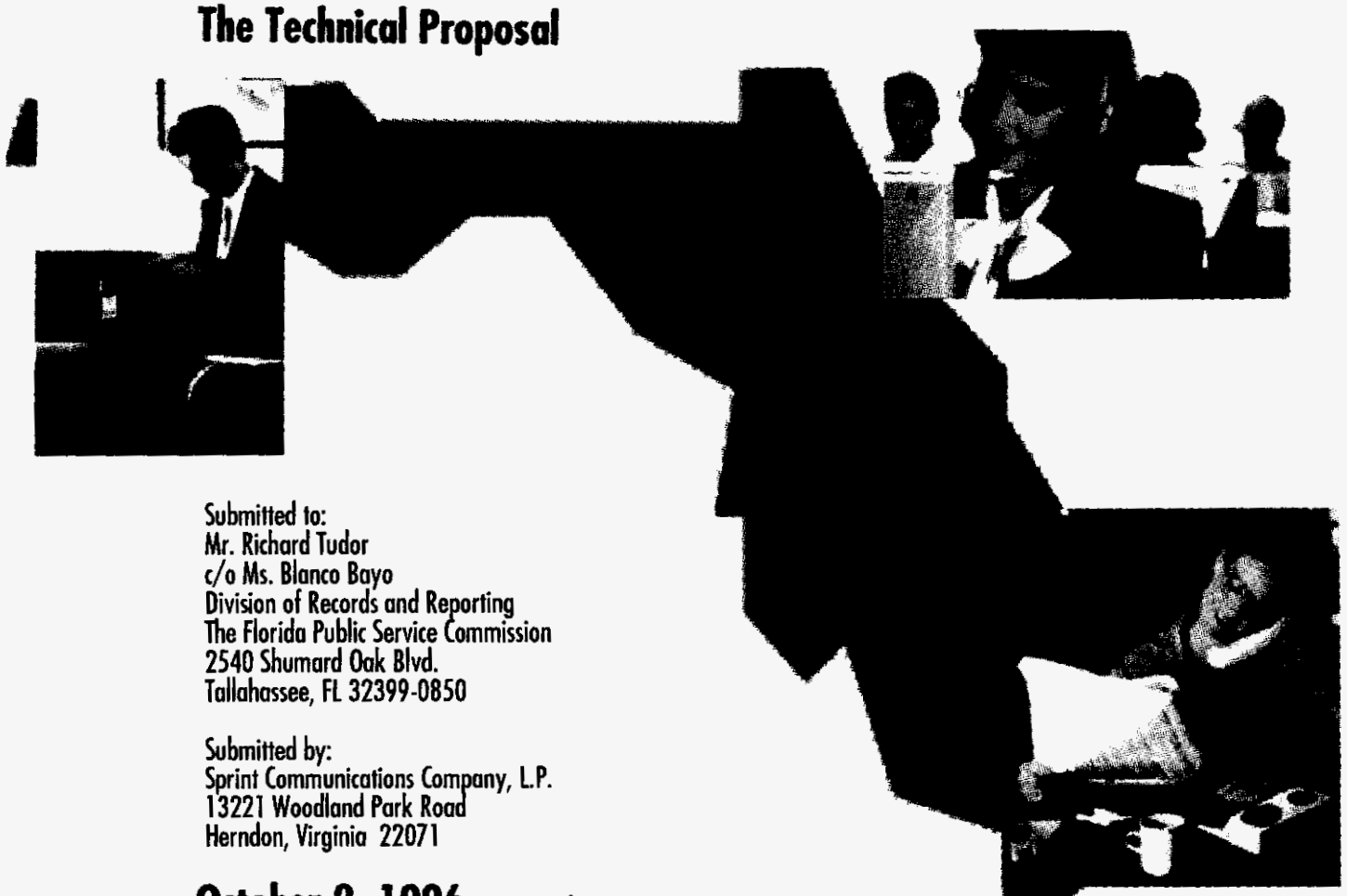
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Request for Proposal for the Provision of a

Telecommunications Relay System for the State of Florida

Volume I
The Technical Proposal



Submitted to:
Mr. Richard Tudor
c/o Ms. Blanco Bayo
Division of Records and Reporting
The Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Submitted by:
Sprint Communications Company, L.P.
13221 Woodland Park Road
Herndon, Virginia 22071

October 2, 1996

Sprint.

This proposal includes data that shall not be duplicated, used, or disclosed - in whole or part - for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of - or in connection with -- the submission of this data, the State of Florida shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the State of Florida's right to use information contained in this data if it is obtained from another source without restriction. The data subject to the restriction are contained in sheets annotated with a restrictive legend.

FORSe

Sprint.

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APPENDIX H - "SPRINT DAILY" FAX ON DEAF AWARENESS WEEK

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Executive Summary

Functional equivalency with the hearing community is the hallmark of a successful TRS. From the inception of a federally mandated TRS, Sprint Communication Company, L.P. (Sprint) envisioned TRS with new perspective, applying imagination and inspiration. We explored new ways to apply technology so that by 1990, when Sprint opened our first relay center, we had not only created a relay service that exceed our customer expectations, but we totally re-defined the industry itself. Functional Equivalency was no longer a dream but a reality. Our TRS service has forever changed the lives of millions of deaf, hard of hearing, deaf/blind, and speech impaired people.

Once selected as your new TRS provider for Florida, the Florida Public Service Commission will be able to take credit for new creativity and technology in enhancing the quality of life for all Florida Relay customers. Our success in the TRS market is based on a simple, yet focused approach: shape how technology and relay services are created, distributed, shared, enjoyed and applied for the benefit of everyone. Most importantly, we measure the value it brings to our customers not only in technological terms but also in terms of how it helps customers reach their goals. To this end, Sprint welcomes the opportunity to partner with the Florida Public Service Commission in providing the finest relay service in the country.

Sprint/CSD Partnership

Sprints proposal for Florida TRS will be more empowering than anything the competition has to offer. Sprint is pleased to announce that we have joined forces with our existing partner, Communication Service for the Deaf (CSD), specifically for Florida Relay, to present a non-traditional approach to providing the highest quality TRS service in the industry today. This dynamic relationship, known as USA Relay, combines CSD's first hand expertise in providing deaf services and relay services and Sprint's technical and management expertise as the largest provider of quality TRS in the world.

CSD was selected as our partner because they:

- Have the same commitment to quality service that Sprint has successfully demonstrated.
- Were the first agency to undergo the new National Association of the Deaf service evaluation assessment, receiving impressive results
- Were the first to offer basic TTY interpreting services in the nation

- Have a proven, seasoned workforce, which has been in operation since 1975
- Have a deaf professional, grass-roots management organization committed to serving the needs of the deaf, hard of hearing, and speech-impaired communities

Likewise, CSD selected to connect with Sprint because of our advanced technical and operational sophistication, as well as our commitment to incorporating deafness and the users of the service into the operations of the relay service. The Sprint/CSD partnership is more then just a concept. We have a proven record of success. Since its formation in 1992, we have been awarded eleven individual state TRS contracts, including South Dakota, North Dakota, Iowa, Oklahoma, Wyoming, Indiana, California, Colorado, Texas, Montana and Minnesota.

Specifically for Florida, Sprint and CSD propose to build a new center in the state to handle all the Florida Relay traffic. This state-of-the-art center will become the home of FRS and will provide the state with the highest quality relay service at the lowest cost available in the TRS industry today.

All the states that benefit from the Sprint/CSD partnership have the added security of knowing that the relationship between Sprint and CSD is effective, efficient, and highly successful. It provides the combined highest quality relay service in the nation at the lowest possible cost/value ratio. The partnership between Sprint and CSD is stronger than ever and continues to grow and thrive. Proof of this is provided by the recent unseating of the incumbent TRS provider in Montana and Minnesota. Additional information about our relationship is noted in Section C.7 of our response.

PROVEN EXPERIENCE

Over the past five years, Sprint TRS has added more than 250 service enhancements, often from direct input from the customers and advisory committees. Some of the enhancements include:

- Shortened macros
- Customer branding
- Error correction
- Identification of local/long distance calling
- Gender identification
- Screen scroll back feature for ASCII callers.

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With Sprint as your partner for Florida TRS, our primary focus will be to provide a high quality, technologically rich TRS the most cost efficient and economical manner possible. This new partnership between the FPSC and Sprint will enable Sprint to help realize TRS's mission in Florida for a functionally equivalent service.

Together Sprint and CSD have become a major force in the TRS industry. We have secured more TRS contracts than any other provider with nineteen state contracts, one federal government contract, and five resellers contracts. Annually, Sprint processes over fifteen million calls. Sprint/CSD has proven ourselves superior in the area of TRS. No other TRS provider can match the experience that Sprint/CSD TRS employees have gained in fulfilling the needs of so many TRS customers from coast to coast.

TECHNICAL SUPERIORITY

The industry is constantly being challenged to introduce the next generation of TRS technology and services. Sprint/CSD embraces this challenge. We will work with the Florida Public Service Commission and the consumers of Florida to come another step closer to achieving functional equivalency, while reducing costs to the FPSC. Sprint has successfully demonstrated out commitment to quality improvement by introducing technology, functions, and features never before used to provide TRS.

To accomplish this goal, Sprint is introducing our new technical platform called Real Time Relay (RTR). This new platform is designed to bring cost savings to the FPSC by improving the Communications Assistants (CA)s' call-handling procedures, thus reducing billable minutes to the state. This is accomplished by following several procedures allowing the CA to establish individualized customer profiles by call branding. The customer provides the CA with selective LEC-styled features including, but not limited to, frequently dialed numbers, carrier of choice, Voice carry-over usage, etc. This information is then used to build a database. For all future calls made by this customer, a customized profile will automatically appear on the CA's terminal, thus allowing the call to be processed in a more expedient manner.

The average length of call varies, of course, depending on the consumer's actual talk time. However, overall call length is shortened due to our technologically advanced, high quality platform, RTR. Obviously, less repetition affects call time which, in turn, affects billable minutes to the FPSC and allows the consumers of FRS to come another step closer to functional equivalency. With Sprint's Real Time

Relay and partnering with the FPSC, Florida will lead the nation and establish a standard by which all others are measured.

Table ES-1 highlights the enhanced service that will be realized by the Florida TRS with Sprint's new platform.

Table ES-1 Real-Time Relay Value-Added Enhancements

Real-Time Relay Features	Cost Impact on Funds
Customer Database	No Additional Cost
Network Call Distributor	No Additional Cost
Recording Ability	No Additional Cost
Customer Initiated Dialing	No Additional Cost
Directory Assistance	No Additional Cost
Voice Carryover/Hearing Carryover with privacy/NO GA	No Additional Cost
Marine Calling	No Additional Cost
Typing Speed - Minimum 55 w.p.m.	No Additional Cost
Two-line VCO	No Additional Cost
Touchtone Carry over	No Additional Cost
Single Line Answering Machine	No Additional Cost
TRS/OSD Integration	No Additional Cost
Bilingual Operators	No Additional Cost
LEC Features	No Additional Cost
Automatic Error Correction	No Additional Cost
Auto Blockage of TTY tones	No Additional Cost
Auto Call Forward to Relay Center	No Additional Cost
Variable Time Stamp Macro	No Additional Cost
VCO-TTY	No Additional Cost
VCO-HCO	No Additional Cost
VCO-VCO	No Additional Cost
Access to 900/976 Numbers	TBD by FPSC
Additional ASL Training	TBD by FPSC
New Traffic Reports	TBD by FPSC
Video Relay Trial	TBD by FPSC
Text to Speech Trial	TBD by FPSC
Caller ID	TBD by FPSC
Speech to Speech	TBD by FPSC
Note: TBD = To be determined	

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Close examination of your past vendor's TRS platform will reveal that only Sprint is truly committed to exceeding customer expectations with new and improved features. Selecting Sprint as your Florida TRS provider will ensure that the Florida Public Service Commission and consumers are benefiting from the paramount and futuristic TRS, hence, Sprint's Real-Time Relay.

TRS Customer Database

This feature allows the database to contain individualized customer preference information that will accelerate call set-up time as well as CA work time. Consumers voluntarily provide their personalized profile information via a Customer Data Base Profile Form. Please see Appendix D for a sample. Some of the customer preferences include:

- Carrier of choice
- Voice carry-over without typing
- American Sign Language translation
- Frequently dialed numbers
- Customer notes
- Others to be identified by the Florida Public Service Commission

Customer Initiated Dialing: Allows the customer to dial a telephone number without interacting with the CA. Once the calling party answers, the CA comes on line. This provides the caller more control of the call and reduces call set-up time.

Machine Recording Ability: Reduces redial when CAs receive a recording or answering machine, and allows the customer to receive all the information on the first call. This reduces the number of redials.

Network Call Distributor: Reduces the number of calls going into queue. If all CAs are busy at the center handling Florida calls, the call is automatically routed to another Sprint center. Close examination of the competition's claim of having "next available agent" or "dynamic call routing" will show that only Sprint truly has the technical sophistication to send any relay call **automatically** to any CA throughout our NCD network.

Voice Carry-Over With Privacy/No GA: New hardware for Sprint's TRS platform will enable VCO communication without the need for the TTY user to type GA each time they complete their portion of the VCO conversation. The hardware also enables privacy of the VCO portion of the call.

VCO to VCO: This feature allows voice carry-over (VCO) users to speak to other VCO users. Both parties want to speak but because neither parties' hearing capabilities enable them to use a standard phone, responses must be transmitted in text. In this case, the VCO caller would voice to the CA who would type to the VCO called party. The called party would voice their response to the CA, who will type to the VCO caller.

VCO to TTY: This feature allows the VCO user to communicate with the TTY user through Florida Relay. The CA will speak for the TTY user and type everything the TTY user says to the VCO user.

HCO to HCO: This feature would be used by Hearing Carry-Over (HCO) users who want to call other HCO users. Both parties want to use their hearing abilities but because neither parties' voicing capabilities enable them to use a standard phone, their typed responses must be transmitted by the CA's voice.

SLAM: (Single Line Answering Machine): This feature allows the customer to retrieve their voice answering machine messages through the relay operator.

Two Line VCO: Allows a VCO customer to dial out from their three-way phone to a hearing person. This type of call provides a more natural conversation for the hearing party because they are receiving immediate feedback from the VCO caller and both parties do not need to use GA.

Directory Assistance: Realizing that the majority of LECs provide directory assistance, these services are not TTY accessible. Sprint will design and implement intrastate DA in Florida and interstate DA service nationwide.

Variable Time Stamp Macro: This Macro enables the TTY user to know the time the person they called disconnected from the call and the last five words that the TTY user had typed. This helps the TTY user to know where they were in the conversation when the voice caller hung-up.

Spanish: Sprint provides Spanish translation service for callers who request it. Both TTY and Voice callers can access a qualified Spanish speaking CA who will relay the call in Spanish. Additionally, Sprint is the only TRS provider who provides Spanish to English translation through relay for those who may require such service.

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Whatever technological solutions can be applied in the future, the FPSC and Florida Advisory Committee, with efforts from Sprint's design engineers, will work to provide the highest technology at the lowest possible cost.

EXCEPTIONAL TRS TEAM

Technology is easily duplicated. People make the difference in delivering a high quality TRS. The Sprint/CSD TRS team that has supported more states than any other provider will be the same TRS team that will support the FPSC and Florida TRS. From the TRS site manager to the CAs, no other TRS provider can duplicate or replace the professionalism, proficiency, and knowledge of the existing Sprint TRS team. We are committed to working with, and exceeding the needs and expectations of the FPSC and the needs of every customer.

In response to consumer needs and sensitivities, Sprint has always upheld outstanding employment practices. In addition to a series of required tests, Sprint's CAs are screened toward an attitude of diversity, with emphasis on avoiding paternalistic attitudes. This ensures that transparency is maintained. Sprint's hiring diversity is exemplified by the hiring of visually impaired CAs at several of our centers. With the use of a brailliex, these CAs have proven to be superior Sprint employees and tremendous assets to the team.

Sprint's outreach and consumer education platform is second to none and can be easily modified and customized to meet the preferences of the Florida Advisory Committee. No other TRS provider has the experience of Sprint's account management and customer support team. A dedicated Account Manager will be assigned to work directly with the FPSC to ensure that all customer requests receive top priority and attention. The Account Manager will serve as a "one stop shop" and will provide the FPSC with required information from all of Sprint's TRS departments. With Sprint as your TRS provider, communication between the FPSC and Sprint will be quick, efficient, and easy.

SUMMARY

With Sprint/CSD as your partner for Florida TRS, a new standard of high quality, cost-efficient TRS will emerge in Florida. Our technical platform, Real Time Relay, is designed to provide the state a cost savings and bring consumers the newest feature rich TRS available today. Sprint/CSD will exceed Florida TRS user and fund payer desires by:

- Demonstrating how Sprint is able to offer attractive cost

efficiencies (average talk times) as a result of our experienced work force in TRS.

- Increasing the overall quality of the service with technology, functions, and continual consumer feedback.

Our committed work force is made up of the most dedicated employees, all focused on providing the Florida Public Service Commission and the users of Florida TRS with the highest quality service available anywhere in the world. No other work force can match the experience of our relay team; no other work force has the ability to duplicate what Sprint/CSD will offer you today and tomorrow. Our experience with over 25 TRS contracts has proven us reliable and dedicated with a strong "customer first" focus and philosophy.

Together Sprint and CSD look forward to our new partnership with the Florida Public Service Commission and consumers of Florida. Together we will make Florida TRS the finest in the world, the premium provider with standards by which others are measured.

We look forward to this exciting opportunity.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

C. THE TECHNICAL BID PROPOSAL FORMAT

C.1 FORMAT

- *The bidder's proposal should be organized in the same order as the items listed in the checklist form in Section E. The bidder should provide information concerning each item in the checklist; however, for items rated as pass/fail, bidder may simply note that it has reviewed the item and agrees to comply with the item. For items for which points may be awarded, the bidder should explain how it will provide the service described in the RFP.*
- *Twenty (20) two-sided copies of the complete proposal should be filed.*
- *The technical proposal should be contained in a three- ring binder indicating the name of the bidder and indicating that the contents of the binder is the technical bid proposal only. (The price proposal shall be submitted in a separate sealed envelope - see Section D.)*
- *Each page of the entire proposal should be numbered at the bottom center of each page and each page should be consecutively numbered with no repetition of page numbers in the entire proposal. For example, there should only be one page 1, one page 50 and one page 500 in the entire proposal. Page numbering should only be done in Arabic numerals with no pages numbered with other characters such as 5.7, iii. 6-a, XIX, or similar numbering systems.*
- *In the top or bottom margin of each page, the name of the company should be identified.*
- *To the extent possible, all pages of the proposal should be on 8 1/2" x 11" paper. However, individual presentations which the bidder is unable to place on an 8 1/2" x 11" page in a readable format may be presented on a larger page.*

Sprint understands and complies with these format guidelines throughout our proposal.

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D. The Price Proposal Format

Bidders shall submit their bids on the basis of a charge per billable minute for all services described with the exception of those optional services described in items 39 a. , b. , c. ,and d. The prices per billable minute (or other basis) for items 39 a. b .,c., and d.,shall be separately stated. A format similar to that shown below should be used for the price proposal.

NOTE: THE PRICE PROPOSAL SHALL BE FILED IN A SEPARATE SEALED ENVELOPE MARKED: "SEALED - TO BE OPENED ONLY BY THE FPSC PROPOSAL OPENING OFFICER"

Pricing is located in separate, appropriately marked and sealed envelope, as required.

SERVICE *PRICE PER BILLABLE MINUTE*

1. BASIC RELAY SERVICE $.xx PER BILLABLE MINUTE (Bid price should be on the basis of a flat rate per billable minute and not vary depending upon the volume of traffic).

2. OPTIONAL FEATURES

- *a. Custom Calling Services $.xx PER BILLABLE MINUTE (or other basis)*
- *b. Access to 900/976 $.xx PER BILLABLE MINUTE (or other basis)*
- *c. Enhanced Transmission $.xx PER BILLABLE MINUTE (or other basis) Speed and Interrupt Capability*
- *d. Optional Feature #1$.xx PER BILLABLE MINUTE (or other basis)*
- *e. Optional Feature #2$.xx PER BILLABLE MINUTE (or other basis)*

Sprint understands and has complied.

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C.2 TRANSMITTAL LETTER

Of the twenty copies of the complete proposal, the transmittal letter on one should contain the original manual signature of the person submitting the proposal on behalf of the bidder. All twenty copies should also contain the signer's name and title typed. The transmittal letter shall clearly identify the complete legal name of the bidder.

Each person signing a proposal certifies that he/she is the person in the bidder's organization authorized to make the proposal. The signer shall provide his/her affiliation with the bidder, address, telephone and fax numbers. If different from the person signing the proposal, the proposal shall identify the person or persons (name, title, address, telephone and fax number) authorized to make decisions or answer questions related to the proposal and any subsequent contract.

In the transmittal letter the bidder should state that it will comply with all requirements of the RFP. If the bidder is unable to so state, it should in the transmittal letter identify the sections of the RFP with which it cannot comply and expand on that explanation in the body of its proposal.

Sprint understands and has complied. Our transmittal letter follows on the next page.

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Sprint

13221 Woodland Park Road
Herndon, VA 20171
Telephone: (703) 904-2003
Fax: (703) 904-2612

Donald E. Teague, Jr.
Vice President and General Manager
Government Systems Division

September 30, 1996

Mr. Richard Tudor
c/o Ms. Blanca Bayo
Division of Records and Reporting
The Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

RE: Docket No. 960598-TP

Dear Mr. Tudor:

In accordance with Section C.2 of the subject RFP, Sprint Communications Company, L.P. (Sprint) respectfully submits the following proposal in response to above referenced Docket Number.

Sprint believes you will find our proposal to be of the highest technical and operational quality for TRS users, while offering an aggressive price per minute that is justified through greater efficiency and lower overall long-term costs to the ratepayers of Florida.

The undersigned certifies that he is the person in Sprint's organization authorized to make the proposal. The undersigned is the Vice President and General Manager of Sprint Communications Company, L.P. and he can be contacted at the above address, or by telephone at (703) 904-2003 or by fax at (703) 904-2069.

In accordance with Section C.2, Sprint will comply with all requirements of the RFP as indicated in our response.

As your ongoing partner in this process, please contact Regina Woelfle, Sprint's Contract Administrator, as your primary point of contact or Mike Ellis, Sprint's National Account Manager, as a secondary point of contact for any proposal or contractual issues.

Regina Woelfle, Primary Contact	Mike Ellis, Secondary Contact
Sprint	Sprint
13221 Woodland Park Road	1099 18th Street, Suite 1400
Herndon, VA 22071	Denver, CO 80202
(703) 904 2215 (V/TTY)	(303) 297 5268 (V/TTY)
(703) 904 2069 (Fax)	(303) 297 5649 (Fax)

Sprint looks forward to being the vehicle that citizens of Florida use to gain the greatest telecommunications network access possible over the next three years. Thank you for this exciting opportunity.

Best Regards,

Don Teague

C.8 CHECK LIST

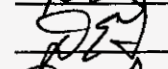
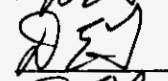
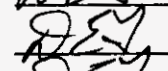
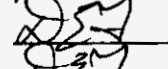
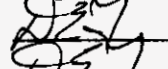
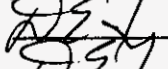
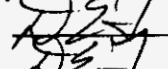
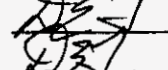
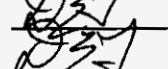
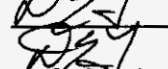
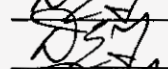
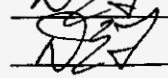
As a part of the bidder's proposal, the transmittal letter should be followed by the evaluation check list in Section E. In the blank beside each item on the check list, the company contact person who is responsible for the proposal and any subsequent contract and who signs the transmittal letter should initial (not check) each item in the check list which is contained within the proposal. The person initialing the check list should ensure that each item in the check list is also contained in its proposal and in the same order as the item appears in the check list. The bidder should also indicate beside each item in the checklist the page number in its proposal where the item in the check list can be found.

Sprint understands and has complied. The check list follows on the next page.

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Florida Relay Service
Section E

FILING CHECK LIST

Check List Item No.	Initials of Bidder's Contact Person	Brief Title	Page No. Of Bidder's Proposal	Pass/Fail OR Maximum Points
1.		Format (RFP ref. Section C-1 and D)	N/A	N/A
2.		Transmittal Letter, Address, Contact Person, Tel. and Fax No. and Legal Name of Bidder, (RFP ref. C-2)	15	P/F
3.		Check List (RFP ref. C-8 and E)	19	P/F
4.		Certification by FPSC and FCC (RFP ref. A-5)	23	
5.		Can provide by June 1, 1997 (RFP ref. B-3)	25	P/F
6.		Term of Contract (RFP ref. B-4)	27	P/F
7.		Access Numbers (RFP ref. B-5)	29	P/F
8.		Location of Relay Center (RFP ref. B-6)	31	100
9.		Availability of System to Users (RFP ref. B-7)	33	P/F
10.		Minimum CA Qualifications and Testing (RFP ref. B-8)	35	100
11.		CA Training (RFP ref. B-9)	39	100
12.		Staff Training (RFP ref. B-10)	43	100
13.		Counseling (RFP ref. B-11)	47	25
14.		Procedures for Relaying Communications (RFP ref. B-12)	49	100
15.		Languages Served (RFP ref. B-13)	55	P/F
16.		Shift Advisor/Consultant (RFP ref. B-14)	57	P/F
17.		Confidentiality (RFP ref. B-15)	59	P/F
18.		Voice and Hearing Carryover (RFP ref. B-16)	65	50
19.		Obscenity (RFP ref. B-17)	73	P/F
20.		Emergency Calls (RFP ref. B-18)	75	50

Check List Item No.	Initials of Bidder's Contact Person	Brief Title	Page No. Of Bidder's Proposal	Pass/Fail OR Maximum Points
21.		Blockage (RFP ref. B-19)	77	200
22.		Answer Time (RFP ref. B-20)	79	200
23.		Equipment Compatibility (RFP ref. B-21)	81	P/F
24.		Transmission Levels (RFP ref. B-22)	83	P/F
25.		Measuring Equipment Accuracy (RFP ref. B-23)	87	P/F
26.		Emergency Operations (RFP ref. B-24)	89	50
27.		Intercept Messages (RFP ref. B-25)	93	P/F
28.		Service Expansion (RFP ref. B-26)	95	50
29.		New Technology (RFP ref. B-27)	99	50
30.		Consumer Input (RFP ref. B-28)	101	100
31.		Complaint Resolution (RFP ref. B-29)	105	50
32.		Charges for Incoming Calls (RFP ref. B-30)	113	P/F
33.		Billing Arrangements (RFP ref. B-31)	115	50
34.		End User Billing (RFP ref. B-32)	135	50
35.		Relaying Interstate or International (RFP ref. B-33)	139	50
36.		End user Selection of Carrier (RFP ref. B-34)	141	50
37.		Recipient of Toll Revenues (RFP ref. B-35)	143	P/F
38.		Long Distance Call Billing (RFP ref. B-36)	145	50
39.		Special Needs (RFP ref. B-37)	149	25
40.		All Unsolicited Features in Basic Relay Service Price Proposal (RFP ref. B-38)	151	200

Florida Relay Service
Section E

Check List Item No.	Initials of Bidder's Contact Person	Brief Title	Page No. Of Bidder's Proposal	Pass/Fail OR Maximum Points
		Optional Services Not In Basic Relay Service Price Proposal		
41.		a. Custom Calling Services (RFP ref. B-39a)	169	Optional/0 Points
42.		b. 900/976 Services (RFP ref. B-39b)	173	Optional/0 Points
43.		c. Enhanced Transmission Speed and Interrupt Capability (RFP ref. B-39c)	177	Optional/0 Points
44.		d. Other Optional Features (RFP Ref. B-39d)	179	Optional/0 Points
45.		Submission of Monthly Invoice (RFP ref. B-41)	185	P/F
46.		Travel (RFP ref. B-42)	187	P/F
47.		Reporting Requirements (RFP ref. B-43)	189	P/F
48.		Liquidated Damages (RFP ref. B-44)	193	P/F
49.		Transfer to New Provider (RFP ref. B-45)	195	P/F
50.		Insurance (RFP ref. B-46)	197	P/F
51.		Public Entity Crimes (RFP ref. C-3)	199	P/F
52.		Financial Information (RFP ref. C-4)	201	P/F
53.		Experience and customer references (RFP ref. C-5)	203	200
54.		Bid Security Deposit (RFP ref. C-6)	215	P/F
55.		Subcontractors (RFP ref. C-7)	217	P/F
56.		PRICE PROPOSAL (RFP ref. Section D) Must be filed in a separate sealed envelope marked: "Sealed - To Be Opened Only By the FPSC Proposal Opening Officer"	219	See RFP Sec. D & E
		MAXIMUM TOTAL POINTS		2000

A. ADMINISTRATIVE REQUIREMENTS AND PROCEDURES

A.5 CERTIFICATION BY FPSC AND FCC

The provider shall have or apply for a certificate of public convenience and necessity to provide local and interexchange service from the FPSC prior to or at the time it submits its proposal for relay service. The provider shall also have or apply for necessary FCC authority to provide interstate and international service prior to or at the time it submits its proposal for relay service.

Sprint has included a Certificate of PublicConvenience to provide interexchange service that was approved on September 3, 1983, and a Certificate and Order Acknowledging Change in Name dated February 24, 1992, Document Number 01875. Sprint's application for local service has been approved and receipt of certificate is pending. Sprint holds complete FCC interstate and international authority to provide service. A copy of Certificate of Public Convenience follows on the next page.

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Order No. 12391 Date September 3, 1983

Florida
Public Service Commission

Telephone
Certificate of Public
Convenience and Necessity

Upon consideration of the record in the above numbered docket, it is

ORDERED that authority be and is hereby granted to GTE Sprint Communications Corporation whose principal address is 3115 N. W. 10th Terrace Ft. Lauderdale, Florida 33301 to provide telecommunication service in accordance with Chapter 364, Florida Statutes, the Rules, Regulations and Orders of this Commission, and the conditions and provisions prescribed in Order No. 12391 in the territory described therein.

This Certificate shall remain in force and effect until amended, suspended, cancelled or revoked by Order of this Commission.

BY ORDER OF THE

FLORIDA PUBLIC SERVICE COMMISSION

(Seal)

Commission Clerk

Executive Director

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Request for change in name on IXC Certificate No. 83 from US SPRINT COMMUNICATIONS COMPANY to SPRINT COMMUNICATIONS COMPANY, L.P.	)	DOCKET NO. 920066-TI
	)	ORDER NO. 25783
	)	ISSUED: 2/24/92

ORDER ACKNOWLEDGING CHANGE IN NAME

BY THE COMMISSION:

On January 16, 1992, US Sprint Communications Company (the Company) filed a request to change the name on its Certificate of Public Convenience and Necessity on the basis that the Company has changed the name under which it does business as a telephone company. Accordingly, we find it appropriate to amend the Company's certificate to reflect the Company's new operating name.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that US SPRINT COMMUNICATIONS COMPANY's request to change the name on its Certificate of Public Convenience and Necessity No. 83 to SPRINT COMMUNICATIONS COMPANY, L.P. is granted. It is further

ORDERED that the change in name shall be effective ten (10) days from the date of this Order. It is further

ORDERED that this docket is hereby closed.

By ORDER of the Florida Public Service Commission, this 24th day of FEBRUARY, 1992.

STEVE TRIBBLE, Director
Division of Records and Reporting

(S E A L)

JRW

DOCUMENT NUMBER-DATE
01875 FEB 24 1992
FPSC-RECORDS/REPORTING

B. THE SERVICE TO BE PROVIDED

B.3 CAN PROVIDE BY JUNE 1, 1997

The commencement date for the service is June 1. 1997. Bidders shall provide a work schedule showing how they can meet that deadline and shall provide a statement that they can provide the complete service by that date.

Sprint understands and will comply with the commencement date for the service on June 1, 1997. Sprint has provided a work schedule in Section B.44 showing how we can meet the deadline. The work schedule will use the key dates of December 3, 1996 as the recommendation date, and December 16, 1996, as the Letter of Intent date. This will provide Sprint the time necessary, at a minimum of 26 weeks, to implement the center and to have many of the features available. Sprint will include a statement that we can provide the complete service by that date.

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B.4 TERM OF CONTRACT

Service shall begin on June 1,1997. The term of the contract will be an initial three year period. Upon mutual agreement between the FPSC and the provider the contract may allow for the term to be extended for an additional period.

Sprint understands that service shall begin on June 1, 1997 and the term of the contract will be an initial three year period. Sprint also understands that by mutual agreement between Sprint and the FPSC, the contract may allow for the term to be extended for an additional period.

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B.5 ACCESS NUMBERS

There shall be a single access number for TDD users and a single access number for voice users. TDD access shall be by using the number 800-955-8771 and voice access shall be by using the number 800-955-8770. At its discretion, the provider may utilize a separate number for access by users of ASCII terminals. The provider must request FPSC authority to use additional numbers for relay access (e.g., Spanish access. ASL access, etc.). If a caller calls the wrong access number, the system shall process the call without requiring the caller to redial.

When selected as the Florida Relay Service provider, Sprint will continue to use the current TDD and Voice access numbers. Sprint will request FPSC authority if additional 800 numbers are needed. The Sprint system will allow a call to be completed if the customer inadvertently calls the wrong access number.

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B.6 LOCATION OF RELAY CENTER

The provider shall not be required to physically locate the relay center in the State of Florida, however, evaluation points will be awarded if traffic is handled at a Florida located relay center. The bidder shall identify the location(s) of the relay center(s) that it plans to utilize to handle Florida relay traffic; if this involves more than one location, the bidder shall identify the locations where relay traffic will be handled, the percentage of traffic it expects initially to handle at each location and how it will decide to allocate the traffic to multiple locations over time.

The minimum percentage of Florida traffic that will be handled at a Florida located relay center (except when emergency conditions exist at the Florida located relay center) shall be specifically stated in the proposal. Evaluation points will be awarded based on this minimum percentage of Florida traffic to be handled at the Florida located relay center. A maximum of 100 points shall be awarded if all Florida relay traffic (except in emergency conditions) is to be handled at a Florida located relay center; if a lesser percentage is to be handled at a Florida located center, then the number of points shall be equal to the percentage of Florida traffic to be handled at a Florida located relay center. For example, a bidder proposing a relay service that will handle 75% of Florida's relay traffic in state (except under emergency conditions) will receive 75 points. Emergency conditions that would justify handling what is normally Florida traffic outside the state would include situations such as natural disasters, bomb threat, etc.,and would not include traffic spikes.

Throughout the life of the contract, the provider shall provide a written notification to the FPSC whenever it makes a change in the traffic handling plan contained in its bid proposal regarding how the percentage of Florida traffic handled outside of the state is distributed. The minimum percentage of Florida traffic to be handled at a Florida located center shall not be changed during the life of the contract.

Sprint and CSD are fully committed to locating the very best, state-of-the-art relay center in the Gainesville, Florida area. Sprint/CSD will initially plan to service 100% of the FRS call volume from the Florida Relay Center. In the event of significant call volume increase or emergency conditions, Sprint will employ our second to none Network Call Distribution (NCD) technology to ensure network survivability and redundancy. Only with Sprint/CSD, can the FPSC rest assured that your new center is an integral component of a much larger and efficient relay center network.

Sprint encourages site visits to any of the Sprint centers in Baltimore, Maryland; Austin, Texas; Charlotte, North Carolina; or Independence, Missouri. CSD also welcomes you to visit any of their centers in Sioux Falls, South Dakota; Moorehead, Minnesota; or Lubbock, Texas. We look forward to welcoming the Gainesville, Florida center as part of our family.

Sprint/CSD has an excellent track record with our existing contract administrators of providing verbal and written notification whenever the need arises to change the traffic handling plan contained in contract agreements or extensions. We look forward to working with the FPSC in the same efficient manner during the life of our contract.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

B.7 AVAILABILITY OF SYSTEM TO USERS

The service shall be designed to relay local, intrastate toll and interstate and international calls that originate or terminate in Florida. Relay service shall be available 24 hours per day every day of the year.

No restrictions shall be placed on the length or number of calls placed by customers through the relay center.

Sprint has read and will comply with the local, intrastate and interstate call requirements detailed in the RFP. There will be no restriction placed on the length or number of calls placed by customers through the Florida Relay Service. Service will be available 24 hours a day.

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B.8 MINIMUM CA QUALIFICATIONS AND TESTING

The provider shall adequately supervise and train its employees to always be courteous, considerate and efficient in their contact and dealings with its customers and the public in general, and shall make checks from time to time to ensure that courteous service actually is being rendered.

Bidders shall specify how they plan to demonstrate that CAs meet all necessary proficiency requirements. CAs shall be able to quickly and accurately type TDD relay messages. The provider shall use valid, unbiased tests for CAs on subjects including, but not limited to:

a. Basic skills in English grammar.

All CAs hired will have successfully completed a validated pre-employment test. This validated test was customized to the CA position based on a job study and was developed in accordance with Department of Labor guidelines. The test was developed by an Industrial Psychologist who specializes in pre-employment testing. The Industrial Psychologist's study included an on site review of the Relay Operator position as well as interviews with incumbents. The pre-employment is a self guided PC based test that is administered in three sections. All three sections of the test are evaluated individually. If an applicant does not pass all three sections they will not be considered for employment.

The third portion of the testing measures the ability to understand basic English grammar. In this segment of the pre-employment test, sentences with blanks throughout appear on the screen. Word selections are show directly above the sentence. The applicant must choose the appropriate word for each blank in the test sentence. The computer automatically moves to the next screen when the allotted time has been exhausted.

b. A minimum typing speed of 55 correct words per minute.

The first portion evaluates the speed of typing from written text. The passing rate currently used for the CA is 45 w.p.m., however the testing can be easily reformatted to accommodate the required 55 w.p.m. In the past we have used a contingency passing rate for those applicants that are close to passing, but may have missed the w.p.m. requirement by a few points. Applicants that meet all other standards are given 90 days to reach required typing minimum, if successful they will remain employed at the Relay Center, otherwise their employment will be terminated.

c. Minimum spelling skills sufficient to quickly and easily spell words comparable to a beginning college level conversation.

The second portion of the pre-employment test evaluates typing from voice simulation. Here the applicant will put on a headset and type what they hear from recorded messages on the computer. Each screen is automatically timed by the computer. This portion of the testing will evaluate an applicants spelling ability, listening and typing skills. A applicant that can not spell at a beginning college level will not pass this portion of the testing, and will not be considered for employment.

d. An understanding of characteristics of limited written English and American Sign Language (ASL) as it may be reflected in the written language of TDD users.

The ability to understand limited written English and ASL is tested in the third section of the pre-employment test. One must be able to comprehend the meaning of sentences with limited words available in order to pass this section. Additional training is provided on ASL by a qualified trainer during the initial training, as well through out a CAs employment.

e. Deaf culture.

When a new hire enters into the initial training they will be trained on deaf culture by a person who has extensive knowledge in this area. Throughout CA employment, they will continue to receive training and information regarding deaf culture. Because we also employ deaf and hard of hearing individuals in our relay centers, information regarding deaf culture is shared on first hand basis with CAs. We believe these interactions on a day-to-day basis are very beneficial to the CA's effectiveness on the job.

f. Ethics, e.g., how a CA deals with situations he may encounter.

During the CAs initial training period, company ethics in regard to basic business ethics are reviewed. A CA must read and sign off stating that they understand and comply to our company ethics program by always conducting themselves in a fair and ethical manner. Because of the nature of our business CAs will most likely face ethical decisions during their employment, therefore this standard of conduct is evaluated and additional training is presented to the CA throughout their employment.

g. Confidentiality.

Also during the initial period, employees have detailed training on employee confidentiality. Confidentiality is a core component to the service we provide. All employees receive training on how important confidentiality is to our customers. They also are required to sign a "Confidentiality Agreement Form" before they are ever allowed to go

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into the Relay Center. If a CA breaks this code of confidentiality this will result in disciplinary action up to and including termination of employment.

h. Clarity of speech.

Any person who has not passed this examination shall not be utilized as a CA. CAs shall be retested at least annually.

After a candidates passes the pre-employment test, they will be screened and interviewed. During this process, oral communication skills are closely evaluated both over the phone and in person. In addition to this, specific job dimensions have been designed that have proven important to the success of a CA. If a person shows to not have good oral skills, or any of the other dimensions evaluated, they will not be considered for employment. Additional steps taken to ensure that only the best are hired include a drug/alcohol screen and a reference/security check.

Employees will be reviewed periodically on all of those areas listed above through monthly surveys and formal semi-annual or annual reviews. Those that need improvement will be developed by the Supervisor.

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B.9 CA TRAINING

Each bidder shall demonstrate in its proposal how ongoing CA training will be provided by including with its proposal an outline of a proposed CA training plan. The provisions for CA training shall include, but not be limited to, an understanding of limited written English and ASL, deaf culture, needs of hearing and speech disabled and dual sensory impaired users, ability to speak in a tone of voice consistent with the intent and mood of the conversation, operation of relay telecommunications equipment, how to handle hearing and voice carryover, ethics. confidentiality and other requirements of the Provider's operating policies and procedures. Training shall include both simulated and live on-line call handling.

All Sprint Relay Center employees participate in 20 hours of Diversified Culture. Sprint works closely with each Sprint center's local deaf community to identify knowledgeable presenters. Sprint also utilizes videos, role plays, group activities and discussion groups to educate its employees on the different needs of their customers.

Diversified Culture topics include:

Who Uses the Relay Service?

- Why is it important to understand our customers?
- Why is it important to recognize their special communication needs?
- Pathological versus Cultural Views of Deafness
- Characteristics of Deafness
- The Deaf Community
- Myths about Deafness
- Why is there a Deaf Culture?
- Deaf Heritage
- Bell's View on Deafness
- Gallaudet's View on Deafness
- Establishment of the National Association of the Deaf
- Use of Sign Language Interpreters
- Different Communication Skills Used in the Deaf Community
- Changes in Attitude Toward the Deaf Community
- Americans with Disabilities Act

American Sign Language

- What is ASL?
- History of ASL
- ASL's recognition as its own language
- Rules of ASL
- Parameters of ASL
- English Idioms versus ASL idioms
- Evolution of ASL
- Syntax of ASL
- How to Translate ASL to English
- TTY Language Samples
- TTY Courtesy

Hard of Hearing and Late Deafened Customers

- Characteristics of Hard of Hearing Customers
- Assistive Devices for Hard of Hearing Customers
- Establishment of Self Help for Hard of Hearing (SHHH)
- Relaying for Hard of Hearing Customers
- Characteristics of Late Deafened Customers
- Establishment of Association of Late Deafened Adults (ALDA)
- Relaying for Late Deafened Customers

Deaf/Blind, Speech Impaired, Spanish Speaking and Hearing Customers

- Characteristics of Deaf/Blind Customers
- Assistive Devices for Deaf/Blind Customers
- Relaying for Deaf/Blind Customers
- Characteristics for Speech Impaired Customers
- Relaying for Spanish Speaking Customers
- Relaying for Hearing Customers

Florida CAs will be trained on proper translation of written/typed ASL. Customers will benefit from having CAs who are trained using role plays written at varying levels of ASL difficulty. The CAs must demonstrate their proficiency in translating this material.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

CAs receive 10 rigorous days of initial training. Table B.9-1, "Sprint's Communications Assistants Training Modules," delineate some of the training modules.

Table B.9-1 Sprint's Communications Assistants Training Modules

Module	Customer Benefits	Duration
Basic Telephony	Customer benefits from CAs thorough understanding of the components of local and long distance calling and the associated equipment.	1-1/2 hours
Overview of the Operating System	CAs fully understand the operation of the call processing terminal. This allows them to quickly and efficiently meet customer requests.	2 hours
Phone Image	CAs understand the importance of good communication skills. This allows them to relay calls quickly without intervention. They recognize why and when to be transparent. CAs also know how to use clear and concise phrases.	2-1/2 hours
Call Processing Procedures	CAs recognize the call details that are provided by the system. CAs understand billing methods. CAs understand different call destination scenarios. CAs can quickly locate required information from job aids and reference manuals. CAs learn to use correct pre-programmed phrases to process calls quickly and efficiently.	15 hours
Emergency Call Processing	CAs can handle customer emergency situations quickly and confidently.	1-1/2 hours
Stress Management/ Responding Positively	CAs are able to handle stressful call situations and maintain the transparency required.	2-1/2 hours

All of Sprint's training programs are developed using adult learning theories; we adapt training to each participants learning modality. We incorporate lecture, visual graphics, flow charts, videos, role plays and actual hands-on training, which stimulates the agents ability to learn.

Sprint's CA training is delivered by a certified training supervisor who must annually demonstrate proficiency in subject matter knowledge and delivery skills.

In addition to the initial training program, Sprint has developed several supplemental training program. Current CAs have already participated in these programs; Sprint will continue to offer these learning opportunities to future CAs. These programs reinforce skills developed in initial training. Sprint and CSD's training materials are mutually inclusive of both simulated and live on-line call handling

- **Voice Inflection Workshop.** CAs are the customers first point of contact. We introduce the importance of superior "Phone Image". Superior phone image encompasses good listening skills, verbal, and reading skills. This means relaying verbatim, remaining transparent, adopting a conversational tone, and translating ASL to conversational English.
- **Answering Machine Workshop.** In today's environment, it is not unusual to call a number and reach various types of answering devices. CAs are prepared to handle voice answering machines, TTY answering machines, voice/TTY answering machines, information lines, audiotext, and pagers/ beepers. There are specific guidelines for handling these types of calls. Control of the call remains with the customer. CAs use interactive training terminals to practice answering machine calls. Actual calls are placed to various recording devices so that agents can continually increase their skills in handling this call type.
- **TTY Pagers.** Sprint worked closes with manufacturers when this technology became available to ensure that access was available to Sprint TRS customers. CAs practice a variety of calls utilizing the interactive training terminals.
- **Two-Line VCO.** Two-line VCO has become popular with relay users over the past year. All CAs have been trained to handle this unique call. VCO users will continue to enjoy a smooth call flow.

Sprint also provides extensive training in the areas of voice carry over and hearing carry over utilizing our interactive training terminals. Confidentiality and ethics are thoroughly covered; for detailed information see Section B.15.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

B.10 STAFF TRAINING

All relay center staff, including management, shall receive training in ASL, deaf culture, needs of hearing, speech and dual sensory impaired users, and ethics and confidentiality. Each proposal should include an outline of a staff training plan indicating training topics and time frames as well as explaining how individuals or organizations (such as deaf service centers, state agencies, universities, etc.) representing the hearing impaired community would be used to assist with the training.

Each Sprint TRS management must complete the entire initial CA training curriculum which includes all requirements stated in this RFP. Sprint's Diversified Culture topics include:

Who Uses the Relay Service?

- Why is it important to understand our customers?
- Why is it important to recognize their special communication needs?
- Pathological versus Cultural Views of Deafness
- Characteristics of Deafness
- The Deaf Community
- Myths about Deafness
- Why is there a Deaf Culture?
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Deaf/Blind, Speech Impaired, Spanish Speaking and Hearing Customers

- Characteristics of Deaf/Blind Customers
- Assistive Devices for Deaf/Blind Customers
- Relaying for Deaf/Blind Customers
- Characteristics for Speech Impaired Customers
- Relaying for Spanish Speaking Customers
- Relaying for Hearing Customers

Sprint works closely with each Sprint center's local Deaf and Hard of Hearing community and organizations to identify the knowledgeable presenters who share additional depth of information about the culture and the local Deaf/Hard of Hearing services or state agencies.

Since 1992, the entire Sprint TRS departments (Marketing, Operations, Engineering, Billing, Human Resources) have participated the Deaf Culture training sessions. The purpose of these sessions is to provide on-going staff training related to Deaf Culture and TRS which is a required element in their yearly focus objectives. Sprint have had the opportunity to work with these respective individuals who led the Deaf Culture training sessions:

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

1. Phil Bravin, Yes You Can, Inc./Former Chairman, Gallaudet University Board of Trustees

2. Ed Franklin, Johnson Community College

3. Dr. Harlan Lane, respected author, Northeastern University

More recently, Sprint introduced a new program called "Cultural Diversity in the Workplace" which was designed by our Human Resources group in conjunction with experts in the Deaf/Hard of Hearing community. Again, this program has been attended by all Sprint TRS management in 1995 and will continue to be part of management mandatory curriculum.

For first time ever in Sprint Corporation, Sprint recognizes the Deaf Awareness Week (September 23-27, 1996) for its internal 50,000 employees world-wide. Daily activities include internal Sprint Fax Daily newsletter and exhibit/presentations by TRS Account Management team that have taken place throughout various Sprint offices in the country. The week is highlighted with Dr. I. King Jordan (President Gallaudet University) keynote presentation to Sprint Senior Executives through the videoconferencing capabilities in four selected site locations.

Appendix H "Sprint Daily" provides concrete proof of our Sprint Daily fax samples that went out to over 50,000 employees worldwide promoting our Deaf Awareness Week activities. No other TRS provider in the world has gone to the extent, or shown the sensitivity and appropriate attitudes, toward Deaf Awareness like Sprint.

Sprint's past experiences proves our commitment to working closely with local Deaf and Hard of Hearing associations/individuals to continually enrich our Diversified Culture curriculum which is integral part of Sprint TRS management training programs. In addition, an ASL workbook has been developed and implemented by the training department on translation of TTY ASL to conversational English. Ohlone Colleges' program for the deaf, Freemont, California was contracted by Sprint to support an ASL Task Force in the beginning phase of the project. Three additional workbooks will be developed by Sprint employees who are native ASL users.

Once excellent benefit that Sprint provides to our employees is "Educational Reimbursement." Employees are encouraged to take ASL classes at local colleges. Employees are reimbursed 100% of their tuition. Numerous TRS employees have taken advantage of this benefit.

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B.11 COUNSELING

Bidders are required to outline a counseling and support program that will help CAs and staff deal with the emotional aspects of relaying calls. Those providing this staff support shall have training in dealing with the emotional aspects of handling relay calls. However, in counseling sessions, the CA shall not give to the support person the names of callers involved. The counseling support system shall follow the confidentiality provisions of this RFP.

Part of our continuing effort to promote employee well being includes providing to employees an Employee Assistance Program. Sprint believes Relay employees must function efficiently for meet its goals, Therefore, Sprint provides an Employee Assistance Program (EAP) to aid employees in the resolution of programs that may or may not be work related. The EAP offers professional consultation, problems assessment, and referral service to assist operators with the emotional aspects associated with processing relay calls. In addition the EAP offers aid for other stress factors outside of the workplace. Employees may obtain this confidential and professional assistance the EAP in one of two ways; self-referral or supervisor referral. All communication between the employee and counselor will be held in the strictest confidence and the content of relay calls is never discussed. Counselors are available 24 hours a day, seven days a week by telephone and in person by appointment. An 800 number is provided to each Relay employee for reference.

Communication Service for the Deaf also provides extensive employee counseling and support programs that will help CAs and staff deal with emotional aspects of relaying calls. Working together, Sprint and CSD recognize the special needs of relay agents and their related stressors and support needs. No other relay partnership in the country acknowledges the mutual impact and importance of confidentiality while providing counseling support services to our employees.

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B.12 PROCEDURES FOR RELAYING COMMUNICATIONS

The system shall be designed to convey the full content of the communication. Unless requested otherwise by a user, the CA shall relay all calls according to the following procedures.

a. The method to be used in the system is for the CA to be identified by a number (not name) followed by "M" if male and "F" if female. The provider shall establish a method which will allow identification of the CA in the event a complaint is filed or a user wants to praise the work of the CA.

Each CA is identified by a unique number and gender identification. This policy is an asset to Sprint since it allows us to track customer commendations and complaints and take appropriate action.

b. The system shall keep the user informed on the status of the call, such as dialing, ringing, busy, disconnected or on hold throughout the call session. The system shall provide feedback to callers on call status within 10 seconds after a caller has provided the number to call and continue to provide feedback until the call is answered.

Sprint firmly believes that in order for relay to be successful, control of call must always remain with the caller. Providing information on call status gives the customer the information they need in order to make decisions and remain in control.

The technology Sprint offers compliments this requirement. Macros (pre-programmed commonly used phrases) automatically tell the customer when the CA is dialing and when the telephone is ringing. In addition, if the outbound customer disconnects, the CA receives a system generated signal on their screen, then informs the inbound customer of the status. This automation guarantees consistency for Florida customers. The CA will inform customers of all possible call status scenarios. For example; when outdialing the call, an automatic macro is generated stating "NOW DIALING...RINGING 1....2....3," etc. CAs will send the call status to the customer within 10 seconds after receiving the calling to number.

c. All users shall have the option of telling the CA what aspects of the call that he/she will handle. For example, the TDD user may voice the call (voice carryover), rather than have the CA do it or the caller may ask that relay be explained as soon as someone answers the call.

Sprint CAs always leave control of the call with the customer. Only Sprint's Customer Data Base enhancement actually allows customers to control the option of telling the CA what aspect of the call that s/he will handle in real-time. This saves valuable time during call set-up procedures and reduces costs to the FPSC relay fund. Customers only need to tell the CA on their first call their preference of communication mode and can modify their profile on a call by call basis if so desired.

d. When the call is first answered and at all times during the conversation, the system shall type to the TDD user or verbalize to the non-TDD user verbatim what is said or typed unless the relay user specifically requests summarization. If the CA summarizes the conversation, the CA shall inform both parties that the call is being summarized.

Sprint CAs will type everything that is said and will speak everything that is typed. CAs will follow the customers request if special call processing procedures are desired.

e. When the CA is asked to explain relay to a user, the CA shall express the term "explaining relay" to the other user on the call to let them know what is happening rather than transmitting all of the explanation. The CA shall not inform the telephone user that the TDD user is hearing or speech disabled unless the TDD user asks the CA to do so.

When the CA needs to explain relay to the hearing user, they will send a macro, (EXPLAINING RELAY), to the TTY customer. CAs will keep both parties informed of the call status. The customer has the option whether the call should be introduced as a relay call. CAs will not inform the customer that the caller is deaf or speech disabled unless requested by the caller.

f. When speaking for the TDD user, the CA shall adopt a conversational tone of voice appropriate to the type of call being made and conveying the intent and mood of the message. The CA shall also indicate identifiable emotions by typing those in parentheses, (e.g., he's laughing, he's crying). Any identifiable background noises shall be relayed to the TDD user in parentheses. The CA shall identify to the TDD user, if identifiable, the gender of voice users when they first come on the line. All of the above should be done automatically unless the user asks that it not be done.

During initial training, CAs receive training in the areas of telephone image and voice inflection. These techniques are practiced throughout role plays and each CA is evaluated on these skills. The use of proper voice inflection makes the call flow more naturally and gives the customer more control of the call, because the intent of the message is more clear. CAs are evaluated monthly on voice inflection to ensure call quality.

Sprint was the very first TRS provider, with the provision of Relay Texas in September of 1990, to provide background noise during the relay call process. Due to strong and favorable customer feedback, Sprint proceeded in providing this same dynamic feature to all other contracts and will do the same for FRS consumers.

Because of customer requests and the importance of listening to our customers, Sprint conducted a trial using descriptive words. Sprint worked closely with the user community to develop an appropriate

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list of identifiable emotions.Table B.12-1, "Example Words," lists examples of words being used.

Table B.12-1 Example Words

Emotion	Response
Angry	(voice getting louder)
Irritated	(sigh)
Sad	(talking softly)
Tired	(yawning)
Bored	(heavy sigh)
Rude	(sharp tone of voice)

Sprint realizes the importance of relaying background noises to the customer. This procedure enhances the conversation and keeps the TTY customer informed of activities taking place out side of the spoken word. CAs will type background noises in parenthesis.

CAs will inform the customer of the gender of the person answering the telephone.

g. CAs shall indicate to the user, if known, if another person comes on the line.

Sprint CAs will inform the TTY user if another or a different hearing person comes on the line during the relaying of the conversation. The CA informs the TTY user of the gender or name if known, for example (MALE) (FEMALE) (NAME).

h. All comments directed to either party by the CA or to the CA by either party shall be relayed, These comments shall be typed in parentheses. However, comments between the CA and a relay user at the beginning of a call which deal with billing information need not be relayed to the other user.

CAs will convey all conversation during the initial call set-up and acceptance of charges from the called party. For example, the CA may relay "Will you accept a collect call?" or "Yes I will accept charges." Sprint will train CAs by developing role play scenarios that meet this requirement. CAs will also type in parenthesis any comments directed to them by either party.

i. CAs shall verify spelling of unfamiliar proper nouns, numbers, addresses, information about drug prescriptions and other unfamiliar words that are spoken and are to be relayed.

To ensure accuracy, CAs will request the non-TTY customer to verify spelling of proper nouns, numbers, addresses, drug prescriptions and any other words that the CA does not recognize.

j. The CA will stay on the line until both parties have terminated the call.

Sprint training and actual practice of processing relay calls ensures the CA will stay on the line until both parties have terminated the call. However, it is our philosophy that the inbound caller "owns" the call and Sprint has developed automatic disconnect features from the outbound call to prevent unwarranted session minute billing to the state. Sprint will be happy to discuss this protective measure with FPSC to further elaborate on the quality service provided as a result. Additional measures are also incorporated to offer both parties the opportunity to speak with a CA or Customer Service representative.

k. CAs shall not counsel, advise or interject personal opinions or additional information into any relay call. This also means the CAs shall not make any value judgements on the profanity or obscenity or legality of any messages. Furthermore, the CAs shall not hold personal conversations with anyone calling the system.

It is imperative that CAs remain transparent and only facilitate communication between two parties. CAs will not make any judgements about the call. CAs receive training that reinforces this aspect of TRS. CAs are not allowed to be involved in a relay call and will only act as a conduit between two parties to ensure the conversation takes place. If either party asks for assistance, the CA is trained to professionally answer specific questions and immediately begin a smooth relay of the information spoken or typed.

l. CAs will leave messages on answering machines or other voice processing systems using the following steps:

i. The CA will relay any message received from the called party's machine/system.

ii. If the caller transmits a message, the CA shall attempt to leave the message and advise the caller if the machine/system timed out before completing the message. At the caller's request, the CA shall make as many repeat calls as necessary at no cost to complete the message.

Sprint will comply with all requirements of answering machine procedures.

The CA will type (ANS MACH) to keep the caller informed of the call progress.

CAs can ask the caller if they care to leave a message. The customers will inform the CA if they want to leave a message.

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CAs will leave message as instructed by the customer.

CAs will inform the customer that the message was relayed. CAs will send a pre-programmed macro that will provide the following benefits:

- Ensure consistency of call processing
- Macro was recently shortened to reduce call work time
- Keeps caller informed.

Sprint will charge the customer for the first call attempt (which is typically the shortest), and subsequent redials to obtain the entire message or leave a message will not be charged to the customer. Sprint developed a procedure using our Ultra WATS lines to ensure that with additional outdials, the customer does not incur toll charges. Sprint will not passed this cost to the end user or the State of Florida

Sprint will comply with all requirements of answering machine procedures.

Sprint CAs will follow all instructions as given by the relay customer.

*m. **CAs will retrieve messages from voice processing systems and relay a TDD message to a voice user or a voice message to a TDD user. The provider shall have procedures for obtaining any necessary system access codes from the user and keeping that information confidential. Upon request by a user, the CA shall listen to messages on the user's own answering machine (e.g., at his home while the user is at home) and shall relay back contents of such messages to the user.***

CAs will retrieve messages from all voice and TTY messaging systems. If codes are required, the CA will inform the caller. The caller will give the CA the access codes which the CA will type on their screen. Once the call is complete, all codes are automatically erased from our system.

CAs will utilize Sprint's recording technology which will allow the CA to obtain the entire recorded message on the first call. When a voice processing system is reached, the CA will activate the recording feature. They can ply back the recording and type at a comfortable speed. Once the call is completed, the recorded message is automatically erased from the CA terminal.

If the customer requests the CA to retrieve messages from their voice answering machine, the CA will instruct the customer to place the handset of their telephone next to the recording device and play back the messages. The CA will utilize Sprint's recording technology to obtain all necessary information on the first attempt. Once the TTY user has replaced the telephone handset onto the TTY, the CA will

type all of the recorded information to the customer. All information is automatically erased at the end of the call.

The CA will identify the type of device the customer has reached. For instance, (ANS MACH) and immediately begin relaying the message. If the customer wants to leave a message, the CA will redial to the number and leave the callers message. This procedure is necessary because most recordings time out if no activity occurs for a period of time.

The CA will inform the customer that the message was left.

Please see Figure B.12-1 for an illustration of this procedure.

Sprint's technological sophistication in this area of recording deserves eye-witness experience. We encourage you to visit our centers and test this aspect of our quality platform.

*n. **Users shall not be required to give their names or the name of the party they are calling, unless needed for billing.***

Sprint understands and will comply.

*o. **For each incoming call, the CA shall without delay make as many outgoing calls as requested by the caller.***

Sprint CAs will leave control of the call with the caller. If additional outbound calls are requested, the CA will immediately dial the number given by the customer.

*p. **If a user requests that a CA of a specific gender be used, the system shall comply whenever possible.***

Sprint understands and will comply.

*q. **If a user requests that the same CA be used during the entire conversation, the system shall comply whenever possible.***

Sprint understands and will comply.

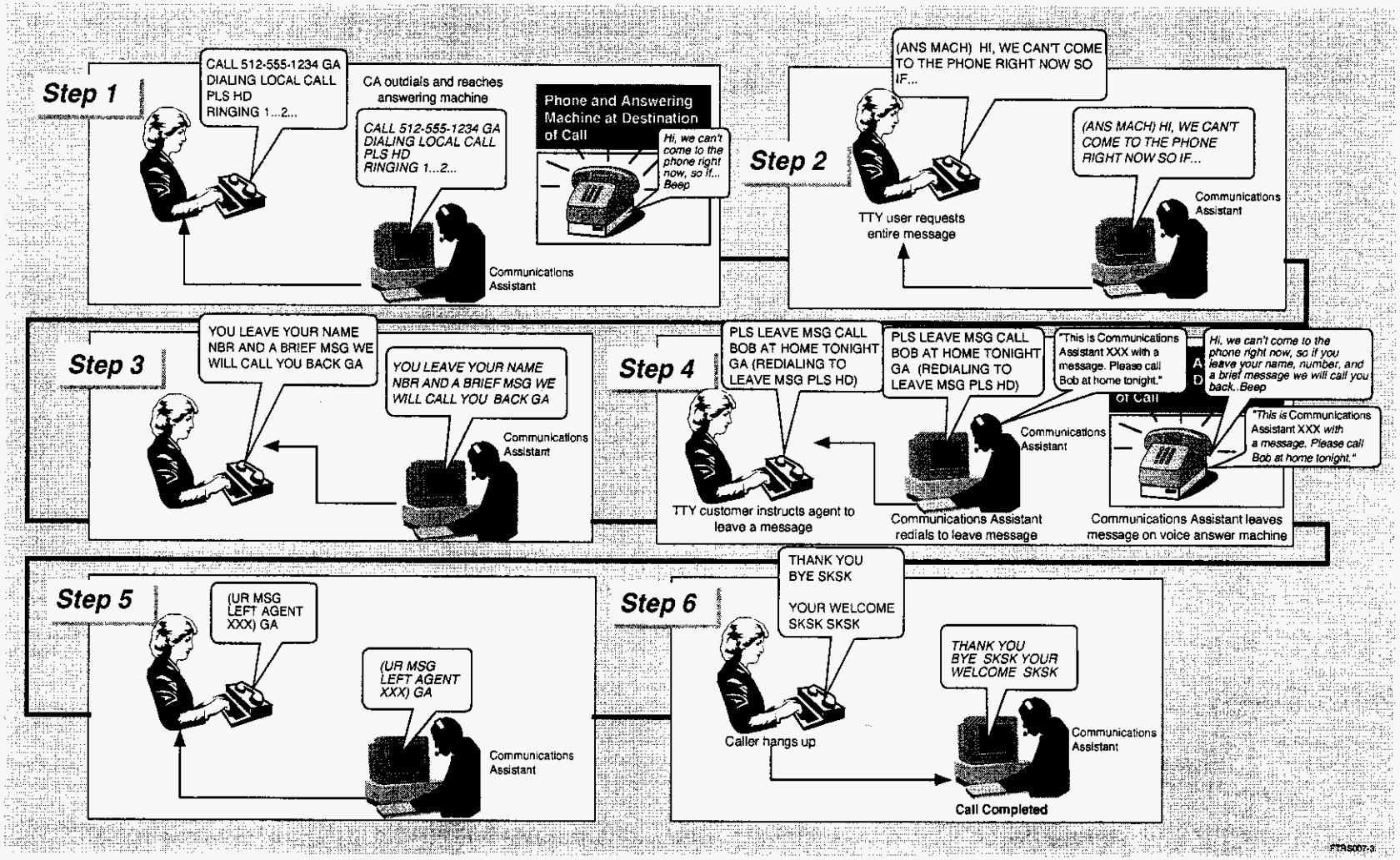


Figure B.12-1 *Sprint Answering Machine Procedures*

B.13 LANGUAGES SERVED

At all times, the provider shall make available CAs with the capability to provide relay service to users who use either English, Spanish or ASL (American Sign Language) on their relay call. Translation from one language to another is not required.

Sprint was the first and continues to be the best provider of Spanish to English translation services without having to dial a separate 800 number. Only Sprint's dedicated staff and sophisticated billing network provides our customers with accurate and detailed translation services. Sprint has been providing translation services for many years and supplements our invoices with exact call detail records. We encourage you to test our Spanish relay and Spanish translation services and can provide a detailed sample invoice of such services upon request.

Sprint has developed a series of ASL workbooks that focus on translation of TTY ASL to conversational English. Ohlone College's program for the Deaf, Fremont, California was contracted by Sprint to support an ASL Task Force in the beginning phase of the project. Additional workbooks will be created by Sprint employees who are native ASL users. This project has increased the skill of CAs to assist customers who use ASL on their relay

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B.14 SHIFT ADVISOR/CONSULTANT

On each shift the provider shall employ in the relay center at least one person who is highly knowledgeable of ASL in order to serve as an advisor/ consultant to assist CAs in understanding the intent of messages and properly communicating the full content of communication.

Sprint understands the importance of providing ASL assistance to CAs. In order for the control of the call to remain with the caller, the conversation must be translated to ensure a smooth call.

Sprint will provide 24 hour coverage of ASL assistance. This person will be available to assist CAs.

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B.15 CONFIDENTIALITY

As required by s.427.704(1)(c). F.S. all calls shall be totally confidential; no written or electronic script shall be kept beyond the duration of the call. CAs and supervisory personnel shall not reveal information about the content of any call and except for the minimum necessary for billing. complaint processing. statistical reporting or training purposes as further described in this RFP shall not reveal any information about a call. CAs and supervisory personnel shall be required to sign a pledge of confidentiality promising not to disclose the identity of any callers (except for the reasons discussed in this section) or any information learned during the course of relaying calls. either during the period of employment as a CA or after termination of employment.

a. *When training new CAs by the method of sharing past experience. trainers shall not reveal any of the following information:*
   i. *names of the parties to the call*
   ii. *originating or terminating points of specific calls*
   iii. *Specifics of the information conveyed*
b. *CAs shall not discuss. even among themselves or their supervisors. any names or specifics of any relay call. except as necessary in instances of resolving complaints bill processing. emergencies or for training purposes. CAs may discuss a general situation with which they need assistance in order to clarify how to process a particular type of relay call. CAs should be trained to ask questions about procedures without revealing names or specific information that will identify the caller.*
c. *Watching or listening to actual calls by anyone other than the CA is prohibited except for training or monitoring purposes or other purposes specifically authorized by the Commission. FPSC staff shall be permitted to observe live calls for monitoring purposes but shall also comply with the confidentiality provisions above.*
d. *A copy of the Confidentiality Policy shall be provided to a user upon request and at no cost.*

Sprint will provide Florida Relay Service in a manner that ensures confidentiality regarding existence and content of conversations. Sprint understands that measures to ensure confidentiality are crucial to the success of any TRS center. Every relay user must feel confident that their privacy is protected for the service to be utilized. No written or taped information regarding the call is kept once the call is released from the CA position. The from and to numbers are removed once the call has been terminated. Once the call has terminated, the billing information is transferred to the billing files and is no longer accessible except for billing purposes. All relay center personnel are required to sign and abide by a pledge of confidentiality which promises not to disclose the identity of any caller or fellow relay employee nor any information learned during the course of relaying calls. Sprint policy implements and enforces strict rules regarding confidentiality.

During initial training CAs are presented with examples of possible questionable types of breaches of confidentiality. Trainers share examples of past experiences without revealing any information which would allow a person to identify name, gender, or ages of the parties involved on a call. Origination or termination points are not used when discussing calls for training purposes. No specific information is given regarding the content of the call or calls.

CAs who need to discuss a difficult call with a supervisor must do so without revealing names or any specific information about the call. CAs who want to clarify a procedure for a specific call will use generalization in discussing it with their supervisor. No specific names or contents shall be discussed.

If a user calls in and they are in a life threatening situation and ask the CA for assistance but do not specify which emergency service they require, the CA will connect the caller to the police. The police will determine who will be dispatched on the call. This type of call will be handled as an emergency and the agent will fill out an emergency incident form to be kept on file.

If a user calls in and threatens the CA or the relay center, the content of the callers threat will be referred to the supervisor. The supervisor will contact the Human Resources Department, Legal Department and Corporate Security. The content of the threat will be analyzed and a course of action will be taken for the protection of all involved.

Watching or listening to actual calls will not be permitted except for training and quality assurance purposes.

Sprint policy implements and enforces the following:

- Operator
  - Prospective CAs are screened in the interview process on issues regarding ethics and confidentiality.
  - During initial training, CAs are presented with examples of possible questionable types of breaches of confidentiality.
  - Stress can be a factor in maintaining confidentiality. CAs receive three hours of training on healthy detachment.
  - After graduation from initial training, each CA must sign a confidentiality agreement
  - When CAs require counseling due to a stressful call, the CA will not discuss specifics about the call. Sprint has consulted with a medical agency to provide a confidential employee assistance program.

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  - Breach of confidentiality may result in termination of employment.
- Building
  - CA center has security card key access.
  - Visitors are not allowed in the CA work area.
  - Agent terminal screens are not visible from any window area.

Breach of confidentiality may result in termination of an employee. All claims of breach of confidentiality will be investigated. If after the investigation it is confirmed a breach of confidentiality did occur, the employee will be terminated.

Sprint recently became aware of the fact that another TRS vendor actively uses customer names and addresses obtained from actual relay calls to gain access to direct mail campaigns and surveys. Despite claims that the State contractor for this vendor gave them permission to do so, Sprint takes serious exception and objection to such practice. At Sprint/CSD we take great pride in our strict interpretation of the Americans with Disabilities Act, Title IV regarding confidentiality of consumers use of relay and has never knowingly breached consumers trust in their use of our service. Sprint has never used consumer names or address information that may have been obtained from an actual relay call, for any type of mail campaign or advertising. We hope the FPSC and consumers of FRS, with Sprint as your new provider, will have the same interpretation and gain confidence that every call and detail about their call is held under the strictest confidence and will never be used for secondary gain.

Sprint will retain records for the sole purpose of billing. If a customer registers a concern regarding operating practices and wishes to reveal their name, it will only be used to follow up with the customer and explain the resolution Sprint has taken in regards to their concern. Please refer to Figure B.15-1, Florida TRS Confidentiality Agreement, which all CAs are required to sign before employment by the Relay Center.

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Florida TRS Confidentiality Agreement

1. All TRS call related information is to be strictly confidential.
2. Nothing is to be edited or omitted from the content of the conversation or the spirit of the speaker.
3. Nothing is to be added or interjected into the content of the conversation or the spirit of the speaker.
4. To assure maximum user control, the employee will be flexible in adapting to the consumers needs.
5. Employees will strive to further competency in skill and knowledge through continued training, workshops, and reading of the current literature in the field.

Employee Role

1. The employee or contractor shall not reveal any information about the call, including the fact that the call is being performed. Information learned from a call cannot be used for personal gain. All call related questions or problems will be discussed with management.
2. The employee shall transmit exactly what is said in the way that it is said in the way it was intended, including profanity; in the language of the consumer's choice.
3. The employee shall not counsel, or interject personal opinions, even when asked to do so by the consumer.

I have read and do understand the Florida TRS Cofidentiality Agreement. I agree to comply with the code and understand that failure to do so will lead to disciplinary action that may include my termination.

Employee Signature Date Supervisor Signature

Print Name, Company Representing and Title

FTRS001-3

Figure B.15-1 Florida TRS Confidentiality Agreement

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B.16 VOICE AND HEARING CARRYOVER

Provider shall provide both voice and hearing carryover upon request of the user. A TDD user may request voice carryover (VCO) which will allow him/her to speak directly to the telephone user and receive the message typed back on the TDD. Also, a TDD user may request hearing carryover (HC0) which will enable the TDD user to directly hear what the telephone user is saying and type back his/her message which will be spoken by the operator.

The provider shall provide 2-line VC0 which will allow a relay user with two telephone lines and a conferencing feature to use one of his lines for a TDD call to the relay center and his second line for a voice call directly to the called party using the relay center line.

The provider shall make provision for two persons who are hearing disabled to speak for themselves by means of voice carryover to voice carryover (VC0 to VC0) and for two persons who are speech disabled to hear for themselves by means of hearing carryover to hearing carryover (HC0 to HCO).

Voice Carry-over (VCO) and Hearing Carry-over (HCO) technology shall be standard features available to the user on request.

Sprint has provided voice and hearing carryover as standard features of its TRS longer than any other interexchange carrier. Voice carryover allows a person who is deaf and hard of hearing to speak directly to a non-TTY user and receive return communications via the TTY through the CA. Hearing carryover allows a person who is speech-impaired to listen to the other party in a telephone conversation, but send communications via a TTY or other automated equipment through the CA. Figures B.16-1 and B.16-2 illustrate how VCO and HCO will be accomplished.

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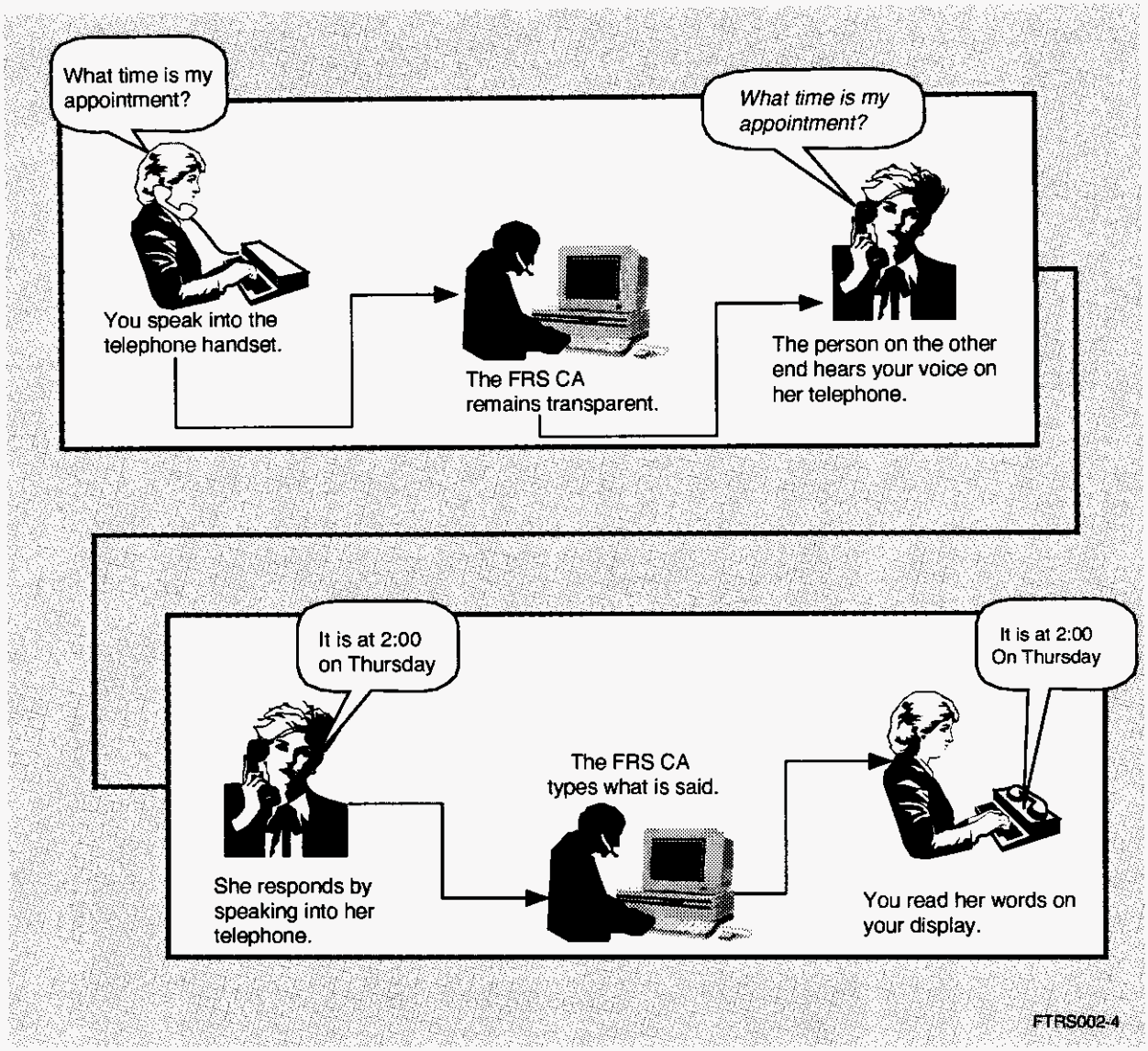


Figure B.16-1 Voice Carryover Bridging Services

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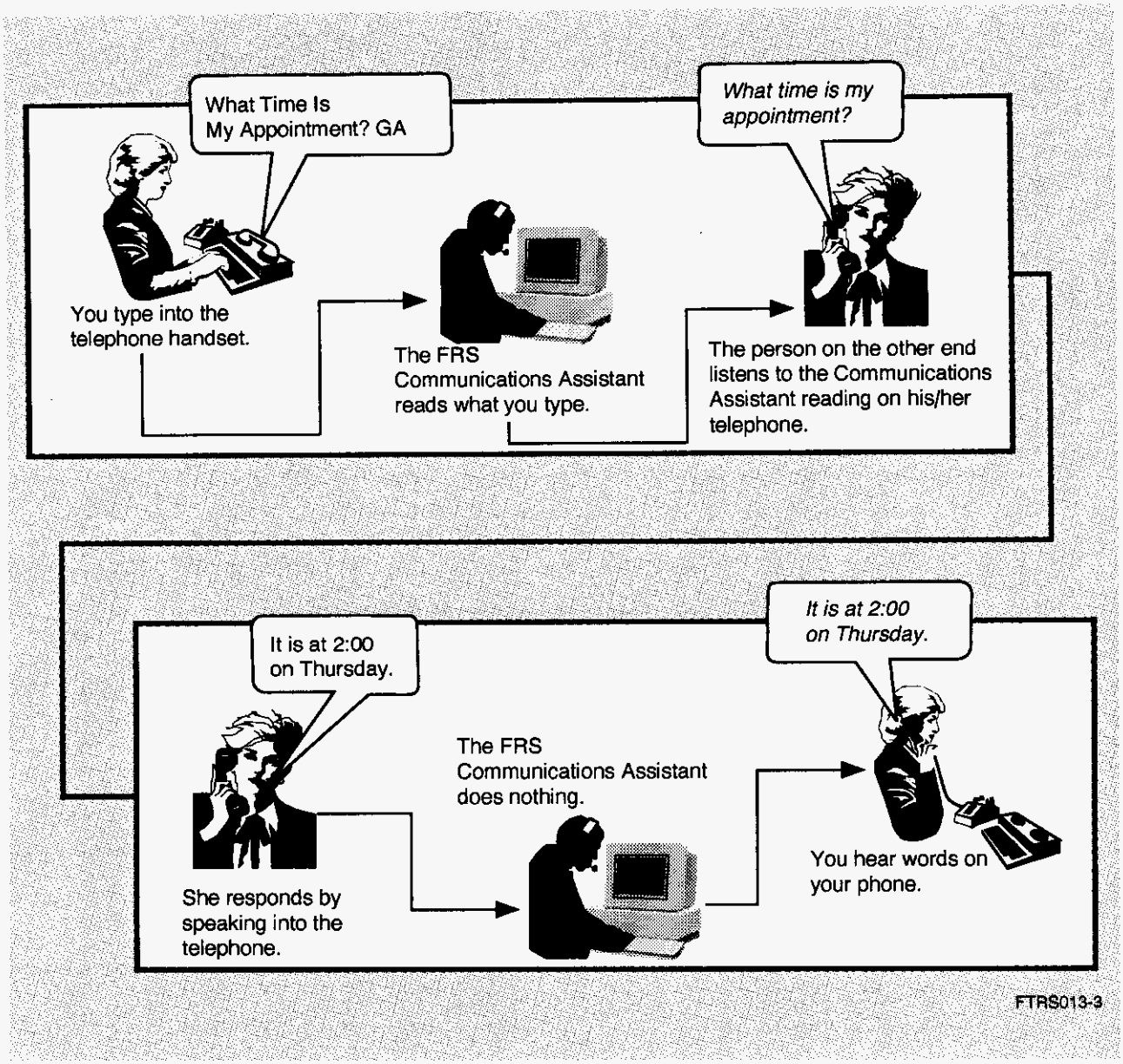


Figure B.16-2 Hearing Carryover Bridging Services

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Sprint was also the first TRS provider to offer VCO users the ability to conduct their entire call, including call set-up and wrap-up, using their voice. This technological enhancement eliminates the need for VCO users to type, and accelerates the call set-up and wrap-up portions of the call. VCO and HCO users may use either the acoustic or direct connect mode to place their calls.

VCO and HCO FRS users can choose to have their telephone number branded as being such a user. When a telephone number is branded as VCO or HCO, each call into the TRS receives a unique VCO or HCO greeting. The following is an example of the unique VCO greeting used when the caller's telephone number is branded:

FRS CA 1234F VOICE OR TYPE GA

After the greeting is sent to the caller, the caller can voice or type their call set-up instructions to the relay operator.

Two-Line VCO

Sprint is proud of our leading edge outreach and promotion of two-line voice carry-over services. All of our CAs are extensively trained to handle this type of call request. An increasingly popular method of communication amongst VCO consumers is to use a personal computer with TTY software or ASCII speed TTY with an additional second line that has conference call capabilities. The VCO user simply calls a Sprint CA and instructs them to call their second voice line. After answering the voice line, the VCO user puts the CA, in essence themselves, on hold and uses the conference call capability and directly dials the number of the person with whom they wish to speak. When the called party answers, and is in contact with the CA, the CA begins listening to the called party and relays the call back to the VCO user at ASCII speeds, if so desired. The VCO user speaks directly to the called party and can interrupt because the CA is truly transparent and the VCO users has gained considerably more control of their own call.

VCO-VCO

Sprint's VCO-to-VCO technology may be used by VCO users who want to call other VCO users. Both parties want to speak but because neither party's hearing capabilities enable them to use a standard phone, responses must be transmitted in text. In this case, the VCO caller would voice to the CA, who would type to the VCO called party. The called party would voice their response to the CA, who would type to the VCO caller.

HCO - HCO

Sprints' HCO-to-HCO technology may be used by HCO users who want to call other HCO users. Both parties want to use their hearing abilities but because neither party's voicing capabilities enable them to use a standard phone, responses must be transmitted in voice. In this case, the HCO caller would type to the CA, who would voice to the HCO called party. The called party would type their response to the CA, who would voice to the HCO call

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B.17 OBSCENITY

CAs do not have to tolerate obscenity directed at them. A proposal should specify how the provider will handle these situations.

CAs who receive a call from a customer using obscenity directed at them will try to redirect the caller. The CA will ask the caller if they wish to place a call. This will be repeated twice. If the caller continues to be offensive, the CA will notify the caller they are asking for a supervisor. The supervisor will again ask the caller if they wish to place a call. This will be repeated twice. If the caller continues to use obscenity, the SUPERVISOR will inform the caller that if they do not wish to place a call, the supervisor will release the line. Only the supervisor can give approval to release an inbound customer.

If the customer is using profanity directed at the CA DURING A RELAY CALL, the CA will remain calm and continue to relay the call.

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B.18 EMERGENCY CALLS

Although most of Florida is covered by 911 communication centers prepared to handle TDD calls directly, the bidder shall develop and follow a policy for handling and referring emergency calls. The policy may include procedures for referring callers to emergency services and numbers other than 911.

Sprint has several options available for providing assistance in emergency situations. Our state-of-the-art Customer Data base provides the CA with "real-time" emergency notes and data. We have also explored an alternative automated system and also have the procedure explained below. Sprint looks forward to discussing these options with FPSC in the near future.

To ensure comprehensive emergency call handling, Sprint has established the following procedures. The CA will:

- Render their terminal unavailable to receive another call
- Notify a supervisor
- Determine the area code and number from which the customer is calling
- Determine type of emergency response needed, (police, fire, ambulance)
- Inform the customer that the emergency provider is being called
- Dial the Directory Assistance Operator
- Provide the appropriate information to the Directory Assistance Operator
- Obtain the appropriate number
- Dial the emergency number
- Announce the call to the emergency dispatcher
- Advise the dispatcher of the area code and number of the caller
- Advise the dispatcher of the emergency services requested
- Stay on the line until the call is complete
- Document the call.

CAs will stay on-line with the emergency provider until told by the dispatcher that their services are no longer needed. This includes situations where the inbound caller disconnects for any reason. By remaining on-line, the CA can provide vital information necessary to

ensure that rapid, appropriate emergency service is rendered. Documentation of each emergency call shall be maintained at the relay center.

Customers also have a second option on how Sprint can handle their emergency calls. They can utilize Sprint's customer data base. The customer can set up in their customer profile the emergency numbers for their area. If the customer calls in and tells the CA it is an emergency call, the CA will access the customer's profile and connect them to the appropriate emergency number.

Sprint is continually researching new ways to improve emergency call processing.

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B.19 BLOCKAGE

Provider is responsible for ensuring that 99% of calls reaching the relay center per day are either answered or continue to receive a ringing signal.

Provider is also responsible for ensuring that 97% of monthly random inbound test calls initiated by FPSC staff from various Florida locations are either answered or continue to receive a ringing signal.

Calls that are blocked must receive a network blockage signal of 120 impulses per minute.

Sprint offers Florida TRS customers the advantage of a superior digital fiber network unsurpassed in the industry. Through use of leading switch technology and SONET network survivability techniques, Sprint's network ensures a very low level of call interruption or blockage.

The Sprint network switch architecture is non-hierarchical, that is, all switches are directly interconnected. Sprint switches are processor-controlled using advanced digital technology and are virtually non-blocking. A call across the Sprint network passes over Inter-Machine Trunks (IMT) which are engineered at P.01 Grade of Service (GOS) to allow for maximum network call completion. The P.01 GOS requirements ensure that 99 percent of calls to the Relay Center will not be blocked. However, it is possible to encounter a busy signal because of blockage in the local exchange network.

In addition, Sprint has incorporated these other advanced technology features to ensure low blockage or call interruption:

- Dynamically Controlled Routing - provides tandem routing options when direct IMT is busy.
- Redundant SS7 (Signalling System 7) - provides dual high-speed paths for call signalling separate from the voice path.

Sprint continuously monitors the grade of service on the network and makes adjustments in the trunking as necessary to maintain the objective grade of service. In the unlikely event that route blockages occur, courtesy messages are provided to the calling party. In a recent 2-week study of total Sprint calls, only 0.71 percent of over 700 million calls encountered a network busy condition.

Once the calls reaches the Florida Relay Center, it will be handled by the Rockwell Galaxy ISS 300 switch. With system availability in excess of 99.99 percent, this digital advanced-technology switch provides unparalleled reliability and fault recovery. In addition, through redundancy of all major system components and catastrophic fault recovery, any calls dropped are limited to those not currently in progress.

Sprint's past performance as a TRS provider has demonstrated that Sprint's network maintains a GOS better than P.01. Florida TRS users will rarely encounter blockage when calling the Sprint Relay Center. Upon reaching the Sprint Relay Center, the call will continue to ring until it is answered by a CA.

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B.20 ANSWER TIME

Provider is responsible for answering 90% of all calls per day within 10 seconds of reaching the relay switch. Elapsed time is calculated from the time inbound calls reach the relay switch. In calculating the percentage of calls meeting the answer time standard. the numerator shall be the total number of calls per day that are answered (with a CA ready to serve) in 10 seconds or less. The denominator shall be the total number of calls per day reaching the relay switch except that the total shall not include calls abandoned within 10 seconds after reaching the relay switch. However, calls abandoned after 10 seconds shall be included in the denominator. (Exception: If the Provider is unable to differentiate between calls abandoned within 10 seconds and those abandoned after 10 seconds of reaching the relay switch, then all abandoned calls shall be included in the denominator.)

Provider is also responsible for answering 90% of random inbound FPSC staff test calls per month within 20 seconds after the last digit is dialed. Test calls may be initiated from various Florida locations by Commission Staff.

Sprint understands the requirements and will comply. Sprint is the national leader in providing TRS as it supports 19 states and a Federal contract. Sprint ensures unequaled answer times through leading edge technology and real time statistics to ensure proper staffing of call centers to meet required volumes. Sprint also uses advanced technology to route calls not only in times of emergencies but anytime during a normal business day. At Sprint we monitor traffic continuously on a 24 hour basis and are able to use real time statistics to make maximum use of resources to ensure customer satisfaction. Our Traffic Management Control Center and our Maintenance Control Center are staffed with professionals who understand call processes, call volumes, distribution patterns, contract requirements and call routing techniques to ensure unequaled service. These two organizations are also highly skilled in the area of traffic data analysis which allows for an effective solution for answering calls in all situations. Historically, Sprint has exceeded customer expectations by providing service levels unequaled in the industry. Listed below are the composite service levels of the five Sprint centers in operation from 1993 through the first quarter 1996:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1993	92%	94%	95%	93%	93%	94%	94%	94%	94%	94%	95%	95%
1994	95%	95%	96%	95%	96%	95%	94%	94%	94%	94%	94%	94%
1995	91%	92%	94%	92%	92%	93%	93%	91%	90%	91%	90%	89%
1996	*84%	91%	90%									

* reflects the impact of the 1996 state of emergency due to the East coast weather disaster

Sprint challenges the competition to show similar results for answer time percentages. We are confident the data above reflects the very best in the TRS industry. Another important factor in determining answer time is a consistent and functionally equivalent method of measuring average speed of answer. Sprint is the only TRS provider that considers average speed of answer in the true sense of functional equivalence. By that, we mean the average speed of answer (ASA) is measured the exact same way for both voice and tty initiated calls. Sprint measures ASA from the time the TRS call arrives to the switching system until the time it is answered by a communication assistant. Close examination of the competition's standard(s) for measuring ASA will prove Sprint's methodology to truly reflect the best answer time in the industry.

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B.21 EQUIPMENT COMPATIBILITY

It is necessary for the system to be capable of receiving and transmitting in both Baudot and ASCII codes as well as voice. It is also required that relay systems be capable of automatically identifying incoming TDD signals as either Baudot or ASCII. All equipment shall be compatible with the basic protocol of TDDs distributed in Florida through the Administrator (Ultratec Model Nos. 100, 200, 400 and 4425 and Ameriphone Dialogue VCO).

Each Sprint TRS Center is capable of receiving and transmitting voice, Baudot and ASCII codes. TTY signals are automatically identified as either Baudot or ASCII, and if ASCII, the baud rate. Sprint's current technology is capable of distinguishing baud rates of up to 28,000. Intelligent modems allow the CA to handle either voice or data lines from the same CA work station. The system software identifies whether the line is voice or data, and prompts the CA accordingly. If the line is data, the device type and baud rate will be identified and a connection made.

All of Sprint's equipment is compatible with the basic protocol of TDDs distributed in Florida through the Administrator, including Ultratec Models 100, 200, 400, 4425, and American Dialogue VCO.

All Sprint network switches and those ACD switches specifically dedicated to TRS, are capable of utilizing and conveying DTMF (Dual Tone/Multi-Frequency) signals for call origination as well as interfacing with ATM (Automatic Teller Machine) devices or other computer systems, and being adaptable to a variety of IVR (Interactive Voice Response) access methods or customer prompts.

Florida TRS will continue to benefit from Sprint's determination to provide the most technically advanced TRS call center platform available. New technologies to enhance the use of telecommunications networks by communication-impaired individuals are continually being tested and adapted for use.

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B.22 TRANSMISSION LEVELS

Transmission levels must be maintained within industry standards for cross talk and distortion for relay calls. Bidder must provide along with its proposal a copy of transmission level standards adopted by the Industry Carrier Compatibility Forum or equivalent acceptable industry standards. Provider must provide updates to those standards as amended during the term of the contract and must meet the then current standards for 95% of calls per month as measured from an end user's perspective.

Transmission shall be at adequate volume levels and be free of excessive distortion. The total levels of noise and crosstalk shall be such as not to impair communications.

Sprint is a certified Interexchange Carrier (IXC) in all 50 states. Sprint's transmission circuits meet or exceed industry interexchange performance standards for circuit loss and noise and are carried on Sprint's all digital fiber-optic network. Sprint developed the first nationwide 100 percent digital fiber-optic network, a network designed for clear channel voice and error-free high-speed data transmission.

A copy of ANSI T1.506-1990, Network Performance - Transmission Specifications for Switched Exchange Access Network, and ANSI T1.506a-1992 - Network Performance - Supplement to Transmission Specifications for Switched Exchange Access Network (Absolute Round-Trip Delay) is enclosed as Appendix A. This standard is currently in the process of being updated by ANSI; a revised copy will be provided when available. Sprint meets, and in most cases exceeds these standards as part of Sprint's ongoing commitment to TRS customers to maintain superior transmission quality.

With the implementation of new technology, such as SONET (Synchronous Optical Network), further improvements to transmission circuits exceed industry interexchange performance standards for circuit loss and noise. The design of SONET ring architecture provides significant improvements in Sprint's ability to provide survivability and to support customers requirements for end-to-end performance monitoring. The positive impact of this technology on survivability has continued to increase as SONET rings are completed across the Sprint network, and are extended into the Local Exchange Carrier (LEC) environment.

In 1993, Sprint announced its commitment to deploy SONET in the fiber-optic network by investing $350,000,000 over a three-year period. In November 1994, Sprint announced the first successful implementation of "self-healing" SONET technology by demonstrating a simulated fiber cut on the Chicago SONET ring. A

"ring" is a portion of the Sprint all digital, fiber-optic network set-up in a closed loop to provide survivability for that portion of the Sprint network.

In June 1995, Sprint announced the completion of the first coast-to-coast SONET telecommunications route, which ensures voice, data, image, and video services without interruption due to cable cuts or electronics failure. Since that event, Sprint has implemented and completed SONET transmission projects that encompass over 85% of the Sprint network. New fiber paths in the network, to expand route diversity or to establish connections to new international destinations, are constructed as 100% SONET routes. The result of 10 years of planning and construction, the cross-country SONET route uses multiple interconnected rings of fiber-optic cable in a 4-Fiber, BLSR (Bi-directional Line -Switched Ring) configuration.

Figure B.22-1,"SONET Ring Survivability," illustrates Sprint's network survivability with SONET technology. If a Sprint cable is cut, SONET will send the calls on the ring in the opposite direction without interruption. These rings safeguard vital communications by automatically rerouting service around disruptions in approximately 60 milliseconds, which is roughly the blink of an eye. In the event of a fiber cut or equipment outage, service is restored in milliseconds, not minutes, as with other carriers' versions of SONET.

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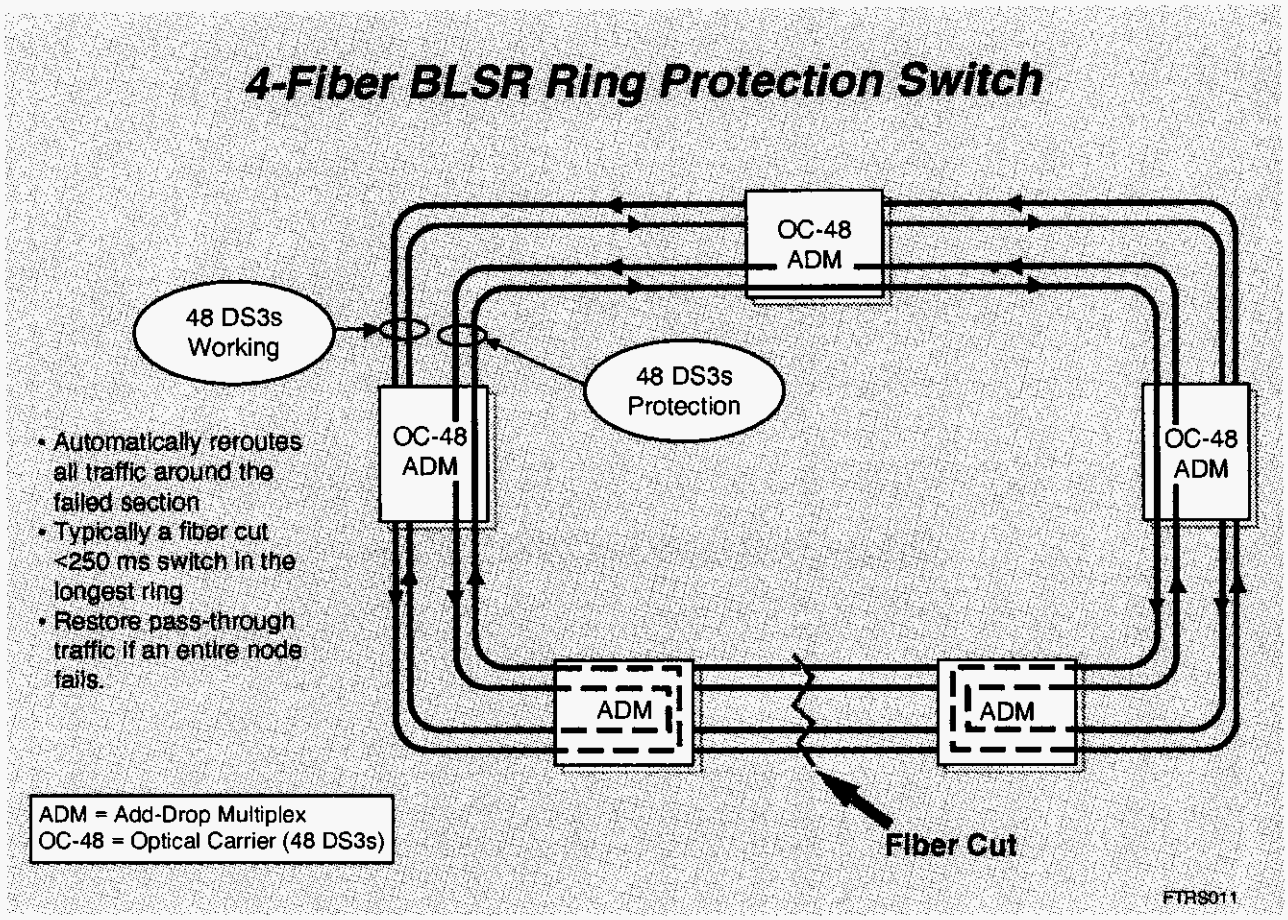


Figure B.22-1 SONET Ring Survivability

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B.23 MEASURING EQUIPMENT ACCURACY

Every meter, recording and ticketing device used to capture call details for billing subscribers or the FPSC/Administrator as well as for providing traffic information shall be tested prior to its installation and shall be accurate 97 percent of the time to within a 1 second grace period. All equipment shall be maintained in a good state of repair consistent with safety and adequate service performance.

As the nation's largest provider of relay services, Sprint maintains an automated process for producing contractually required reports and statistics. In addition to the contractual reports and statistics, additional reports and statistics are processed to ensure that the automated systems are performing as designed, and to ensure the accuracy of the information being populated into the reporting call detail record. The information being populated in the call detail record include the telephone number or credit card number to be billed, originating telephone number, terminating telephone number, date, start time of call, ending time of call, and call duration to the nearest 100th of a second.

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B.24 EMERGENCY OPERATION

In addition to a minimum of thirty (30) minutes battery capacity sufficient to operate each relay center processing Florida relay traffic at busy season busy hour load, each relay center shall have installed emergency power generating equipment capable of maintaining the relay center's operations for extended periods of time. The uninterruptible power system shall support the switch system and its peripherals, switch room environmental (air conditioning, fire suppression system, emergency lights and system alarms), operator consoles/ terminals, operator work site emergency lights, and Call Detail Record recording. Provisions shall be made to meet emergencies resulting from failure of power service, sudden and prolonged increases in traffic, storms, lightning, etc. Employees shall be instructed as to the -procedures to be followed in the event of emergency in order to prevent or mitigate interruption or impairment of relay service.

The bidder shall describe its plan for dealing with all types of natural and man-made problems (e.g., hurricanes, lightning strikes, fires, etc.) which either isolate the relay center and prevent calls from reaching the center or cause the center to be unable to operate. In addition, the plan should detail the steps which will be taken to deal with the problem and restore relay service.

The provider shall inform the contract manager of any major interruptions to the operation of the relay center extending beyond five minutes duration. The contract manager shall also be informed when it becomes known to the relay center that any portion of the state is isolated for more than five minutes from the relay center. The provider shall also provide a report after restoration of service.

Uninterruptible Power System (UPS)

Sprint will continue to exceed the minimum requirements for back-up power systems at all TRS Call Centers. This is accomplished by providing each Relay Center with a UPS and generator, and sufficient fuel to provide power for 24 hours after a power failure. The back-up power system can continue to provide power beyond 24 hours as long as fuel is readily available.

During a power outage, the UPS provides a seamless power transition until the emergency generator can be brought on line. While this transition is in progress, power to all the basic equipment and facilities for the center operation is maintained. This includes the switch system and its peripherals, agent positions, switch room environmental and fire suppression systems, emergency lights for all areas of the call center, system alarms and CDR recording. Once the back-up generator is on line, stable power to all TRS system equipment and facilities is established and maintained until commercial power is restored.

The past performance of Sprint's back-up power systems in support of TRS indicates high reliability. The back-up system has been required during power outages approximately three to four times a year, and has worked when needed. Sprint also tests the back-up power system once a week. Sprint has a maintenance agreement for our Uninterruptible Power Supply (UPS) system, which consists of a semi-annual manufacturer's inspection and 24-hour emergency response. Sprint also has a maintenance agreement for our batteries with 24-hour emergency response. Sprint's back-up power system will continue to ensure reliable service for Florida TRS users.

Switching System

Sprint uses the Rockwell Galaxy ISS 3000, a switching system that is an integral piece of the TRS platform. While a switching system cannot ensure that calls are not dropped due to technical failure, the Rockwell Galaxy ISS 3000 switch is an all digital, state-of-the-art system that provides unsurpassed reliability and fault recovery. The Rockwell Galaxy ISS offers system availability in excess of 99.99 percent, redundancy of all major system components, and catastrophic fault recovery that limits the dropping of calls to those not currently in progress. Calls will not be dropped if they have been answered by a CA position. The Rockwell Galaxy ISS is currently used as the switching platform for a large number of E911 service providers, which demands the utmost in system reliability.

All of the Rockwell Galaxy ISS preventative maintenance functions can be performed on-line, with no effect on call processing. In addition, the Rockwell Galaxy ISS offers a complete package of on-line and off-line diagnostic routines that identify system faults or failures to the individual board level. On-line diagnostics are launched automatically and manually. Automatic diagnostics are continually run by the switching system software to detect defective components before they are used. Manual on-line diagnostics can be launched at any time, with no effect on call processing, calls in progress, or calls waiting to be answered, as the routines are scheduled by the switch processor and run at the earliest nonservice affecting opportunity (within seconds). Diagnostics and service evaluation routines are also available at the lowest line termination level for inbound/outbound trunk fault detection.

An inventory of spare critical components are maintained on site to ensure the required levels of service are met.

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Disaster Recovery Plan

Sprint's comprehensive Disaster Recovery Plan for Florida TRS is in Appendix B of this proposal. In the plan, Sprint details how data will be recovered and service restored in the event of a natural or man-made disaster. The plan also confirms Sprint's commitment to notify the Florida TRS Administrator of any disruption in service that lasts more than 5 minutes.

The Disaster Recovery Plan developed for Florida TRS details the method Sprint will utilize to cope with specific disasters, including alternate, quick, and reliable switching of calls, network diagrams identifying where traffic will be rerouted if vulnerable circuits become inoperable, and the provision of redundant circuits to geographic areas where users are concentrated. Besides typical network outages, the Florida TRS disaster recovery procedures apply to specific disasters that are not part of the network. The plan also details the steps that will be taken to deal with the problem and restore TRS.

In the event of a disaster, TRS traffic can be dynamically rerouted within minutes to any of Sprint's TRS centers, which are supported by Sprint's all-digital fiber-optic backbone network. This state-of-the-art network is redundant and has survived natural disasters, such as the recent San Francisco earthquake and Hurricanes Hugo and Andrew, without service disruption. According to the information reported to the FCC by each carrier, Sprint has the most reliable network compared to our largest competitors. Carriers are required to submit outages to the FCC when service is disrupted for 30 minutes or more, resulting in at least 90,000 calls being blocked. Table B.24-1 lists outage information gathered from the report.

Table B.24-1 FCC Reported Carrier Outages (Jan thru Jun 1996)

Carrier	No. of Outages
Sprint	5
AT&T	9
MCI	9
WorldCom	6

As further back-up, state-specific call processing software resides at each center. Relay agents are trained in advance to provide service to other states; the transfer of calls between centers is transparent to users.

In addition, back-up redundancy and disaster recovery is provided by Sprint's SONET transmission architecture. SONET allows for instantaneous re-routing of traffic during any transmission failure.

The State of Florida and Florida TRS will benefit from Sprint's disaster recovery process.

B.25 INTERCEPT MESSAGES

Intercept messages as appropriate shall be provided if a system failure occurs.

Sprint currently provides for intercept messages in voice and TTY tones for instances where system failure occurs within the TRS switch, center or outbound circuits.

Various methods of providing intercept messages will be used depending on the type of outage or local emergency. In the event the TRS center is unavailable to process incoming relay calls, either due to a network outage or a center outage, the Sprint network will automatically route the incoming calls to an announcement, which will inform the caller that the TRS center is temporarily unavailable to process calls.

If the call reaches the TRS center, but call completion can not be performed due to a network outage or all trunks busy condition, the CA will provide the announcement to the caller that all circuits are temporarily busy and the call should be retried later.

FRS users will also be informed of local emergencies (e.g., tornado, flood, and fire) that force CAs to leave the TRS center. In this case, calls will be immediately routed to another center.

It is important to note that blockage within the local exchange carrier's network may occur before a call reaches the Sprint network. In such instances, the announcements given to the customer are beyond the control of Sprint. However, Sprint's network is designed to provide TRS with virtually no blockage.

Calls not associated with a system failure or other unavoidable interruption in service will be answered by a continuous ringing or busy signal.

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B.26 SERVICE EXPANSION

Bidder shall show the capability of expanding services in response to increasing demand. Bidder shall develop and illustrate in its proposal a detailed plan of how this expansion will be accomplished. The plan shall include, but not be limited to, bunking capacity, CA work stations, personnel staffing and equipment capacity. The plan shall also indicate how any time lag shall be avoided to meet any increased call volume. The above plans shall allow the provider to be able to maintain all standards listed in the RFP.

Sprint's TRS is capable of expanding in response to increasing demand, maintaining all standards listed in the RFP. The TRS trunking capacity, CA work stations, and equipment capacity is equipped to handle an immediate 25 percent increase in requirements. Based on usage studies, trunking, work stations, and other equipment will be expanded when these system components reach 85 percent of the equipped capacity. The engineering, installation, test and acceptance of equipment additions occur within 120 days of when needed.

Equipment utilization is monitored weekly, and quarterly usage studies of TRS system components ensure that capacity requirements are met with a "just in time" approach to keep costs at a minimum while ensuring high service standards.

Table B.26-1 shows Sprint's TRS Typical Expansion Schedule, and Table B.26-2 provides an Expansion Schedule Glossary.

Table B.26-1 Sprint Typical Expansion Schedule

Item #	Task to be Performed	Loc.	Staff Responsible	Responsible Company	Duration (weeks)	Comments
	Systems Engineering					
1	Selection of Center Location	–	Bldg	EPS	N/A	
2	Leasehold Negotiations	–	Bldg	EPS	N/A	
3	Architectural and Engineering Drawings	–	Bldg	EPS	N/A	
4	Building Construction	–	Bldg	EPS	N/A	
5	Funding Approval	KC	Sys Eng	EPS	5	
6	CA Position Furniture	KC	Sys Eng	EPS	8	
7	ACD Switch Expansion (order)	KC	Sys Eng	EPS	3	Concurrent with #6
8	ACD Switch Expansion (install)	TBD	Sys Eng	EPS	1	
9	CA Position Expansion (order)	KC	Sys Eng	EPS	3	Concurrent with #6
10	CA Position Expansion (install)	TBD	Sys Eng	EPS	1	Must wait until furniture installed
11	Conformity Testing of CA Positions	TBD	TA	EPS	1	
12	CA Hiring		HR	GSD	3	Concurrent with #1-#11
13	CA Training	TBD	TRN	OPS	2	Concurrent with #1-#11
14	Configuration of Temporary Training Area	–	Sys Eng	EPS	N/A	
15	Final Test and Acceptance of Hardware	TBD	TA	EPS	0	CA positions tested in step 10
16	Begin Service	TBD	ALL	EPS	0	
Total Weeks 16						

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Table B.26-2 Expansion Schedule Glossary

Glossary					
Sys Eng	-Systems Engineering	TA	-Test/Acceptance	KC	-Kansas City Location
Comp Sys	-Computer Systems	Ops	-Operations	IC	-Internal Comm.
Sys Maint	-Systems Maintenance	HR	-Human Resources	RI	-Rockwell Inter.
CR	-Carrier Relations	EPS	-Enhanced Platform Services	USW	-US West
TRN	-Training	Bldg	-Building & Facilities	Plan	-Planning/Development
Sys Adm	-Systems Administration	Mkt	-Marketing	GSD	-Government Systems Div.
N/A	Not Applicable				

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B.27 NEW TECHNOLOGY

The users should be allowed to benefit from advancing technology. Bidder should describe the methodology and process it will use to keep abreast of technological changes in the provision of relay service, to inform the FPSC and Administrator that new enhancements are available and at what price, and to provide the FPSC the opportunity to purchase such enhancements or upgrades to the service.

Industry Leader

Users of FRS will benefit from Sprint's commitment to introducing leading-edge technologies. Many of the advanced features provided by today's TRS providers, such as ANI database, which allows for the automatic identification of caller types such as voice carryover (VCO), and hearing carryover (HCO), were pioneered by Sprint five years ago. Sprint will continue to introduce state-of-the-art technologies, such as the Real-Time Relay initiative, to the users of FRS.

Ongoing Development

Sprint is continually developing new enhancements through our software release schedule. Software release meetings are held monthly to update TRS personnel on the progress of new enhancements. The engineering staff receives input from our account managers as to the features and enhancements being requested from our TRS customers. Sprint also conducts periodic surveys and focus groups, conducted by companies such as Cambridge Research, to gather information regarding the features desired by our TRS customers.

From a hardware perspective, FRS will benefit from Sprint's involvement in the joint development of telecommunications hardware with leading hardware providers, such as Phone TTY, Inc. Sprint also participates and attends various technology trade shows. Users of FRS will also benefit from Sprint's significant presence and influence on national boards that address industry issues, such as coin sent paid.

Section B.38 elaborates on some of the new technology that Sprint has provider over the years to our existing contracts as a direct result of customer feedback and suggestions. The opportunity to purchase such enhancements at that time were always communicated to the contract administrator and appropriate advisory council entities through Sprint's dedicated account management team. Sprint will keep the FPSC apprised of all new technological and service advances.

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B.28 CONSUMER INPUT

The telephone users shall have input on the quality of the delivery of service. Bidders shall develop a plan to include the Commission and its Advisory Committee in any evaluation of the system. A bidder shall not include travel or per diem costs of the FPSC or its Advisory Committee in its bid Price since those costs will be funded by State. An outline of this plan shall be included with the bidder's proposal. The plan should explain methods for consumer input and how the recommendations from these evaluations will be incorporated into the policies of the relay center. This does not preclude the provider from conducting additional internal evaluations which use relay staff. The results of any service quality evaluation shall be reported to the FPSC office quarterly.

Bidders are encouraged to include in the consumer input plan methods for working with organizations serving hearing and speech impaired individuals statewide to conduct periodic community forums. The community forums shall be for the purpose of gaining user input on the quality of relay service and for responding to user questions and problems on use of the relay service. The community forums shall be planned and conducted in conjunction with organizations serving people with hearing and speech impairments.

The provider shall participate in all meetings of the Advisory Committee and all FPSC workshops and hearings relating to relay service unless excused by the contract manager.

Sprint believes that consumer input is the cornerstone of building the highest quality relay service possible that users will both want to use and enjoy using. Our consumer input track record with TRS accounts nationwide has enabled us to bring to the marketplace a TRS product that has incorporated numerous features that users have requested. Sprint will incorporate this experience in gathering user input through an evaluation process in the State of Florida and will share results quarterly with FPSC offices.

Sprint will establish a customer council comprised of various representatives of the user community that represent diverse backgrounds and needs. organizations targeted will include and will not be limited to the following:

- Florida Association of the Deaf
- Florida Chapters of SHHH
- Florida Public Safety Answering Points
- Educational Programs for Deaf and Hard of Hearing
- Florida Chapters of AARP
- FLorida Chapters of ALDA
- Florida Civic and Community Service Organizations

- Florida Rehabilitation and Independent Living Service Organizations
- Florida Local and Statewide Deaf Service Organizations
- Florida Association of Better Business Bureaus
- Florida Association of Chambers of Commerce.

All participants on the customer council will be invited to participate in the evaluation process at the expense of sprint as the TRS provider. Sprint will actively seek representatives that can assist in gaining feedback from:

- ASL Users
- Late Deafened Adults
- Hard of Hearing (VCO) Users
- Speech Disabled Users
- Voice Telephone Users
- Parents of Deaf and Hard of Hearing Children
- Business Users of Florida TRS
- Spanish Users of Florida TRS.

Sprint will hire a full time dedicated resident account manager for the sole purpose of being the single point of contact for the contract manager of the FPSC. This account manager will coordinate quarterly customer council meetings in order to evaluate service quality and will compile and report results to the FPSC office quarterly. The same account manager will participate in all meetings of the advisory committee and all FPSC workshops and hearing relating to the relay service unless excused by the Contract Manager. Sprint's TRS account manager position description is as follows:

> Provides account management and support services designed to ensure customer satisfaction for assigned accounts. Monitors contract to ensure contract compliance. Other duties include: Communicating customer concerns, needs and requirements to respective internal departments; coordinate appropriate action steps necessary for resolution and as needed, assist Managers-Marketing Technical Support and respective account managers in defining customer specification and requirements. Acquire thorough knowledge of Sprint Services' products and services; identify business applications and potential opportunities within each assigned market segment; and work with designated salesperson or account manager to furnish necessary services to fulfill customer needs. Provide marketing interface into

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Engineering for customized report generation and traffic management input.

Sprint Proposes that quarterly Evaluation of Service focus on the following areas, as well as other areas identified by the FPSC and the advisory committee:

1. Service Standards (average speed of answer/blockage compliance)

2. Technology (identification of enhancements desired)

3. CA Performance (identification of quality of service issues)

4. Customer Service (commendation and complaint resolution)

5. Consumer Education (available outreach and its impact)

6. Other areas identified by the FPSC and advisory committee

Sprint will also ensure accessible communications for all Sprint events that relate to customer service and service evaluations including but not limited to:

1. Sign Language Interpreters

2. Real-time captioning

3. Materials available in large print and braille

Sprint looks forward to this opportunity to bring our commitment to the customer and as we potentially join in a partnership together with the FPSC and advisory committee to make Florida TRS the premier TRS in the country.

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B.29 COMPLAINT RESOLUTION

The provider shall establish procedures regarding complaints. inquiries and comments regarding system services and personnel. The provider shall ensure that any caller to the relay center having a complaint will be able to reach a supervisor or administrator while still on line during a relay call. All complaints received by supervisors or in writing shall be documented, including their resolution, and kept on file and available to the Commission upon request. In addition, the relay center shall have a toll-free Customer Services telephone number available and accessible to the public statewide for the purpose of reporting service or other deficiencies. Records of such reports and copies of written reports regarding service or other deficiencies shall be maintained for the life of the contract and for twelve (12) months after conclusion of the contract period. This record shall include the name and/or address of the complainant, the date and time received, the CA identification number, the nature of the complaint, the result of any investigation, the disposition of the complaint and the date of such disposition. Each signed letter of complaint shall be acknowledged in writing or by contact by a representative of the provider. The necessary replies to inquiries propounded by the Commission's staff concerning service or other complaints received by the Commission shall be furnished in writing within fifteen (15) days from the date of the Commission inquiry.

Sprint relay staff can only provide the best service if it welcomes and values customer comments. Customers willing to express compliments and concerns provide a valuable opportunity to maintain high quality customer service. This feedback enables Sprint to build and maintain a relationship with our customers, reinforcing our commitment to service, as well as remedy any problems that arise.

Operations Supervisors or Operations Administrators are available 24 hours a day to provide on-line assistance to relay customers. In addition, Sprint has an 800 number for customers to contact our Customer Service department. These employees are responsible for accepting all customer contacts; documenting the contacts, commendations or concerns; and forwarding the documentation to the proper source for resolution. A follow up contact will be made in the form of a letter or a personal telephone call from the Account Manager.

These procedures enable Supervisors to provide immediate coaching, training or feedback to CAs.

Following is the table of contents for Sprint's Customer Contact Procedures:

1. Purpose

2. Objectives

3. CA Commendations

4. Definition of Customer Contact & Escalation Types

5. Steps for Handling Escalations to Customer Service from the Relay Center

6. Steps for Handling Escalations to the Relay Center from Customer Service

7. Steps for Handling Escalations to State Account Manager from the Advisory Board, Public Utilities Commission Staff or State Representative

8. Steps for Managing the Customer Feedback System

Figure B.29-1 illustrates Sprint Complaint Resolution Process for Florida Relay Service.

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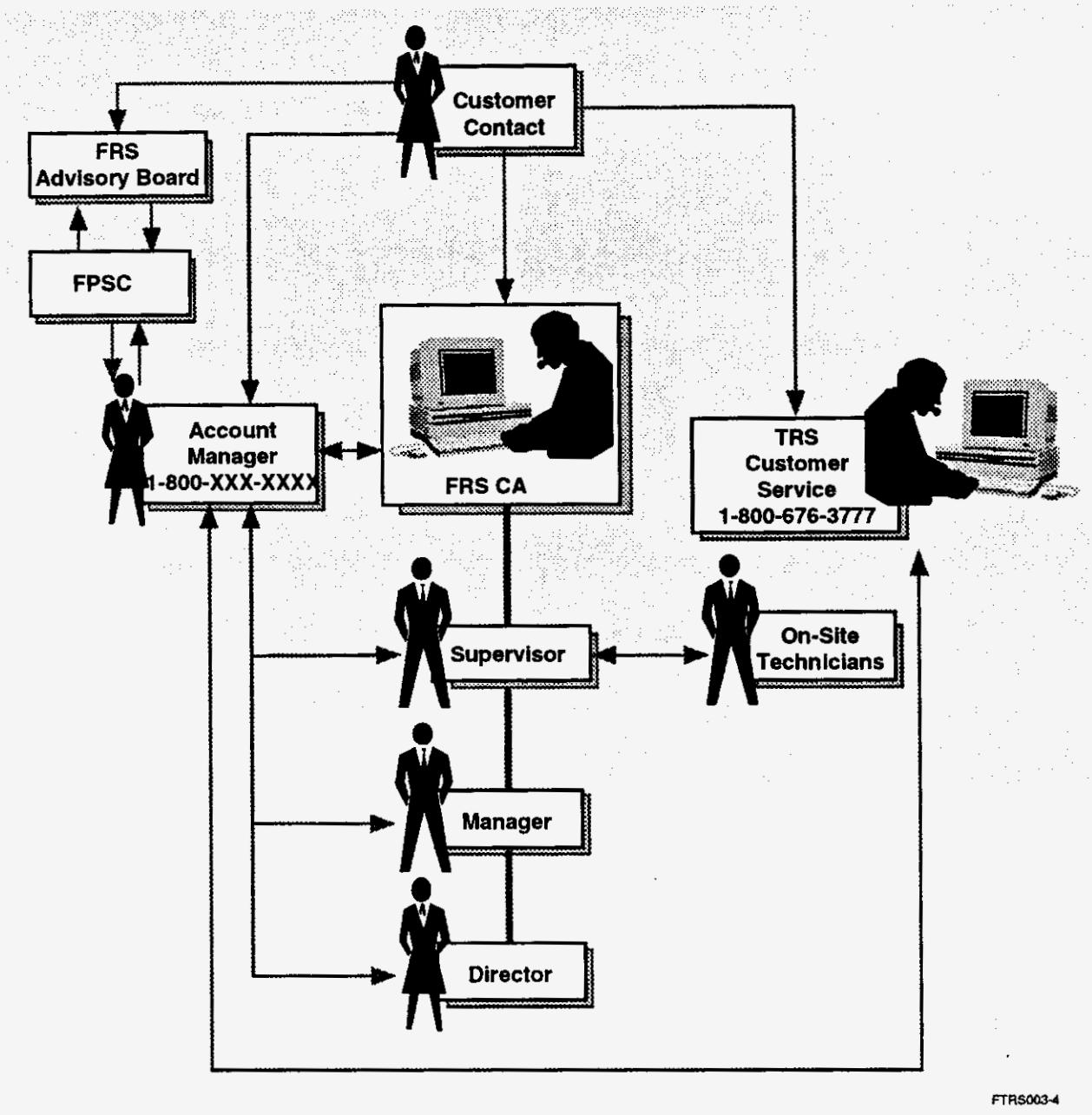


Figure B.29-1 *Sprint Complaint Resolution Process for Florida Relay Service*

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Sprint is proud that we provide many avenues in order to receive feedback from customers and can respond quickly to customer concerns. In 1996, Sprint experienced .02 percent complaints in relation to the number of calls we handled.

Figure B.29-2 illustrates a Sample Sprint's TRS Customer Contact Summary.

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TRS Customer Contact Summary
Florida
Month Year

	CRS	AM	CS	TOTALS
COMMENDATIONS				
Agent				0
Service				0
TOTAL	0	0	0	0
POLICY COMPLAINTS				
#00 Everything Relayed				0
#01 Problem Answer Machine				0
#02 Feelings Not Described				0
#03 Request Service Block				0
#04 Miscellaneous				0
SCOPE OF SERVICE COMPLAINTS				
#10 No 900 Number				0
#11 Limited LD Service				0
#12 Miscellaneous				0
MISC COMPLAINTS				
#20 Rates				0
#21 Improper Agent Protocol				0
#22 Typing Speed/Accuracy				0
#23 Answer Wait Time				0
#24 Line Disconnected				0
#25 Trouble Linking Up				0
TOTAL	0	0	0	0
OTHER CALLS				
#30 Instructions (Explain Service)				0
#31 Send Information				0
#32 General Information				0
#33 Billing Question				0
#34 Purchase TDD				0
#35 Referred to LEC				0
#36 Wanted Sprint Cust Svc				0
#37 Employment Inquiry				0
#38 Computer Setting				0
#39 Other				0
TOTAL	0	0	0	0
NON STATE REPORTED				
#40 Rate				0
#41 Request Relay Number				0
#42 Charged for Local Call				0
TOTAL	0	0	0	0
TOTAL CONTACT	0	0	0	0

CRS Contacts received from Relay
AM Contacts received from Account Manager
CS No contacts per Customer Service

Figure B.29-2 Sample Sprint's Customer Contact Summary

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B.30 CHARGES FOR INCOMING CALLS

The Provider shall make no charge to the users for making calls (incoming) to the relay service.

There will be no charge to FRS users for making incoming calls to the relay center.

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B.31 BILLING ARRANGEMENTS

Provider shall bill for charges for collect calls, person-to-person calls, calls to or from hotel rooms and pay telephones, and calls charged to a third party. Provider shall also arrange for billing to any industry standard local exchange company or alternative local exchange company calling card. For calls billed by or on behalf of the provider, the bidder shall include a complete description of how users will be billed for all calls. This description shall include the bidder's procedures for obtaining billing information from the local exchange and alternative local exchange companies, whether the billing will be performed directly by the provider itself or contracted, specific credit cards or telephone calling cards to which calls can be billed, and a sample bill format. The bidder shall also explain how it will respond to customer inquiries about erroneous bills and how credits will be issued or refunds made.

COLLECT CALLS, PERSON TO PERSON, THIRD PARTY

The capability to invoice Florida TRS users for collect calls, person to person, and calls charged to a third party is a service provided by Sprint.

COLLECT CALLS: Sprint's CAs will obtain call acceptance from the called person before the caller can begin their conversation. This information is embedded in the call detail record and used to bill collect calls to the end user. (Figure B.31-1,"Collect Call Processing," illustrates how this is and will be handled.)

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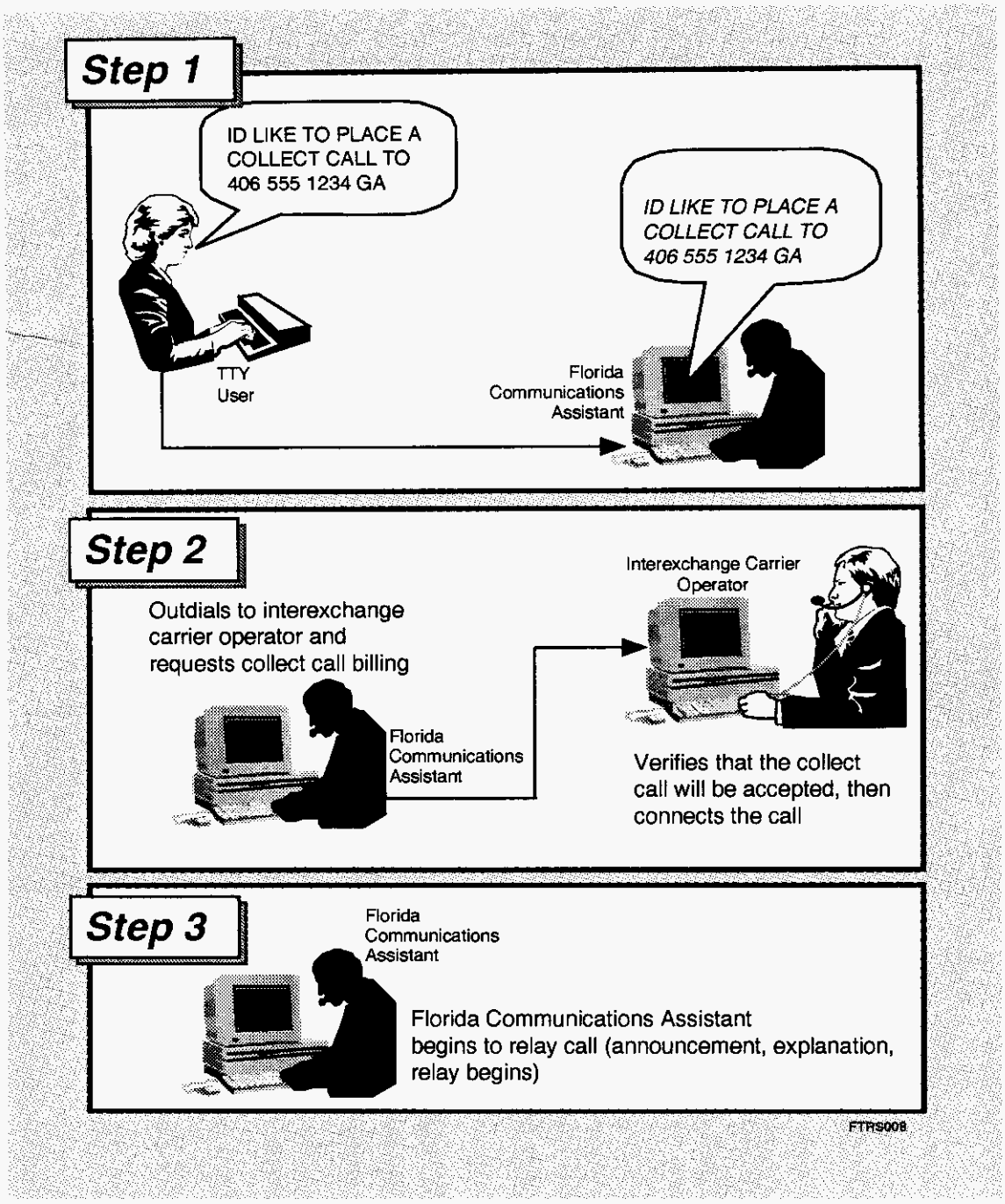


Figure B.31-1 Collect Call Processing

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ACCESS TO PAY 800 OR 800-COLLECT: The call will be dialed using a protocol that will simulate a call dialed through the calling customer's originating LEC end office. It will appear to the LEC as if the call was dialed from the TRS caller's telephone. The call will be routed to the correct destination as if it was dialed from the TRS caller's telephone. If the call is dialed to a free 800 number, there will be no charge to the originating customer. If the call is dialed to a toll 800 number, the rating and billing of the call will be completed as if it was dialed directly from the TRS caller's telephone. All billing will be completed by the terminating carrier and presented to the end user on a LEC or long distance carrier bill. This method will permit the access of pay 800 services, and will increase functional equivalency for the relay service end users.

PERSON TO PERSON: As with collect and third party calls, person to person calls are identified within the call detail record with a unique value that is recognized by Sprint's billing system. This enables us to bill a person to person call appropriately today.
(Figure B.31-2,"Person-to-Person Processing," illustrates how this is and will be handled.)

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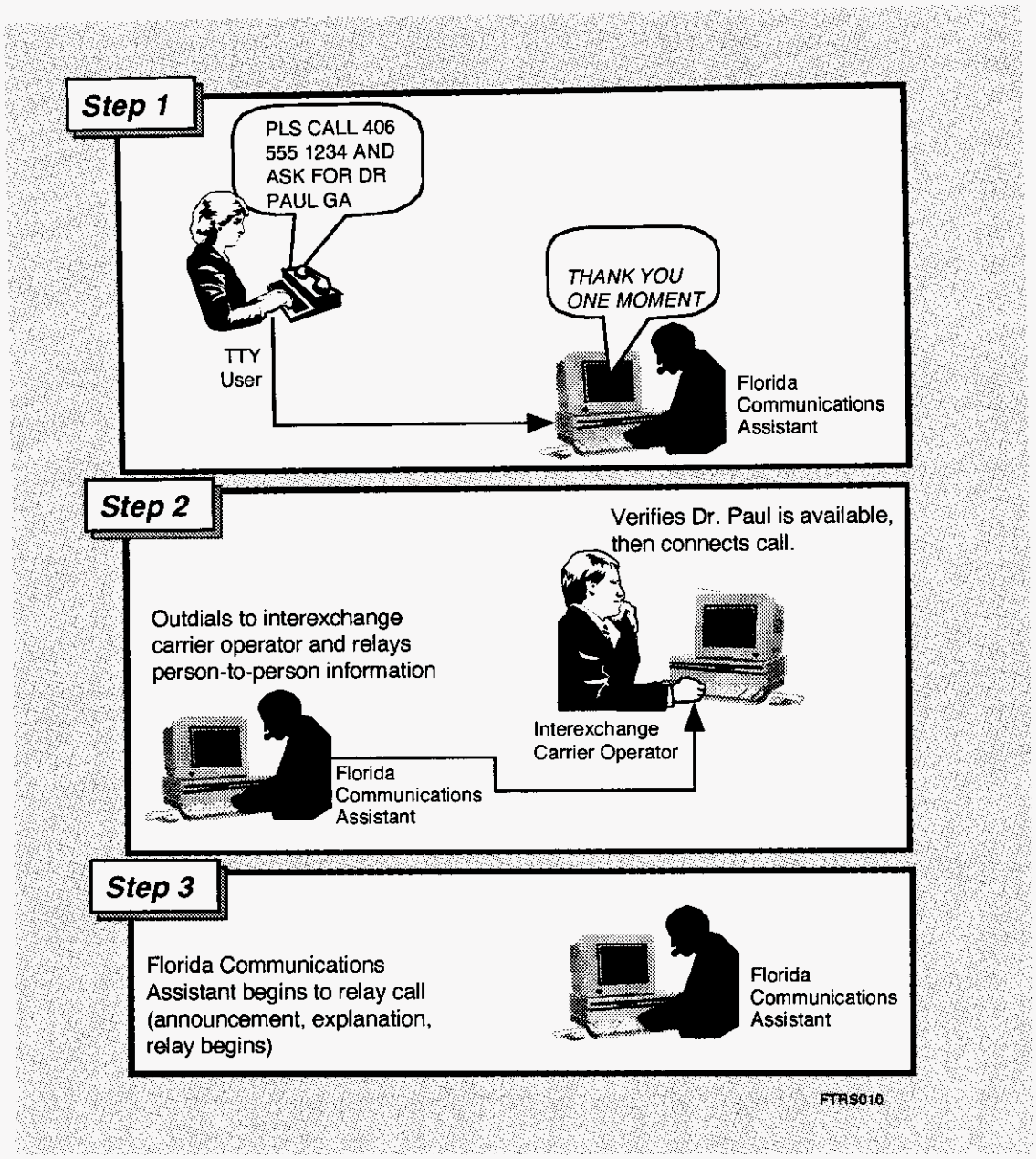


Figure B.31-2 Person-to-Person Processing

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THIRD PARTY: The call detail record created for a third party is populated with appropriate values, ensuring the call is billable as a third party call. (Figure B.31-3,"Third Party Processing," illustrates how this is and will be handled.)

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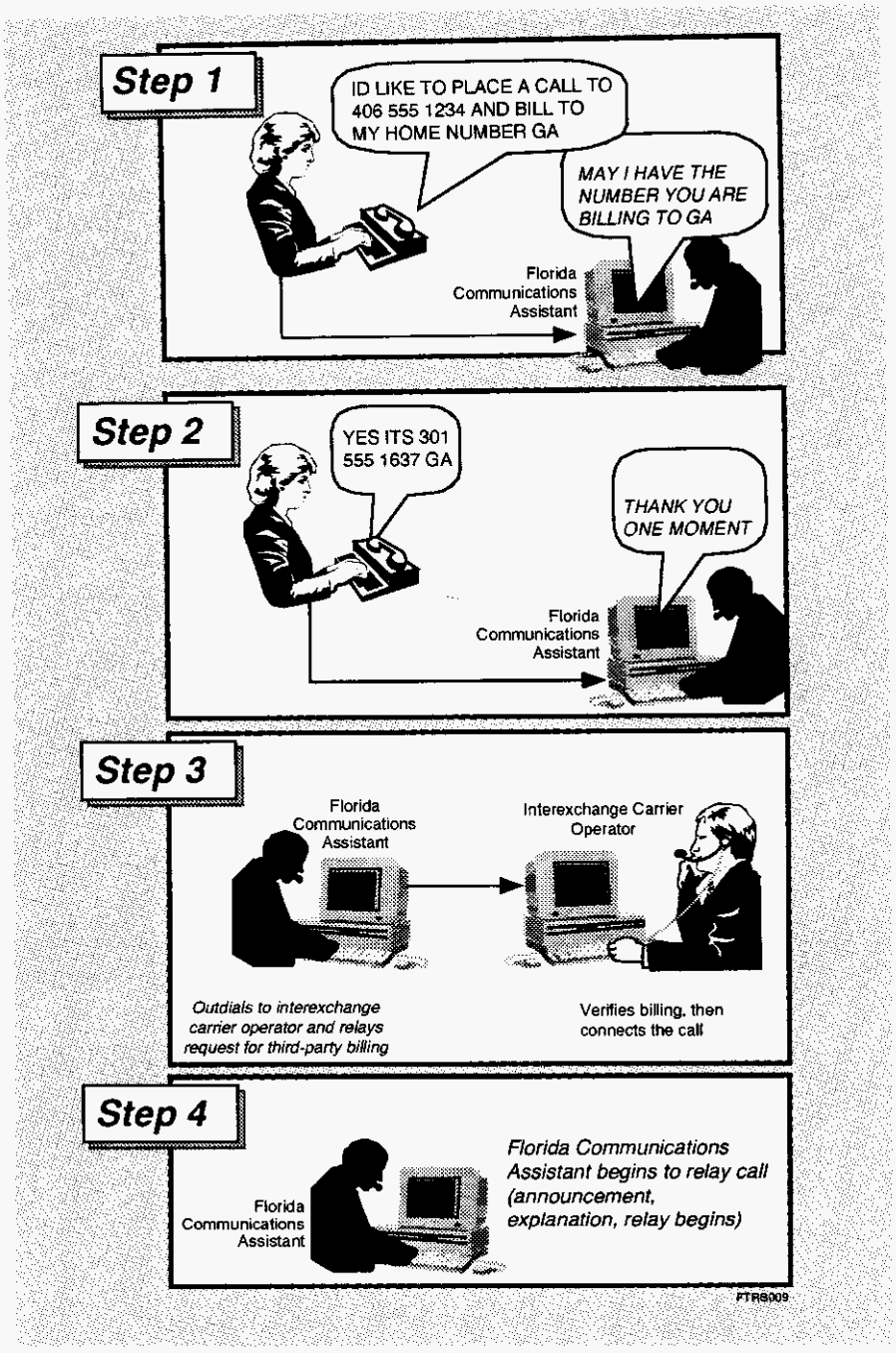


Figure B.31-3 Third Party Processing

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BILLING PROCESS

Sprint produces call detail records and processes them through an automated rating and invoicing system. The creation of the reporting call detail record is an automated function of the switching equipment and software used to provide Florida TRS service. Sprint's TRS Billing Group processes the reporting call detail record in a mainframe production environment to produce the reports and statistics requested by Florida TRS. Automated report generation allows the information to be processed in an efficient and timely manner. Automation also eliminates the possibility of human errors. Additional reports and statistics will continue to be automatically generated to ensure the efficiency and accuracy of the production process and the information (call detail records) processed. (Figure B.31-4,"Sample Call Detail Report," illustrates the automated process of generating call detail records).

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FRS

Sprint.

FLORIDA RELAY SERVICE
DETAIL OF RELAY CARRIER MONTHLY COMPENSATION/STATISTICS
FOR THE MONTH OF XXXXX, 199X

INVOICE DATE: Month, date, year
INVOICE NUMBER: MMYY361

Minutes of Service Compensation

Total Session Minutes of Service *(Does not include time prior to the moment when the operator is ready to render assistance and/or ready to accept information necessary to process the call)*	0
Less Interstate Session Minutes	0
Less International Session Minutes	0
Less Interstate Directory Assistance Session Minutes	0
Less Toll-Free Session Minutes	0
Total Billable Minutes of Service	0
Total Number of Calls into FRS	0
Average Length of Calls into FRS for Session Minutes	0.00
Total Number of Calls for FRS End Users	0
$ per Minute of Service	$0.00
Total Minutes of Service Compensation *($ Per Minute of Service * Billable Minutes of Service)*	$0.00
Total Due	$0.00

Please send remittance to:
Sprint - TRS
P.O. Box 101343
Atlanta, Georgia 30392-1343

Figure B.31-4 Sample Call Detail Report

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Individuals placing toll calls through Florida TRS will incur a charge only for the conversation portion of the call. This is known as talk time. Talk time is measured from the moment the Florida TRS caller is connected with the called telephone number and the conversation begins until the caller disconnects the call to the called telephone number. Sprint populates the CDR with time stamps that document the different components of a call. Talk time, measured in minutes, seconds and hundredths of seconds, is used to accurately calculate end user toll charges.

ALTERNATIVE BILLING METHODS

Florida TRS users will have a variety of alternative billing methods available to them.

Billing Methods include:

- LEC Calling Card
- Nonproprietary Interexchange Card
- Sprint FONCARD

Figure B.31-5 shows a sample bill format, from a LEC invoice, which details how billed calls are placed through the Florida TRS center.

Sprint's 24 hour TRS Customer Service Center will be available to assist FRS customers who may receive erroneous bills. Once acknowledged, Sprint will provide credits to customer's account.

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ACCT NUMBER 904 XXX XXXX XXX X
AUGUST 31, 1996
DETAIL OF CHARGES PAGE 11

Sprint

SUMMARY OF CHARGES FOR SPRINT

MONTHLY SERVICE - JULY 15 THROUGH AUGUST 1996	.00
ITEMIZED CALL (SEE DETAIL)	3.84
-911 EQUALIZATION SURCHARGE	.01
CHARGES BEFORE TAXES	3.85
FEDERAL TAX	.12
STATE AND LOCAL TAXES	.27
TOTAL	4.24

SPRINT BILLING INQUIRIES 1-800-585-7920

ITEMIZED CALLS FOR SPRINT

NO	DATE	TIME	PLACE CALLED		AREA NUMBER	*	MIN	AMOUNT
1	07 17	608PM	Ft. Myers	FL	813 000 0000	E	17	1.91#
2	07 29	254PM	Miami	FL	305 000 0000	D	4	.33#
3	07 29	258PM	Miami	FL	305 000 0000	D	10	.84#
4	07 5	835AM	W. Palm Beach	FL	407 000 0000	D	9	.76#

THANK YOU FOR PAYING BY MAIL

FTRS014-

Figure B.31-5 Sample LEC Bill Invoice

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B.32 END USER BILLING

Intrastate toll calls placed through the relay system and billed by or on behalf of the provider shall be billed to the voice or TDD caller at 50% of the provider's rate for non-relay calls. An additional 10% discount (60% total discount) shall apply to calls to or from the dual-sensory impaired; the provider shall develop a system for identifying such users and applying the discount to their calls. Timing for timed intrastate call billing shall begin when the relay operator advises both parties to proceed and shall not include any initial time by the operator to explain how relay service works.

The bidder shall explain how its discount toll plan subscribers would be billed for relayed calls billed by or on behalf of the provider. For example, if a bidder offers a discount for over 5 hours of usage per month, the bidder should explain how a subscriber to that service would be billed for any relay calls made during the month.

The provider shall not charge the end user more for non-message toll relay calling than would be charged for the same call if billed by the end user's local exchange or alternative local exchange company. The provider can accomplish this by obtaining necessary billing information about the end user's local company in order to ensure that it does not bill in excess of those rates (e.g., extended area service calls, extended calling service calls, etc.)

In the alternative, the provider can collect necessary billing information and turn that billing information over to the end user's local company so that the end user's local company can bill for relay calls under the local company s rates. If this alternative approach is taken. the provider shall submit the billing information to the local company in an industry standard format and the provider shall incur whatever costs are required to correctly format the billing information so that the local company can bill the calls.

Of the two approaches described above. the bidder should indicate how it will initially bill calls and the provider shall advise the contract manager whenever it changes billing methodologies.

Rate Discounting

Intrastate toll calls will continue to be discounted by 50% off day rates, 50% off evening rates, and 50% off night/weekend rates from the Message Telecommunications Services tariffed rates. The discounts will continue to be applied to the intrastate toll calls after the total charge for the call has been calculated. Discounts are not applied to operator surcharges. Sprint will provide LECs with information to enable them to meet the statutory requirement that access not be charged on calls that originate and terminate within the same local calling area.

An additional 10% discount (60% total discount), shall be applied to calls to or from the dual-sensory impaired. Sprint will develop a systems for identifying such users and apply the discounts to their calls.

Individuals placing toll calls through Florida TRS will incur a charge only for the conversation portion of the call. This is known as talk time. Talk time is measured from the moment the Florida TRS caller is connected with the called telephone number and the conversation begins until the caller disconnects the call to the called telephone number. Sprint populates the CDR with time stamps that document the different components of a call. Talk time, measured in minutes, seconds and hundredths of seconds, is used to accurately calculate end user toll charges.

Functionally Equivalent Rates

When Florida TRS users select Sprint as their carrier of choice, they will never be charged rates paid for functionally equivalent voice communication services with respect to such factors as the duration of the call, the time of day, and the distance from the point of origination to the point of termination.

Florida TRS customers will benefit from Sprint's commitment to provide TRS that is functionally equivalent to the traditional telephone users' network as possible. With Sprint as the TRS provider, TTY callers to Florida TRS will be able to complete calls from any location in the United States via a toll free 800 number to voice users and visa versa. Sprint will ensure that all Florida TRS operations are in compliance with Title IV of the Americans With Disabilities Act (ADA), the Federal Communications Commission (FCC).

Sprint was the first and continues to be the only TRS provider that offers discounts to TTY and Voice callers.

Discounts are currently applied to each toll call regardless if the billed party is a TTY or voice caller. Sprint chose to provide discounts on each toll call, because TRS calls are traditionally longer than non-TRS calls. Discounting the call makes the billing process more equitable. The MTS undiscounted tariffed rates on file with the FPSC that will be used for TRS calls are listed in Table B.32-1 and B.32-2.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

Table B.32-1 ***Intrastate InterLATA Rate Schedule - MTS Rates Effective July 1, 1996***

Mileage	INITIAL DAY	ADDITIONAL DAY	INITIAL EVENING	ADDITIONAL EVENING	INITIAL NIGHT/ WEEKEND	ADDITIONAL NIGHT/ WEEKEND
01-10	$0.2000	$0.2000	$0.1500	$0.1500	$0.1200	$0.1200
11-22	$0.2200	$0.2200	$0.1700	$0.1700	$0.1300	$0.1300
23-55	$0.2500	$0.2500	$0.1900	$0.1900	$0.1400	$0.1400
56-124	$0.2700	$0.2700	$0.1900	$0.1900	$0.1500	$0.1500
125-292	$0.2800	$0.2800	$0.1900	$0.1900	$0.1600	$0.1600
293-430	$0.2800	$0.2800	$0.2000	$0.2000	$0.1600	$0.1600
431 +	$0.2800	$0.2800	$0.2100	$0.2100	$0.1600	$0.1600

Table B.32-2 ***Intrastate IntraLATA Rate Schedule - MTS Rates Effective April 1, 1996***

Mileage	INITIAL DAY	ADDITIONAL DAY	INITIAL EVENING	ADDITIONAL EVENING	INITIAL NIGHT/ WEEKEND	ADDITIONAL NIGHT/ WEEKEND
01-10	$0.1800	$0.1800	$0.1300	$0.1300	$0.1100	$0.1100
11-22	$0.2000	$0.2000	$0.1500	$0.1500	$0.1200	$0.1200
23-55	$0.2300	$0.2300	$0.1700	$0.1700	$0.1300	$0.1300
56-124	$0.2500	$0.2500	$0.1700	$0.1700	$0.1400	$0.1400
125-292	$0.2600	$0.2600	$0.1800	$0.1800	$0.1400	$0.1400
293-430	$0.2600	$0.2600	$0.1800	$0.1800	$0.1400	$0.1400
431 +	$0.2600	$0.2600	$0.1800	$0.1800	$0.1400	$0.1400

Extended Area Service

Sprint will make every effort to provide Florida TRS customers, who subscribe to extended area service (EAS) plans, with equivalent service. In Florida, Sprint proposes to utilize the mileage band system

to prevent toll billing when completing calls made to or from extended area service plan subscriber locations.

The mileage band system uses vertical and horizontal coordinates of the calling from and calling to numbers to calculate the distance between the two numbers. Based on the distance calculated and information received from the LECs, the system software determines if the call falls within a predetermined mileage radius. If the call falls within the mileage radius it is treated as local. If the call falls outside the mileage radius it is treated as toll. Mileage bands cross state lines, LATAs, area code boundaries and LEC territories.

Carrier Of Choice

Sprint will generate a monthly report from call detail records and send it to the appropriate Carrier of Choice, as well as LEC. This will facilitate timely credit within normal billing cycles for MTS tariffed rates. The contract manager will be notified of any changes that may be necessary in the billing methodologies described above.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

B.33 RELAYING INTERSTATE OR INTERNATIONAL

The provider shall be required to relay interstate and international calls that originate or terminate in Florida. The provider shall not include in its bill for Florida relay service any charges or time associated with interstate or international calls.

If relayed interstate or international calls are to be billed by the provider to the end user at a rate higher than the rate for a nonrelay call. the provider shall quote the rate to the party to be billed before beginning the call. The bidder should indicate how its rate for interstate and international calls will compare to the rate for nonrelay calls and whether any discounts will apply to interstate and international relay calls.

Sprint will provide both interstate and international calling for calls that originate or terminate in Florida. The state will not be billed for any charges or time associated with interstate or international calls. Interstate and International calls will not be billed to the end user at a rate higher than the rate for a non relay call.

Florida TRS callers will be able to place interstate and international calls that originate or terminate in Florida. Sprint will relay all calls made through Florida TRS and will seek reimbursement for the processing of interstate and international calls from the National Exchange Carrier Association. NECA administers the TRS Interstate Fund by closely monitoring payments into the fund by telecommunications providers and fund disbursements to Relay service providers. The minutes reimbursed by NECA will be listed on the invoice as a reduction to the total minutes of service for the month. The State is not invoiced for minutes associated with the relying of interstate or international calls. Users of Florida TRS who place toll calls will be billed only for the toll portion of the call by the caller's Carrier of Choice.

The TRS Interstate Fund compensation for interstate service includes, but is not limited to, interstate portion of toll free, message telephone, operator services, video, international, and resale services provided by common carriers.

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B.34 END-USER SELECTION OF CARRIER

The provider shall allow a caller to select an interexchange company other than the provider for billing purposes. In such case, the provider shall supply the services of the relay center for the call but provide billing information to the requested interexchange company so that the requested company can correctly bill the relay call. The provider shall route the outgoing call portion of the relay call to the requested interexchange company and shall be responsible for the cost of access through associated local exchange company tandems and. where tandem access is not provided, for connections to the requested carrier through other forms of access. The provider must meet current and subsequent requirements of the Industry Carriers Compatibility Forum for handling end user requests for a carrier other than the provider.

Sprint lead the industry in the development and deployment of Carrier Of Choice (COC). Realizing that a great amount of IXC and TRS industry coordination would have to occur for a seamless deployment, Sprint lead by approaching the Industry Carriers Compatibility Forum (ICCF) to assist in the development of an architecture, methods and procedures. This resulted in the technical requirements that provided IXCs with the information needed to recognize COC calls passed from TRS providers.

Because of Sprint's involvement in organizing the industry Carrier Of Choice (COC) issues and our commitment to meeting or exceeding ADA Title IV requirements, Sprint was the only interexchange carrier (IXC) and TRS provider who fully implemented COC on the FCC required date of July 26, 1993. On that date, Sprint was technically and operationally prepared to send COC calls to participating carriers' networks and was prepared to receive COC calls from any TRS provider capable of processing COC calls.

Florida Relay Service callers will have their interstate calls carried by any interexchange carrier who has agreed to participate in the COC program. If a customer states their COC preference to the CA, the CA will determine if the carrier is a participant; if so, the call will be routed over that carrier's network. FRS callers will be able to use any billing method made available by the requested carrier, i.e. calling card or major credit card. As with calls carried by Sprint, most COC participants limit billing methods based on the type of line the call is originating from. For instance, sent paid will not be accepted as a billing method for calls that originate from payphones and international calls cannot be billed collect. These limitations, however, are not restricted to TRS but are universal telecommunications procedures.

If the caller states no COC preference or if their preferred carrier is not a COC participant, the call will be carried over the Sprint network. CAs will relay COC calls when the call is placed over another carrier's network and will explain COC procedures to customers when needed.

In the third quarter of 1996, Sprint implemented COC branding. A FRS user will be able to enter their interstate COC preference in their customer profile which will eliminate the need to tell the CA. Each time a call is received from the caller's ANI and they are placing an interstate call, the system will automatically route the call over the selected carrier's network. The COC branding will immediately be activated when the customer enters their preference in their profile.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

B.35 RECIPIENT OF TOLL REVENUES

The relay provider shall be allowed to retain the toll revenues for all long distance calls billed by or on behalf of the provider.

Sprint has read and will comply.

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B.36 LONG DISTANCE CALL BILLING

Operator-handled calls shall be carefully supervised and disconnects made promptly. A check of the timing clock shall be made at least once each twenty-four (24) hours to ensure that the clocks are synchronized and that the time is correct. Clock deviations shall not be in excess of 12 seconds. Bidders shall specify the record system for identifying and documenting long distance and toll calls for billing purposes. The record shall contain, at a minimum, the following information:

- ***a. telephone number or credit card number to be billed (NPA-prefix-line number)***
- ***b. originating and terminating telephone number (NPA-prefix-line number)***
- ***c. originating and terminating exchange name***
- ***d. date***
- ***e. start time***
- ***f. call duration to the full second (the time in between start time and end time)***

Long distance calls billed to subscribers shall be listed chronologically and reflect the connect time of such calls based on the appropriate time zone. Bidders shall also fully describe the billing system and billing process that will be used, including identification of any subcontractors, specific duties of the subcontractors. and how the billing record detail will be transmitted to the billing agent (if any).

As the nation's largest provider of relay services, Sprint maintains an automated process for producing contractually required reports and statistics. In addition to the contractual reports and statistics, additional reports and statistics are processed to ensure that the automated systems are performing as designed, and to ensure the accuracy of the information being populated into the reporting call detail record. The information being populated in the call detail record include the billed to number, originating telephone number, terminating telephone number, originating and terminating exchange name, date, start time of call, and call duration to the nearest 100th of a second.

When a Florida TRS user selects Sprint to carry their toll call, that call is placed over the Sprint long distance network. The call is handed off to the Sprint network at the designated LEC access tandem. A Call Detail Record is automatically created for all calls placed over the Sprint network. Sprint has established procedures to identify TRS toll calls by using the information Digits 60, 66, and 67, as specified by Bell Core standards. Since a Call Detail Record is automatically generated at the time the call transpires and is properly identified as a TRS call, Florida TRS users will receive a timely and accurate invoice generated

by Sprint's internal billing systems. Figure B.36-1, "Sprint Automated End-User Billing Cycle," illustrates the automated Florida TRS users billing cycles.

Records Maintenance

Sprint shall retain and maintain all records and documents relating to this contract for three years after final payment by the State and shall make them available for inspection and audit by authorized representatives of the State, including the procurement officer or designee, at all reasonable times.

Sprint does and will continue to maintain a record of all relay service results provided until such time that the Legislative Auditor has completed an audit of the Florida Public Service Commission and gives permission to dispose of the records. These records will be available for review during normal business hours for inspection by the State of Florida, and /or an independent outside auditor upon FPSC's request.

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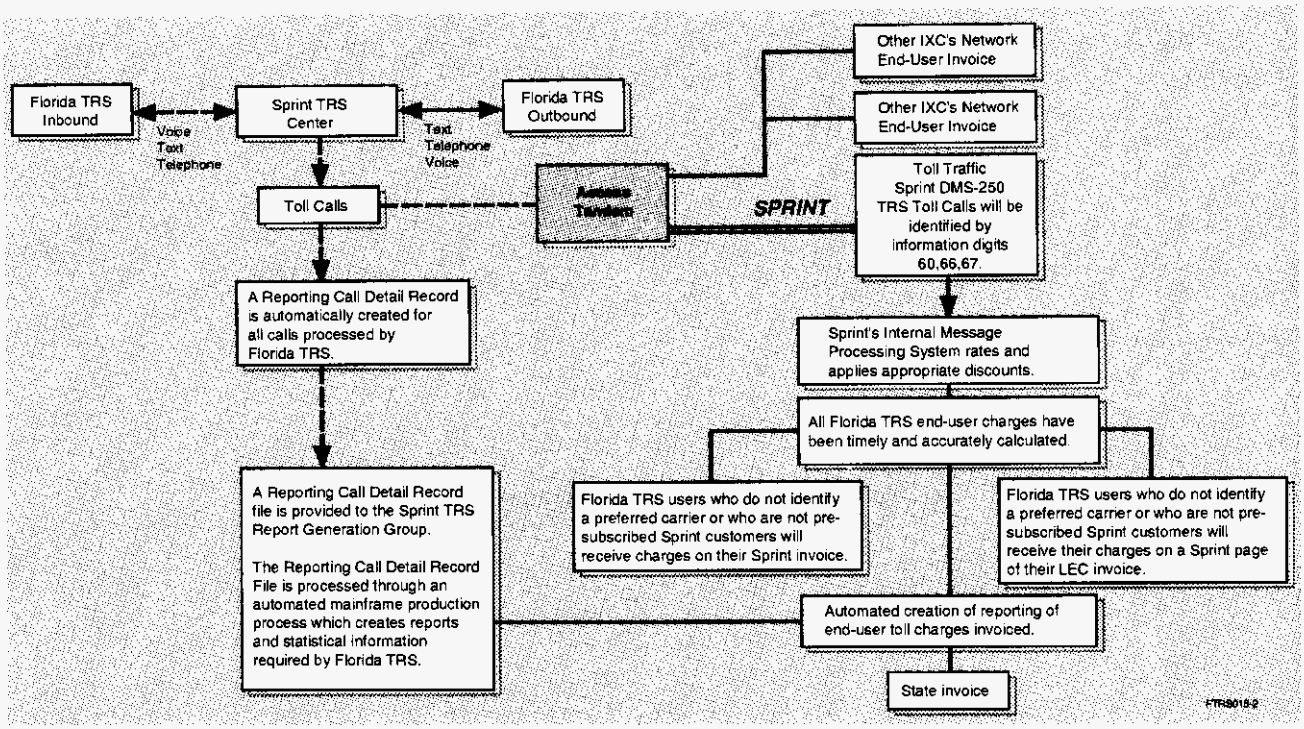


Figure B.36-1 Sprint's Automated End-User Billing Cycle

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B.37 SPECIAL NEEDS

The provider will not be required to provide Special Need services. However, consideration will be given for additional evaluation points for proposals that include Special Need services as a part of the basic relay service.

Special Needs is defined as limiting factors of a physical or literacy nature that preclude a person who is hearing, speech or dual-sensory (both hearing and visually impaired) disabled from using basic relay service. Special Needs includes: (1) physical limitations either temporary or permanent, which preclude use of a TDD with or without adaptations for persons with manual dexterity limitations (e.g., paralysis. severe arthritis. broken fingers) and (2) markedly limited ability either to read or write English or Spanish which precludes user from being able to use the relay service. (It should be understood that relay service does not include translation from one language to another for the Special Needs population or for any other consumers.) Special Needs does not include (1) unavailability of telephone service at the caller's home or business, (2) inability to communicate in either English or Spanish (i.e., where caller can only communicate in a language other than English or Spanish), or (3) handling complex calls (e.g., intervening in a call with a doctor to explain a medical procedure.)

The bidder shall describe what steps will be taken to provide telecommunications assistance to persons with hearing, speech and dual-sensory impairments who have special needs. This description shall include the types of services that would be provided, the prices to end users (if any) for those services. how those services would operationally be provided, how parties other than the provider would be involved in providing Special Needs services and how the provider would assure that those parties would fulfill their portion of the service obligation.

Sprint realizes that it is not required to provide special needs services as part of the proposal. However, because we believe that access to telecommunications is the cornerstone of any successful program, we have set aside $75,000 annually in our business case to solicit responses to a Sprint RFP targeted to community based organizations across the State of Florida seeking responses to provide services such as:

- Visual/tactile telephone interpreting (for users with dual sensory impairments or language barriers to text telephones)
- Community based sites to access video relay interpreting (for users who have limited access to text telephones due to mobility or language barriers)
- Community based sites to access speech to speech relay service (for users who have need to access an intermediary agent to assist in an voice to voice call for speech impaired users)

Sprint has developed a standard Relay Ambassador Program (RAP) RFP that we use extensively across the United States to assist with outreach and

the delivery of special needs services. An example of a RAP RFP has been attached to this proposal as Appendix E.

This RFP would be modified to include the goals and objectives of the Florida Relay Service in terms of best serving people who have special needs in the State of Florida. Approval of the final RFP released will be obtained from the FPSC.

Responses received would be evaluated by Sprint and finalists submitted to the Florida Relay Service for final approval on an annual basis.

Statistics on the costs, number of people served, and types of service provided would be maintained for audit/review by Florida on a quarterly basis. Vendors will be asked to demonstrate how they will provide the service and report the service results to Sprint.

Reimbursement of sub-contracting community based organizations providing this service would be subject to quarterly approval of submitted reports to the Florida Relay Service. Sub-contracting entities would most likely include a variety of local independent living centers that have a consumer base that most closely aligns with the goals of the Florida Relay Service Program. Again, final selection of vendors by Sprint would be subject to approval.

This process will be managed through the Sprint Account Manager dedicated to the Florida Relay Service.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

B.38 All Unsolicited Features in Basic Relay Service Price Proposal

The provider will not be required to provide unsolicited features in its basic relay service. However, consideration will be given for additional evaluation points for proposals that include unsolicited features. The cost to the state for these unsolicited features must be included within the basic relay service price proposal.

Any additional features not described elsewhere in the RFP, and which the bidder is including in its basic relay service and price proposal, which a bidder would like to propose should be fully described indicating how the feature would work, how it would improve the system, which users would benefit from the feature and any other information which would allow the FPSC and PRC to evaluate the feature.

With Sprint as your premium provider of FRS, consumers will experience the most comprehensive array of features and options available. The following product feature list includes enhanced quality products from our first and second generation technology platforms. We look forward to working with consumers and the FPSC to further expand this list in the near future. Sprint is proud of our ability to customize and tailor these features based on unique customer requirements. Table B.38-1 exhibits the unsolicited basic relay service which is included in the basic price proposal for FRS.

Table B.38-1 Unsolicited Features in Basic Relay Service

Features	Description	Cost
800 Access (1 to 4 numbers)	Upon discretion of FPSC, FRS could be accessed up to four separate 800 numbers (TTY, Voice, ASCII, Spanish)	**Standard Feature**
Auto Block of TTY Tones	System's ability to block TTY tones during call set-up for Voice/HCO callers.	**Standard Feature**
Automated Number Identification	System's ability to identify inbound FRS telephone numbers automatically for billing/reporting purposes.	**Standard Feature**
Average Speed of Answer	Calls answered 90% of times within 10 seconds, calculated from the time inbound calls reach the FRS switch.	**Standard Feature**
Background Noises	FRS TTY callers will be informed of background noises during the call through CA's tying in parenthesis.	**Standard Feature**
Branding of Call Type	System's ability to determine, based on previous call history, the caller's preferred communication mode (TTY, Voice, ASCII, VCO, HCO, Spanish)	**Standard Feature**
CA Typing Speed	Minimum of 55 w.p.m. typing	**Standard Feature**

Table B.38-1 Unsolicited Features in Basic Relay Service (Continued)

Features	Description	Cost
Caller ID	Customer Database feature to identify the customers that desire to have the called number identified.	**Standard Feature**
Carrier of Choice	System's ability to bill customer's toll calls to their presubscribed interexchange carrier	**Standard Feature**
Cellular/PCS Phone Access	Allows FRS Cellular customers to reach FRS' 800 number(s) to complete relay calls.	**Standard Feature**
Custom Calling Services	Through Customer Database feature, it allows FRS callers to have traditional LEC services i.e. Call Block, Frequently Called Numbers.	**Standard Feature**
Customer Database	Allows FRS callers to enter specific information i.e. carrier of choice, last number redial, speed dial, etc. to expedite their call set-up time.	**Standard Feature**
Customer Initiated Dialing	Allows FRS callers to input their desired outbound call number before speaking to CA.	**Standard Feature**
Delay Recording	Pre-programmed macro to inform customers that their call is on queue for next available CA.	**Standard Feature**
Directory Assistance (Intrastate/ Interstate)	Allows FRS callers to reach local directory operator at 4-1-1 or long distance DA operator at (NPA) 555-1212.	**Standard Feature**
Emergency Assistance	Provides emergency assistance for FRS callers through customer database profile.	**Standard Feature**
Error Correction	System automates corrects CA's typographical errors and spells out many non-TTY abbreviations.	**Standard Feature**
Gender ID	Greeting macro that informs callers the gender of CAs.	**Standard Feature**
HCO-HCO	Allows speech disabled callers to communicate with each other with their hearing abilities during the call.	**Standard Feature**
Hearing Carryover (HCO)	Allows speech disabled caller to use their hearing abilities throughout the call.	**Standard Feature**
Inbound International	From any International destinations, callers could reach FRS through Sprint's International Inbound 10-digit number.	**Standard Feature**
Intercept Message	Provides intercept messages in voice and TTY in event of system failure occurrence within FRS switch, center, or outbound circuits.	**Standard Feature**
Language-Spanish	Provides Spanish Relay or Translation service to FRS Spanish-speaking communities.	**Standard Feature**
Last Number Redial	Allows customer to dial the last number dialed without having to provide the outdial number information.	**Standard Feature**
Local/Extended Area Service	Callers who subscribe to extended area service plan will receive equivalent service through FRS.	**Standard Feature**

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Table B.38-1 Unsolicited Features in Basic Relay Service (Continued)

Features	Description	Cost
Machine Recording Capabilities	System capability to allow FRS CAs to record and play back audio-text interaction messages to reduce numerous call back to complete entire message.	**Standard Feature**
Marine Calling	Allows FRS callers to place a ship-to-shore call or vice-versa through marine operators	**Standard Feature**
Mobile Radio and Paging	Allows FRS callers to leave messages to pagers.	**Standard Feature**
Network Call Distributor	State-of-art call routing technology to reach next available CA through Sprint TRS centers.	**Standard Feature**
Quick Release	System's ability to disconnect outbound call leg when inbound call leg is disconnected.	Standard Feature
Restricted 800/888	Allows FRS callers to reach restricted 800/888 numbers.	**Standard Feature**
Roaming Service	Third-party calling capabilities to allow FRS callers to complete a third-party billing call.	**Standard Feature**
Single Line Answering Machine Retrieval	Allows FRS callers to retrieve their voice-mail messages on the inbound leg of the call.	**Standard Feature**
Speech Disabled Indicator	Command (S) typed by speech disabled person to inform CA that a speech disabled person is on-line.	**Standard Feature**
Text/Voice Transmission	System's ability to identify product call type i.e. TTY, Voice, or ASCII.	**Standard Feature**
Third-party Calling (Roaming service)	Third-party calling capabilities to allow FRS callers to complete a third-party billing call.	**Standard Feature**
Touchtone Carry Over (TCO)	System's ability to allow FRS callers to enter their audiotext interaction personal identification numbers.	**Standard Feature** upon request
Transfer Gate capabilities	System's ability to transfer FRS callers to TTY Operator Service or TRS 24-hour Customer Service.	**Standard Feature**
TRS Customer Service	24-hour Customer Service support available for FRS customers.	**Standard Feature**
TRS/OSD Integration	System's ability to transfer calls, upon request of FRS callers, between TRS and TTY Operator Service centers.	**Standard Feature**
TTY Operator Services	Operator services available to complete a TTY to TTY call; obtain Directory Assistance information; or receive credit for erroneous billing.	**Standard Feature**
Two-line VCO	Allows VCO users to communicate using personal computer with ASCII compatibility and a second line with conference calling capabilities.	**Standard Feature**
Variable Stamp Macro	Macro to enable FRS callers to know when their called party had disconnected from the call.	**Standard Feature**

Table B.38-1 Unsolicited Features in Basic Relay Service (Continued)

Features	Description	Cost
VCO w/Privacy/NOGA	Allows VCO users to enable VCO communication without need for user to speak "GA" each time.	**Standard Feature**
VCO-HCO	Allows VCO user to use their speaking ability to communicate with HCO user with their hearing ability through FRS.	**Standard Feature**
VCO-TTY	Allows VCO user to use their speaking abilities when communicating with TTY user through FRS.	**Standard Feature**
VCO-VCO	Allows VCO users to use their speaking abilities when communicating to each other through FRS.	**Standard Feature**
VCO/HCO Branding	System's ability to allow VCO callers to set-up the call without typing and HCO callers to listen during call set-up.	**Standard Feature**
Voice Carryover (VCO)	Allows deaf or heard of hearing person to use their speaking abilities through FRS.	**Standard Feature**
Voice Call progression	System's ability to allow Voice or HCO callers to listen during call set-up (i.e. ringing).	**Standard Feature**
Voice Gender ID	Informs the outbound TTY caller the gender of their caller.	**Standard Feature**

Branding

The call processing benefits of call branding were identified by Sprint prior to the deployment of Sprint's TRS product in Texas in 1990. Sprint was the first TRS provider to use call branding in a TRS environment. The ability to determine, based on previous call history, the most likely method a specific customer's call to the relay service should be answered is a corner stone of TRS provided by Sprint and by our TRS platform. This ingenuity will be continued.

The current method of branding inbound calls begins when a call is placed to the Sprint TRS platform. A billing record (call detail record) is created. The billing record contains information on the inbound call that can be learned through call processing. The information includes:

- Caller's ANI (calling phone number)
- Method in which the caller communicated (Voice, TTY, ASCII, Voice Carryover, and Hearing Carryover)
- Called number, billing method, language that the customer used (English or Spanish).

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When billing records are processed, each ANI from each CDR is compared with a database that contains the telephone numbers that have dialed relay and the communication method used during the call. If the ANI in the CDR is not included in the database, it is added along with the communication type. If the ANI is found within the database, the communication type in the CDR is compared to that in the database entry. If the communication types are different, the database is updated to reflect the caller's most recent call to TRS. If the communications types are the same, there is no change made to the database. Sprint will ensure that caller information will be updated in a timely fashion. Figure B.38-1,"Branding of Call Types," illustrates the branding of call type.

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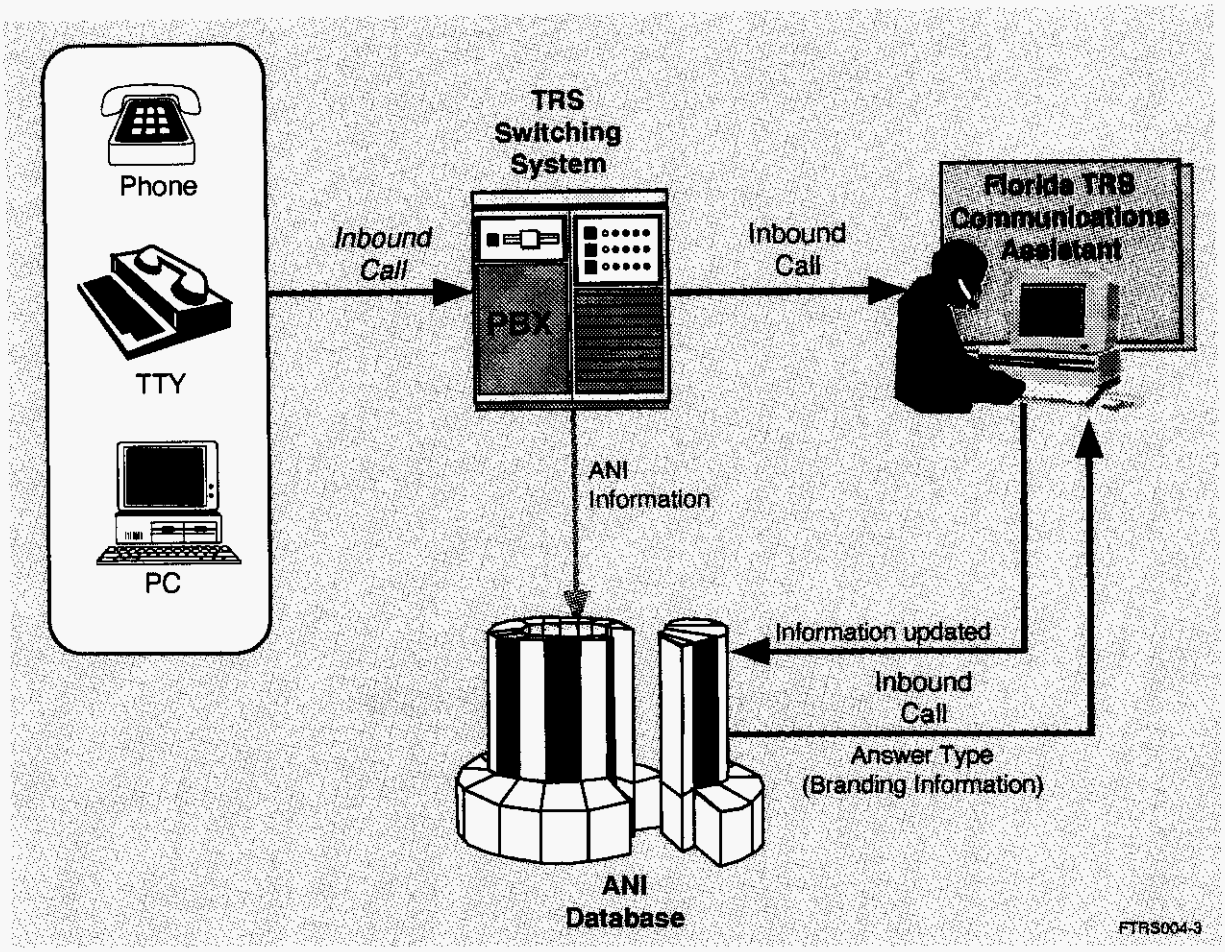


Figure B.38-1 Branding of Call Types

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In addition to regular database updates, there are provisions for "locking" a customer's communication type. This feature is included for customers who use more than one communications type or households or businesses that have more than one relay user. This feature is enabled through the relay service, and may be requested by any customer at any time during an inbound relay call.

Real-Time Relay

Sprint's Real-Time Relay will change telecommunications relay service dramatically. Real-Time Relay, our second generation TRS technology platform, is being developed and implemented with the goal of making the relay call truly mirror the traditional telephone call as much as possible. These new features are all aimed at enhancing the interactive communication between the caller and called party.

Some Real-Time Relay enhancements under development include:

- TRS Customer Database. This database will allow callers to enter specific information into their customer profile. Items such as call type, customer carrier of choice, last number redial, speed dial lists, auto forward location, blocked outbound numbers, Spanish, American Sign Language (ASL) syntax, and ASCII outdial can be activated automatically or at the option of the caller. (Available in 3rd quarter of 1996). Figure B.38-2 illustrates a Sample TRS Customer Database Profile.

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TRS Database Profile

Phone Number:	
Last Name:	
First Name and Middle Initial:	
Street Address:	
City:	
State:	Zip:

Answer Type:	☐ TTY	☐ VOICE	☐ VCO	☐ HCO
	☐ ASCII-300	☐ ASCII-1200	☐ ASCII-2400	
Language Type:	☐ English	☐ Spanish	☐ ASL	

Caller ID:	IN ☐ YES ☐ NO	OUT ☐ YES ☐ NO	Global Relay Block:	☐ YES ☐ NO
Outdial Restriction:	☐ Toll Call	☐ International	☐ Marine	☐ Directory Assistance
☐ Operator Assistance	☐ 976	☐ 900	☐ 800 NPA	

Long Distance Profile:

Interstate (Out of State):	☐ Sprint	☐ AT&T	☐ MCI	☐ Other:
Intrastate (In State):	☐ Sprint	☐ AT&T	☐ MCI	☐ Other:
Preferred Billing Method:	☐ Collect			
	☐ Third Party	Phone Number:		
	☐ Calling Card	Name of Card:		
		Card Number:		

Phone Numbers Profile:

Frequently Dialed Numbers		
	Name	Phone Numbers
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Note: Limit 9 characters entry name

Emergency Numbers		
	Name	Phone Numbers
1	POLICE	
2	FIRE	
3	AMBULANCE	
4	DOCTOR	
5		

Blocked Numbers	
Call Block 1	
Call Block 2	
Call Block 3	
Call Block 4	
Call Block 5	
Auto Forward Number:	

FTRS016

Figure B.38-2 Sample TRS Customer Database Profile

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- Customer Initiated Dialing. This feature allows the caller to input their desired outbound call number before speaking with the relay operator. This will enable the caller to have more control of the call, which will reduce relay operator work time, thereby reducing the cost to the State.
- Machine Recording Capabilities. This capability will enable the relay operator to record and play back items such as answering machine messages, voice mail greetings, and audio information bulletin board scripts. This capability will greatly reduce the need for the relay operator to call back numerous times to complete an answering machine message call.
- VCO with Privacy/ No GA. New hardware being developed for Sprint's TRS platform will enable VCO communication without the need for the TTY user to type "GA" each time they complete their portion of the VCO conversation. The hardware will also enable privacy of the VCO portion of the call.
- Network Call Distributor. Minimizes calls from going into a queue. If all relay operators are busy, the call is automatically routed to another Sprint center.

Figure B.38-3,"Real-Time Relay Platform," illustrates Sprint's Real-Time Relay platform.

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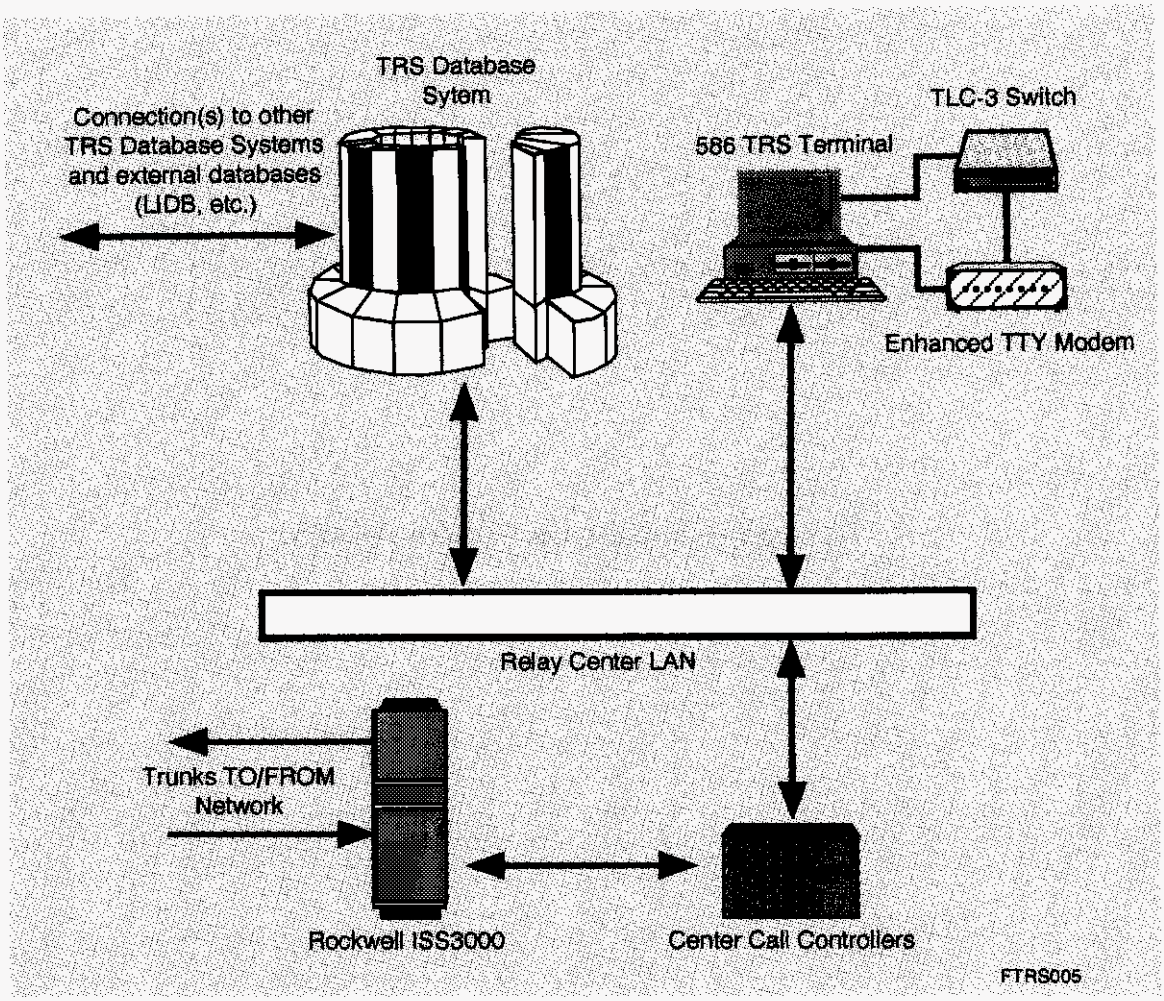


Figure B.38-3 Real-Time Relay Platform

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In addition to the standard features on Sprint's TRS platform, below is information on two enhancements not included in the pricing. Pricing for these features will be provided to the State upon request.

Variable Timestamp Macro

A macro of this type will enable TTY relay service users to know the time the person they called disconnected from the call. It can also be utilized when the TTY user is the called party. The variable time stamp macro will be sent to the TTY inbound user anytime the voice party disconnects.

The variable time stamp macro will be engaged when the system software detects a disconnect on the TTY inbound line. The local time, based on the ANI of TTY user, will be inserted in the macro and sent to the TTY relay service user after the transmission of text ends. The following is an example of a variable time stamp macro:

"UR CALLER DISCONNECTED XXX SECONDS AGO AND THE LAST WORDS SPOKEN WERE W1 W2 W3 W4 W5"

VCO-To-TTY

VCO-to-TTY calling would allow VCO users to communicate with TTY users through Florida Relay Service. Today, if a VCO user wants to communicate with a TTY user, they cannot use Florida Relay Service because both parties are using devices. Our research with VCO users indicates that VCO users want to communicate with TTY users, but they do not want to type their message. VCO users want to speak their part of the conversation and read the response from the called party. To process this type of call, the relay agent would type the VCO user's message to the TTY user, then the TTY user would type directly back to the VCO user.

VCO-HCO Calling

VCO to HCO calling allows a deaf/hard of hearing person using their own voice to communicate with a speech disabled person who uses their own hearing. The consumer demand for this technology is fairly new and undefined, yet Sprint is positioned to respond. Sprint is committed to working with consumers who have these special communication needs to better define the requirements necessary to ensure exactly what is desired.

For example, one variation of this feature would be for the HCO person to attempt to use their voice instead of type, in hope of the agent being able to understand their speech and then type to the VCO

user. This would alleviate the HCO's users need to type. This would also be more in line with Sprint's experience of our Speech to Speech trial(s) for some HCO users. Special training and support is needed outside of the traditional VCO to HCO call and pricing for such a feature would need to be negotiated.

Error Correction

Sprint has enhanced CA typing accuracy by introducing error correction software to the TRS CA terminal. This service automatically corrects many of the CAs typographical errors and spells out many non-TTY abbreviations that may be used by the CA in voice-to-text translation. This enhancement was developed by a Sprint relay operator in our Maryland center.

Automatic Error Correction is one of the many service enhancements made to Sprint's TRS platform and provided to all of our states at no additional charge. Currently, there are 486 words and abbreviations in the error correction dictionary. Sprint was the first carrier to provide Automatic Error Correction and has been providing it to our customers since 1992. (Refer to Appendix F, "Error Correction Article," for more information.)

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B.39.A CUSTOM CALLING SERVICES

The provider will not be required to provide custom calling type services unless required for certification by the FCC. No additional evaluation points will be awarded to a bidder based on a proposal to provide services which offer functionalities similar to those of one or more of the following custom calling services. The proposed charge to the Administrator for custom calling service should be separately stated in the price proposal.

The bidder shall explain how a user could receive functionalities similar to those of the following services in conjunction with a relayed call. The bidder shall also indicate what additional cost would apply to the caller. if any. If no separate charge to the relay user is stated it will be assumed there is no separate charge.

a. ***Three-way calling which would allow a user with only one telephone line to conduct a conversation with two other parties at the same time.***
b. ***Last number redial which would allow the caller to dial the relay center and have the CA dial the last number called via relay without the caller having to give the number to the CA.***
c. ***Call trace which would allow the caller to dial the relay center and have the CA provide the number of the last call made to the caller via relay.***

Sprint's customer data base will enable FRS users to access to the custom calling services, typically provided by LECs for standard (voice) users:

Last Number Redial

Last Number Redial will allow the FRS user to call the last person dialed through the Relay Center without having to provide the telephone number to the relay agent. The FRS user can simply instruct the relay agent to "call last number". When this instruction is given, the system software immediately performs a database search based on the caller's telephone, and retrieves the last number that was dialed from that telephone number through the Relay Center. Last Number Redial is a standard feature of the Customer Database.

Frequently Called Numbers

Frequently Called Numbers, sometimes referred to as Speed Calling, will allow FRS users to store up to 10 frequently called telephone names and numbers in their customer profile. Each telephone number placed in an user's profile will be assigned a unique code of 0 through 9. A FRS user can either provide the relay agent the code for the frequently called telephone number or name instead of the entire

10-digit number. The Frequently Called Numbers feature is a standard feature of the Customer Database (Refer to Section B.38 for further information).

Call Waiting

With LEC-offered Call Waiting, only the hearing caller recognizes the tone alerting them of an incoming call. The hearing caller must tell the relay agent that they have a call waiting. The relay agent can then inform the TTY called party to hold until the caller returns to the line. Upon completion of LEC-engineered network enhancements that will allow both parties, caller and called party (TRS), to hear the tone, hearing users will have to inform the relay agent of when they have a call waiting.

Call Forwarding

Call Forwarding will be beneficial to TTY users who receive voice calls from people who are not familiar with placing calls through FRS (e.g., business owners). Call Forwarding will allow TRS users to forward calls through FRS back to them on a second line. To use this feature, the TRS user will have to purchase call forwarding and a second telephone line from their LEC and establish a customer profile with FRS that will register their telephone as one that will be forwarded back to FRS. Once this has been completed, the customer can forward incoming calls (assumed to be voice callers) to the FRS 800 number. When the call is received at FRS, the system software will know, based on the registered incoming telephone number of the TRS user, that the incoming call needs to be forwarded to the user's second line (answered with TTY). Based on the incoming registered telephone number, the system software will match that number with the telephone number of the second line. The CA will then outdial to that second line and relay the call between the original caller (voice) and the original called party (TTY). The Call Forwarding feature is a standard feature of the Customer Database.

Call Block

FRS users can include telephone numbers in their customer database that they want blocked from terminating to a telephone line. This feature can also be used to block telephone numbers (e.g., 900/976 numbers) to which the TRS user is attempting to place a call. The TRS user will be able to inform FRS of telephone numbers that they do not want to terminate or originate from their telephone line. The Call Block feature is a standard feature of the Customer Database.

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Caller ID

Sprint's TRS platform currently has access to the caller's telephone number (ANI) which enables the relay operator to verbally, or via TTY/ASCII, inform the terminating party (called party) of the telephone number of the originating party. The called party can decide whether or not to accept the call.

The Customer Database feature can be utilized to support blocking of the Caller ID telephone number, or the ability to identify customers that desire to have the called number identified.

Based on our understanding of the LEC Caller ID offering, no relay provider can claim to provide ubiquitous Caller ID in the true sense. Caller ID as it exists today in the LEC network requires communication between the originating end office Service Control Point (SCP) and the terminating end office SCP. The current configuration of the LEC network prohibits a relay provider from gaining access to all of the local SCPs to provide Caller ID, as it is offered for non-TRS calls. At this time, Sprint provides to the terminating local exchange network the telephone number of the calling party in every call completed over Sprint's long distance network; however, the information is not used and is not presented to the terminating customer by the LEC.

Call Trace

Call trace is a custom LEC feature which is sold to individual end users. While this feature is not currently available on Sprints TRS platform, we would welcome the opportunity to discuss the cost of development and deployment with the State of Florida.

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B.39.B 900/976 SERVICES

The provider will not be required to provide access to 900/976 service unless required for certification by the PCC. No additional evaluation points will be awarded to a bidder based on a proposal to provide 900/976 service. The proposed charge for 900/976 service should be separately stated in the price proposal.

The bidder should explain how it could provide relay service users with access to 976 and 900 number services. Bidders are to describe how such access can be provided, how callers can disconnect without being charged and a methodology for billing the user directly for any charges incurred from the 900/976 service. The bidder should describe how it would deal with denied 900/976 calls and high bill complaints for 900/976 calls. If this service is provided before placing the call. the CA shall advise the caller that there will be a charge for the call.

Sprint has researched access to pay-per-call services, and has determined the best method of providing access to the greatest number of 900 services. This method is based on the current practice of assigning 900 numbers by carrier. Since a 900 - NXX is assigned to a specific carrier, if the carrier that "owns" a 900 number can be identified, the outbound 900 call can be placed through the existing Carrier of Choice Access Tandem connection and additional access tandem connections throughout Florida. The rating and billing of this call type will be determined as if it was dialed from the TRS caller's telephone. All billing will be performed by the destination carrier.

Call blocking to all pay per call services will be performed via the originating LEC. A toll-free 900 number will be created for customers who wish to access pay-per-call services (with the exception of 800 pay-per-call services). If the originating customer has a pay-per-call block on the telephone line and attempts to dial the TRS Center's 900 number used for pay-per-call services, the originating LEC will block the call, and the call will never reach the TRS Center. If an 900 number block has not been added to the originating telephone line, the LEC will complete the call to the TRS Center. The customer will not be charged for the call to the TRS Center. However, the use of the free 900 number will prevent unauthorized end users from circumnavigating the telephone line restriction. A pay-per-call may be placed once the customer reaches the TRS Center. Using this method, callers wishing to dial pay services must always dial the TRS Center's 900 number to access such services, and will not be permitted to dial pay services if access to the TRS Center is via the general use 800 number. Please refer to Figure B.39-1,"Access to 900 and 800 Pay-Per-Call Services," for a diagram of how 900 Pay-Per-Call service will work.

Sprint looks forward to working with the FPSC to implement the procedures and technology that will most readily provide advanced services, such as Pay-Per-Call Access.

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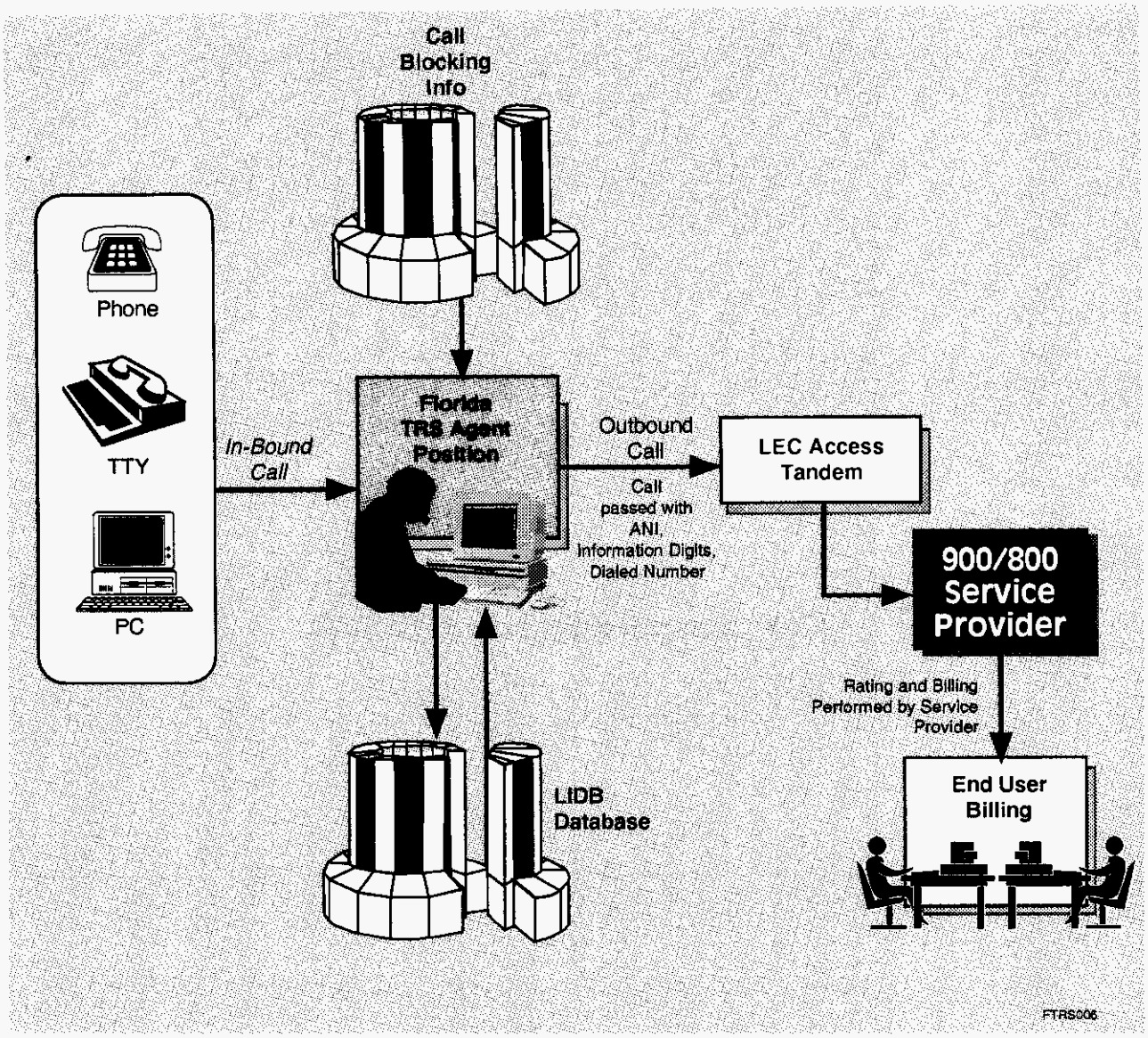


Figure B.39-1 Access to 900 and 800 Pay-Per-Call Services

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B.39.C ENHANCED TRANSMISSION SPEED AND INTERRUPT CAPABILITY

The provider will not be required to provide the enhancements described below unless required for certification by the FCC. No additional evaluation points will be awarded to a bidder based on a proposal to provide these enhancements. The proposed charge to the Administrator for the enhancements below should be separately stated in the price proposal.

Enhancements may include the ability both to send and receive typed communications at the same speed as typed or transmitted. Enhanced protocols may also include the ability to send and receive interrupt signals while another party is typing. The bidder should state what requirements would exist in order for the relay user to be able to utilize the above enhancements.

Sprint is investigating the implementation of proprietary protocols on its platform through agreements and/or partnerships with the industry technology leaders. We are also exploring the capability of the emerging standards V.62 associated with Digital Simultaneous Voice Data (DSVD) modems in supporting future enhanced products. At this time, there is no clear answer to how we will implement a proprietary protocol. However, as with the implementation of past products, Sprint intends to implement a proprietary protocol in a seamless manner providing a robust platform to support expansion of future products.

Sprint would be happy to share with FPSC our most recent dialogue and details with Ultratec in regard to their attempt to offer Turbo Code to various TRS vendors. Due to the confidential nature of these discussions, we look forward to elaborating with FPSC in a confidential environment. Pricing for this feature is currently not included in our bid price and will be determined upon negotiation with FPSC.

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B.39.D OTHER OPTIONAL FEATURES

Any additional features not described elsewhere in the RFP which a bidder would like to propose should be fully described. Examples might include. but are not limited to. features such as: providing a caller profile identifying to the CA the caller s preference regarding use of calling card carrier of choice, use of HCO/VCO. descriptions of background noise; video interpreting; use of speech synthesis equipment instead of a CA to convert text to speech; use of voice recognition equipment instead of a CA to convert speech to text; etc.

No additional evaluation points will be awarded to a bidder based on a proposal to provide these unsolicited features. The proposed charge for any unsolicited features offered under this section should be separately stated in the price proposal.

Video Relay Interpreting (VRI)

Sprint is very proud of our advancements in Video Relay Interpreting Service. FRS users will benefit from Sprint's unmatched expertise and experience in video teleconferencing. Sprint currently provides worldwide teleconferencing via our Meeting Channel network of fully equipped teleconferencing rooms. Sprint joined forces with Kinko's copy centers to provide low cost teleconferencing to individuals and businesses across the United States.

To further demonstrate Sprint's commitment to video technology, Sprint was the first TRS provider in the country to combine video technology with relay applications. In January of 1995, Sprint partnered with the Public Utility Commission of Texas in a very successful 4 week video interpreting trial. The trial involved three video equipped agency locations in the Austin area, a Texas PUC location and a Relay Texas location. The trial demonstrated the feasibility of desktop video in providing video interpreting service. Additional video trials are being planned for locations throughout the country utilizing video equipment that complies with the newly adopted H.320 video standards. These standards will enable video equipment, regardless of the manufacturer, to communicate with each other.

A second 90 day VRI trial with the State of Texas has been implemented in September 1996. The trial has expanded to 10 site locations throughout the State and Relay Texas location in Austin.

Sprint looks forward to working with FPSC on a VRI product that best meets the needs of FRS users.

Text To Voice

The State's request for information concerning services for customers with special needs indicates a knowledge of technical advances and customer desires. Sprint is currently researching the possibility of developing a Text to Voice product. Increases in workstation processing power (high speed 486 / Pentium processors) and software have moved text to voice technology from a futuristic dream to a present day possibility. Sprint stands ready to bring this technology to TRS users.

Sprint has been in contact with speech synthesis industry experts, including faculty at the University of Quebec, researching the feasibility of including text to voice as a feature in Sprint's TRS platform. Text to voice applications under review by Sprint include:

- Large vocabularies (vocabularies that support the diverse needs of TRS conversations; includes technical and nontechnical TRS conversations)
- Word substitution ("You are" substituted for "UR" and "Go Ahead" substituted for "GA")
- Ability to chose between adult or child versions of male and female voices
- "Rules Based" text to voice applications that provide basis for truly interpreting and converting ASL-based text to voice.

Speech to Speech Calling

Speech to Speech would provide FRS customers who have severe speech disabilities, or who use an electronic voice, the ability to communicate with people who have no speech or hearing impairments. People with speech disabilities have shared with Sprint how difficult it is for them to communicate over the telephone with someone who does not have a speech impairment. The relay service can be used by both parties to increase the effectiveness of the communications. For instance, a speech impaired person could call WRS and ask the CA to call a non speech-disabled person. The CA would inform the called party that they are receiving a call from a person with a speech disability and that the agent would remain on the line to assist when needed. As the call progresses, the CA would only be involved if the called party could not understand what the speech disabled person was saying. In that case, the CA would voice for the speech disabled person. Both parties would use standard telephones to communicate through TRS.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

Sprint is the ONLY TRS provider today that has proven experience and unique insight to how this service can be successful. Our Speech to Speech trials in California and Missouri have been industry leading endeavors. In fact, in a recent transition from Sprint to a new vendor, the state elected to offer Sprint an exclusive extension for Speech to Speech services because the new vendor does not have the capability, experience or knowledge.

Speech to Speech services are significantly different from HCO to HCO services and have historically been priced separately. Sprint would be happy to share with you are expertise in Speech to Speech services in a confidential environment.

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B.40 PERFORMANCE BOND

The Provider will be required to furnish an acceptable performance bond, certified or cashiers check or bank money order equal to the estimated total first year price of the contract. The bond shall be in effect for the entire duration of the contract.

To be acceptable to the FPSC as surety for performance bonds, a Surety Company shall comply with the following provisions:

A. The Surety Company shall be admitted to do business in the State of Florida.

Sprint understands and will comply.

B. The Surety Company shall have been in business and have a record of successful continuous operations for at least five (5) years.

Sprint understands and will comply.

C. The Surety Company shall have minimum Best's Policy Holder Rating of A and Required Financial Rating of VIII from Best s Key Rating Guide.

Sprint understands and will comply.

D. All bonds shall be signed by a Florida Licensed Resident Agent who holds a current Power of Attorney from the Surety Company issuing the bond.

Sprint understands and will comply.

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B.41 SUBMISSION OF MONTHLY INVOICE

By the 7th calendar day of the month (or the subsequent business day if the 7th falls on a Saturday Sunday or holiday). the provider shall submit a detailed invoice (showing billable minutes and rates) to the Administrator [defined in s.427.703(1)] at the contracted price for the previous month s activity. The accounting period used to prepare monthly invoices shall be the calendar month. Payment shall not exceed the prices contained in the contract. The invoice and supporting documentation shall be prepared in such a way as to allow the Administrator or the FPSC to audit the invoice. A copy of the monthly invoice shall be submitted to the contract manager at the same time it is submitted to the Administrator.

Sprint will submit an automated invoice to the Administrator by the 7th calendar day of the month. The invoice will detail the billable minutes of service at the contracted price for the previous month's activity. A sample invoice is included in Appendix D. Payment is due to Sprint 30 days after receipt of the invoice by the Administrator.

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B.42 TRAVEL

The Provider will not be entitled to a separate payment from the FPSC or the Administrator for any travel expense which occurs as a result of this contract.

Sprint understands and will comply.

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B.43 REPORTING REQUIREMENTS

The provider shall provide to the Commission s Division of Communications and the Administrator the following written reports by the 25th calendar day of each month reporting data for the previous month. (More frequent or more detailed reports shall also be provided upon request.)

Sprint will provide by the 25th calendar day of each month reporting data for the previous month. Sample automated reports are provided in Appendix D.

a. Total daily and monthly

i. number of incoming calls (separately stating whether incoming calls originate as Baudot ASCII or voice calls.) The number of incoming calls which are general assistance calls shall be footnoted on the report.

Sprint understands and will comply.

ii. number of incoming call minutes associated with each of the categories of incoming calls in a.i. above

Sprint understands and will comply.

iii. number of outgoing calls (provide two breakdowns of this total: one separately stating completed calls and incomplete calls. and one separately stating whether calls terminate as Baudot. ASCII or voice calls)

Sprint understands and will comply.

iv. number and percentage of incoming Florida calls received at each relay center operated by the provider (Total should equal the number of incoming calls in item a.i. above.)

b. Average daily and monthly blockage rate.

Sprint understands and will comply.

c. Range of answer times for the month and daily and monthly number an percent of incoming calls answered within 10 seconds.

Sprint understands and will comply.

d. Total daily and monthly number of outgoing calls (including both completed and incomplete) of the following lengths:

- *0 - 10 minutes*
- *>10 - 20 minutes*
- *>20 - 30 minutes*
- *>30 - 40 minutes*
- *>40 - 50 minutes*
- *>50 - 60 minutes*
- *>60+ minutes*

Total of d. should equal total of a.iii.

Sprint understands and will comply.

e. *On a daily basis for the month, number of outgoing calls and average length of calls by hour of day. (Total should equal total of a.iii.)*

Sprint understands and will comply.

f. *Number of local, intraLATA toll, intrastate interLATA, interstate and international calls for the month. (Total should equal total of a.iii.)*

Sprint understands and will comply.

g. *Number of outgoing calls and average length of completed outgoing calls originated by TDD users and voice users (identified separately). (Total number of calls should equal total in a.iii.)*

Sprint understands and will comply.

h. *The provider shall provide monthly summary reports to the FPSC and the Administrator regarding number of complaints received categorized by topic areas.*

Sprint will submit monthly a TRS Customer Contact Summary Sheet along with the monthly invoice package to the State of Florida. The Summary Sheet will include the specific policy complaints, scope of service complaints, and miscellaneous complaints received for Florida TRS.

i. *The provider shall report monthly to the FPSC and the Administrator the results of any user evaluations conducted.*

Sprint understands and will comply.

j. *The provider shall report monthly on new subcontractors being used to assist in providing relay service and shall identify the scope of their role in the process and the relationship of the subcontractor to the provider.*

Sprint understands and will comply.

k. *By March 1, the provider shall provide to the Administrator and the contract manager forecasted relay usage figures and costs to the Commission for the upcoming fiscal year (July 1 - June 30).*

Sprint has read and will comply. Sprint will submit an annual report summarizing operations for the contract year with forecasted relay usage figures and costs to the Commission for the upcoming fiscal year.

The provider shall include information on its capability and willingness to provide ad hoc reports including new information in the bidder's database or new formats for existing information.

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Sprint is willing to work with the FPSC to meet any reporting needs that may arise in the future. The Account Manager will obtain the Customer Requirements for the new reports and a Level of Effort will be submitted back to the State for approval.

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B.44 LIQUIDATED DAMAGES

Implementation of the Florida Relay Service in a timely matter is essential. Failure by the Provider to implement the service by June 1, 1997 shall be considered a significant and material breach of the Provider's commitment. For every day the service is delayed, the Provider shall pay to the Administrator, for deposit in its operating fund, the sum of $25,000 per day.

Liquidated damages shall accrue in amounts up to the following amounts per day of violation:

l. For failure to meet answer time, blockage rate or transmission level requirement - $5,000

m. For failure to meet complaint resolution requirement - 1,000

n. For failure to provide reports - $500

o. For failure to provide contracted services for the life of the contract, the FPSC reserves the right to require the payment by the Provider, of liquidated damages in an amount commensurate with the duration and extent of the system deficiencies.

Any liquidated damages may be paid by means of the Administrator deducting the amount of the liquidated damage from a monthly payment to the provider. Such action shall only occur upon order of the FPSC.

Sprint has read and understands.

Sprint has provided an implementation plan which illustrates major milestones and activities from contract signing to construct and staff a full in-state operations center by June 1, 1997. Sprint will work with FPSC on transition plans to ease the migration of traffic from the current provider to Sprint, when selected as the TRS provider for the State of Florida.

Please refer to Table B.44-1 for Sprint's implementation schedule for Florida Relay Service.

Table B.44-1 Florida Relay Service Implementation Schedule

Item #	Task to be Performed System Engineering	Loc.	Staff Responsible	Responsible Company	Duration (Weeks)	Comments
1	**Funding Approval**	KC	Sys Eng	EPS	5	
2	**Selection of Center Location**		Bldg	EPS	1	Concurrent with #1
3	**Leasehold Negotiations**		Bldg	EPS	1	Concurrent with #1
4	**Architectural and Engineering Drawings**		Bldg	EPS	4	Concurrent with #1
5	**Building Construction**		Bldg	EPS	10	
6	**Agent Position Furniture**	KC	Sys Eng	EPS	8	Concurrent with #5
7	**ACD Switch Expansion (order)**	KC	Sys Eng	EPS	3	Concurrent with #6
8	**ACD Switch Expansion (install)**	TBD	Sys Eng	EPS	2	
9	**Agent Position Expansion (order)**	KC	Sys Eng	EPS	3	Concurrent with #6
10	**Agent Position Expansion (install)**	TBD	Sys Eng	EPS	1	Must wait until furniture installed
11	**Conformity Testing of Agent Positions**	TBD	TA	EPS	2	
12	**Agent Hiring**	CSD			3	Concurrent with #1-#11
13	**Agent Training**	CSD			2	Concurrent with #1-#11
14	**Configuration of Temporary Training Area**		Sys Eng	EPS	1	Concurrent with #1-#11
15	**Final Test and Acceptance of Hardware**	TBD	TA	EPS	0	Agent positions tested in Step 10
16	**Begin Service**	TBD	ALL	EPS	0	
N/A = Not Applicable				Total Weeks 26		

Sprint will coordinate a working relationship with FPSC to ensure that all contract requirements are properly implemented and satisfied. Sprint has designated Michael Baer (Sprint Program Manager, Denver, Colorado) as the Implementation Manager and will designate an Account Manager to be FPSC's primary contact after the service cutover.

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B.45 TRANSFER TO NEW PROVIDER

When relay service is transferred to a new provider, the provider shall make every effort to ensure that service is transferred to the new provider so that relay users do not experience an interruption in service. The relay service and consumer service 800 or other telephone numbers shall be made available to the new provider, with the new provider paying any costs associated with transferring the numbers to the new provider's use.

Sprint will ensure the State of Florida and FPSC a completely transparent cutover to the FRS end-users. Sprint has delivered four successful service transitions in the State of California (In-State center requirement) in 1991, the Federal Information Relay Services (FIRS) (Expansion of Baltimore TRS center) in 1993, the State of Montana (Out-of-State requirement) in 1995, and the State of Minnesota (Migration of Out-of-State to In-state center requirement) in 1996. During these transitions, Sprint involved the contract administrators for all activities and worked with the service provider incumbent to ensure every step was met according to the implementation schedules.

In California, Sprint built their largest TRS center (600 Communication Assistants) in Sacramento within a five-month timeframe. Additionally, Sprint conducted several outreach activities to communicate the new service to the TRS communities.

With FIRS, Sprint expanded its Baltimore TRS facility to specifically tailor it to the needs of FIRS configuration and network. Under Federal Government regulation, FIRS traffic is carried over the FTS2000 network in which the FIRS traffic is specially gated to specific group of communication assistants positions.

In Minnesota, Sprint works with the State to provide an Out-of-State solution during the first six months of service while the in-state center is being constructed, within a six-month timeframe. During the interim period, the Minnesota Relay Service traffic is supported by Sprint's Network Call Distribution where the call is answered by next available Communication Assistant in one of the three Sprint and USA Relay centers. When the Minnesota in-state facility is operational, the traffic will be re-routed without any interruptions to service for the MRS end users.

In all transitions, Sprint did not encounter any technical or network difficulties. The only difference was the end-users themselves who commented on the fine quality of service they received. Initially, they thought it was a system upgrade but later learned that it was a new provider.

Sprint is more than capable and experienced to ensure the same level of commitment and expectations for the State of Florida. The Florida 800 numbers, 800-955-8771 (TTY) and 800-955-8770 (Voice) will be portable to the new TRS center, as required by the RFP, under Sprint's responsibility and discretion.

Refer to Florida Relay Service Implementation Schedule in Section B.44.

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B.46 INSURANCE

The provider shall provide insurance coverage for itself and all of its employees used in connection with performance of services under this Agreement and ensure that all subcontractors shall be similarly covered. Such policies shall be issued by a financially sound carrier and/or carriers. Such insurance coverage shall hold the FPSC harmless from all claims of bodily injury, including death, and property damage, including loss of use, by provider, its employees, agents or subcontractors and their employees. This insurance will include Worker's Compensation as required by law and comprehensive general liability and bodily injury insurance in amounts that are commercially reasonable under the given circumstances.

Sprint understands and will comply except for FPSC's negligence.

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C. THE TECHNICAL BID PROPOSAL FORMAT

C.3 PUBLIC ENTITY CRIMES

Pursuant to Section 287.133, Florida Statutes, a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshhold amount provided for in Florida Statute -287.017 for Category Two ($11,000) for a period of 36 months from the date of being placed on the convicted vendor list.

Sprint has read and understands.

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C.4 FINANCIAL INFORMATION

To allow the FPSC to evaluate the financial responsibility of the bidding company, the following items shall be submitted with the proposal for the bidding company (and its parent company, if applicable):

1. ***Audited Financial Statements (or a SEC 10K Report) for the most recent two (2) years, including at a minimum:***

   a. ***Statement of income and related earnings,***

   b. ***cash flow statement,***

   c. ***balance sheet, and,***

   d. ***opinion concerning financial statements from an outside CPA;***

Sprint has provided a copy of our 1994 and 1995 Annual Reports and SEC Form 10K Reports in Appendix C.

These documents include the following information:

- Statement of income and related earnings
- Cash flow statement
- Balance sheet
- Opinion concerning financial statements from our CPA

2. ***Primary Banking Source letter of reference.***

Sprint also provides the following primary banking source references:

- Citicorp
  Mr. Jim Walsh, Vice President
  399 Park Avenue, 9th Floor
  New York, NY 10043
  Telephone: 212-559-7538

- Commerce Bank
  Attn.: Credit Department, Vice President
  1000 Walnut Street
  Kansas City, MO 64141-6248
  Telephone: 816-234-2501

- First Chicago
  Mr. William Banks, Vice President
  Mail Suite 0363
  Chicago, IL 60670-0363
  Telephone: 312-732-9781

A copy of primary banking source letter is enclosed as part of Appendix C.

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C.5 EXPERIENCE AND CUSTOMER REFERENCES

For each state in which the bidder has or is providing relay service, the bidder shall indicate: (1) when the bidder began operating the system, (2) the number of outgoing calls for the most recent month, and (3) the total duration of the contract. If the bidder's relay service is available for testing by means of a number that can be dialed from within Florida, bidder should provide the telephone numbers that can be used to dial the bidder's relay service.

The bidder shall provide the names of three customer references, including specific contact name and phone number, to whom the bidder has provided the bid service or a similar service. If no customer references are available or applicable, explain and provide three alternative references explaining the relationship of the reference to the bidder.

OVERVIEW

Sprint is a global communications company—at the forefront in integrating long distance, local, and wireless communications. Sprint operates fiber-optic and value-added networks that are among the world's largest and we maintain offices on six continents through more than 50 subsidiaries, joint ventures, and distributor partners. Sprint built and operates the United States' only nationwide all-digital, fiber-optic network and is the leader in advanced data communications services. Sprint is also the world's largest carrier of Internet traffic.

Sprint was established in the telecommunications industry in 1986, and employs 50,000 people, who support TRS, voice, data, and video services around the world.

Sprint has a history of bringing leading-edge technologies to the TRS, commercial, and government markets. Sprint has firmly established itself as a major force in the long distance industry by completing the transition that moved all Sprint customers from an outdated analog hybrid network to our nationwide digital fiber-optic backbone network. Sprint developed the first nationwide 100 percent digital fiber-optic backbone network, a network designed for clear-channel voice and error-free, high-speed data transmission. Sprint is continually trying to improve our services and technology, such as with SONET (Synchronous Optical Network), our four-fiber, bi-directional, virtually instantaneous restoration service network. Florida TRS will benefit from superior quality calls for your end users.

An innovative force in the overall telecommunications industry, Sprint was the:

- **First** United States carrier to deploy Signalling System #7 (SS7) network-wide

- **First** to offer Integrated Services Digital Network (ISDN) capabilities nationwide
- **First** to offer nationwide public Frame Relay data service
- **First** to offer commercially available Asynchronous Transfer Mode (ATM)
- **First** to demonstrate the Self-Healing SONET Ring.

Specifically for the Telecommunications Relay Service industry, Sprint was the:

- **First** with Automatic Number Identification
- **First** with Intelligent Computerized Communication Assistant Work Stations
- **First** with Automatic Number Identification Database
- **First** with Automated Billing with Detailed Reporting
- **First** with Voice Carryover Enhancements (No Typing)
- **First** with Hearing Carryover Enhancements (Hearing Through on Call Set-Up)
- **First** with Scroll Back for ASCII Users
- **First** with Identification of Communication Assistant Gender
- **First** with Identification of Customer Gender
- **First** with Identification of Background Noises
- **First** with Error Correction (Spell Check)
- **First** with Shortened Macros
- **First** with Customer Branding
- **First** with Identification of Local/Long Distance Calling
- **First** with Video Relay Interpreting Trials
- **First** with Speech to Speech Service Trial.

Appendix G exhibits the Sprint "Relay Today "newsletter that is published quarterly for Sprint TRS customers.

Sprint's strategy has been to bring to the marketplace the most advanced transmission technologies to provide the highest quality voice and videoconferencing solutions. By working with the states, we have come to learn and appreciate the subtle nuances that contribute to the improvement of TRS. For example, enhancements to voice carryover (VCO) and hearing carryover (HCO) are of valuable importance to hard of hearing and speech disabled customers and

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Video Relay Service is to customers whose ASL is their primary language. Sprint listened and responded by providing VCO and HCO service enhancements for hard of hearing and speech-disabled customers. For ASL users, we initiated the Video Relay Interpreting trials in the State of Texas and conducted demonstrations in States of California and Maryland. Sprint will continue to listen and proactively respond to customer's desire for technological advancements.

Sprint looks forward to the opportunity for a successful partnership with the FPSC accommodating the thoroughly understood TRS requirements.

TRS BACKGROUND/EXPERIENCES

Sprint is the nation's leader in providing Telecommunications Relay Services (TRS) both in terms of total contracts and calls handled. We currently provide TRS services to 19 States, the Federal government contract (FIRS), and five resellers. Last year we processed over 15 million TRS calls totaling over 23 million conversation minutes. Sprint is the most experienced provider of TRS with over six years of actual TRS call processing.

FRS, with Sprint as your provider, will serve the deaf, hard of hearing, speech disabled, and voice communities by enhancing the quality of their daily lives.

Functional equivalency with the hearing community is the hallmark of a successful Telecommunications Relay Service (TRS). The technical enhancements that Sprint has to offer, partnered with the FPSC's desire for "second to none" TRS quality, will provide transparent conduits that connect two people as well as enable free and open communication.

Sprint believes that the key to a successful Telecommunications Relay Service operation is a proven, professional service provider. One who:

- Is an FCC-Certified TRS provider
- Has been a TRS provider since 1990 (State of Texas)
- Is a facility-based TRS provider. Operates five TRS centers and partners with CSD/USA Relay centers in Sioux Falls, SD, Lubbock, TX, and Moorhead, MN and New Mexico Relay Network center in Albuquerque, NM.
- Knows the industry and has the presence
- Understands thoroughly the customer's requirements
- Has the integrity and is committed to serving the customer with enhanced technology and superior service.

Because of our experience with TRS since 1990, we understand—more than any other vendor—the superior quality deployment of service required to fulfill Florida TRS's needs. This requires the TRS relationships in Florida, and the personnel and financial resources to provide unsurpassed service.

Sprint-Provided Telecommunications Relay Service Contracts

Table C.5-1 represents Sprint TRS States who have helped Sprint to showcase our superior expertise in the Telecommunications Relay Service market. Sprint, the largest provider of Telecommunications Relay Service in the United States, currently provides relay service in 19 states, to the Federal Government, and to five resellers.

Table C.5-1 Sprint-Provided Telecommunications Relay Service Contracts

State	Original Current Contract	Successful Recompeted Contracts	800 Number(s)	Mo. Outbound Calls (7/96)
California	03-01-92 through 10-11-96		(800) 735-2929 (TTY) (800) 735-2922 (Voice)	730,524
Colorado	07-01-91 through 06-30-95	07-01-95 through 06-30-98	(800) 659-2656 (TTY) (800) 659-3656 (Voice) (800) 659-4656 (ASCII)	87,917
Connecticut	07-01-93 through 10-01-97		(800) 842-9710 (TTY) (800) 843-8134 (Voice)	59,954
Indiana	10-01-92 through 10-01-97		(800) 743-3333 (TTY/V)	93,737
Iowa	07-10-92 through 12-31-96		(800) 735-2942 (TTY) (800) 735-2943 (Voice)	36,990
Maryland	12-01-91 through 11-30-96	12-01-96 through 11-30-99	(800)) 735-2258 (TTY/V)	203,530
Minnesota	07-01-96 through 06-30-99		(800) 627-3529 (TTY/V)	105,139
Missouri	06-08-91 through 06-30-96	07-01-96 through 06-30-99	(800) 735-2966 (TTY) (800) 735-2466 (Voice)	93,960
Montana	03-01-96 through 02-28-99		(800) 253-4091 (TTY) (800) 253-4093 (Voice)	9,725

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Table C.5-1 Sprint-Provided Telecommunications Relay Service Contracts (Continued)

Nevada	12-01-91 through 11-30-94	12-01-94 through 11-30-97	(800) 326-6868 (TTY) (800) 326-6888 (Voice)	29,619
New Hampshire	Franchise Agreement		(800) 735-2964 (TTY/V)	16,343
New Mexico	05-10-93 through 10-01-97		(800) 659-8331 (TTY) (800) 659-1779 (Voice)	22,579
North Dakota	07-26-93 through 10-01-97		(800) 366-6888 (TTY) (800) 366-6889 (Voice)	7,455
Oklahoma	11-15-93 through 11-15-99		(800) 522-8506 (TTY) (800) 722-0353 (Voice)	56,636
Oregon	04-01-92 through 06-30-96	07-01-96 through 06-30-99	(800) 735-2900 (TTY) (800) 735-1232 (Voice) (800) 735-0644 (ASCII)	81,354
South Carolina	03-13-92 through 10-01-97		(800) 735-2905 (TTY/V)	43,084
South Dakota	06-30-92 through 05-31-97		(800) 877-1113 (TTY/V)	11,066
Texas	09-01-90 through 08-31-95	09-01-95 through 08-31-00	(800) 735-2989 (TTY) (800) 735-2988 (Voice) (800) 735-2991 (ASCII)	359,087
Wyoming	06-30-92 through 06-30-97		(800) 877-9975 (TTY) (800) 877-9965 (Voice)	4,354
Federal Information Relay Service	04-01-93 through 04-01-97		(800) 877-8339 (TTY/V)	8,914

Sprint is the only company today completely poised to fulfill the critical needs of Florida TRS to provide an experienced and sophisticated quality TRS service for the State of Florida customers.

Sprint Sales/Marketing Support

Sprint values its relationship with the State of Florida as a partner in the development and delivery of Florida TRS. Sprint will designate an Account Manager to be Sprint's main point of contact for the FPSC, Florida TRS Advisory Committee, and Florida TRS customers.

In addition, the Sprint TRS Sales/Marketing Management Lead team listed has a combined total of more than 22 years of Sprint's Sales, Marketing, and Product Development experience. Sprint has a team of experienced individuals in place who are familiar with the particular requirements and the sensitive critical needs of Florida TRS. In addition to the account management team, Sprint's support team for Florida TRS will work with the state. Table C.5-2 highlights key individuals and functional areas that have and will continue to support Florida TRS.

Table C.5-2 Key Account Management Team Member Highlights

Team Member	Responsibilities and Experience
Michael Ellis	
TRS National Account Manager	
Date of Hire: March 2, 1992	Mr. Ellis is responsible for all aspects of TRS sales efforts nationwide. Prior to this, he was Relay Colorado, Relay Nevada, and Relay New Mexico's Account Manager for three years.

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Table C.5-2 Key Account Management Team Member Highlights (Continued)

Team Member	Responsibilities and Experience
	As a late-deafened adult, Mr. Ellis is sensitive to the needs of the deaf, hard-of-hearing, and speech-disabled communities. His experience with these communities includes six years with Human Services Inc. in Colorado as Manager of Specialized Clinical Service and one year as Manager of Client Services at the Center on Deafness in Denver, Colorado. He has established, promoted, and expanded multi-service level nonprofit organization services for the deaf, hard-of-hearing, and disabled communities of Colorado, as well as providing a wide variety of customer advocacy and TRS-related services throughout the Rocky Mountain region. Mr. Ellis is a member of the National Association of the Deaf, Colorado Association of the Deaf, Association of Late Deafened Adults, American Deafness and Rehabilitation Association, and a board member of the People-to-People International Committee on Disabilities. He holds a Bachelor's Degree in Psychology from Baker University in Baldwin City, Kansas, and a Masters of Arts degree in Counseling from Gallaudet University in Washington, D.C.
Michael Baer	
National TRS Program Manager	
Date of Hire: February 10, 1992	Mr. Baer is responsible for developing, planning, and managing the implementation of TRS for complex projects and programs. These include State RFP responses, contract implementation, nationwide TRS industry issues, and overall product margin integrity. Prior to this, he was Maryland Relay's Account Manager for three and half years. As the Account Manager, he provided direct support to the Baltimore TRS center and customers of Maryland Relay.

Table C.5-2 Key Account Management Team Member Highlights (Continued)

Team Member	Responsibilities and Experience
	Mr. Baer also has six years of experience at Gallaudet University, which included serving as the Supervisor of Human Resource System in the Personnel Office and as Director of Gallaudet Interpreting Services. He established the first ever comprehensive University-Human Resources database, to ensure maximum effectiveness in reporting processes and information availability for administrators. Mr. Baer was involved in activities that included serving as the Staff Representative to President's Council on Deafness and University Staff Advisory Committee; The Deaf Way International Conference as the Volunteer Programs Coordinator; and Assistant Football Coach with the Gallaudet Bison Football team. Mr. Baer is a member of National Association of the Deaf, Maryland Association of the Deaf, Montgomery County Association of the Deaf, and a board member of the Maryland School for the Deaf Foundation. He holds a Bachelor's degree in Sociology/General Business from Gallaudet University and a Masters of General Administration from the University of Maryland, University College.

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Table C.5-2 Key Account Management Team Member Highlights (Continued)

Team Member	Responsibilities and Experience
Anthony B. Bartlett	
National TRS Product Manager	
Date Of Hire: June 22,1989	Mr. Bartlett is responsible for the management of Sprints' TRS product development efforts. Additionally, he ensures product effectiveness through extensive interaction with this support organizations. Mr. Bartlett serves as the Sprint TRS industry relations subject matter expert on all TRS issues, and manages ADA Title IV compliance issues. Mr. Bartlett is a member of the United States Telephone Association. Prior to his advancement to this position, he was responsible for the management of all TRS Operations subcontractors. These subcontractors operate partnership relay centers in Sioux Falls, South Dakota; Lubbock, Texas; and Albuquerque, New Mexico. Mr. Bartlett has been involved in the TRS product for six years seeing as an Operations Supervisor, Training Supervisor, and Training Administrator. Before joining Sprint, Mr. Bartlett spent 12 years in State and Local government.

Table C.5-2 Key Account Management Team Member Highlights (Continued)

Team Member	Responsibilities and Experience
Mark Seeger	
National TRS Customer Relations Manager	
Date of Hire: April 23, 1990	Mr. Seeger is responsible for planing, developing, and managing the implementation of appropriate product service strategies, including operator services, TRS, and related services nationwide. Additional responsibilities include determining pricing, service, and competitive positioning strategies, as well as performing customer service functions. Mr. Seeger is the son of parents who are deaf. As a native user of American Sign Language, he has a National Registry of Interpreters for the Deaf Comprehensive Skills Certification (Level V) of his interpreting skills. Prior to joining Sprint, Mr. Seeger was employed as Director of Programs at the Texas Commission for the Deaf, where his responsibilities included Interpreter Services, Telephone Relay Services, Services to Older Hearing Impaired Texans, TTY Placement, and the Board for Evaluation of Interpreters. Mr. Seeger has served as a professional consultant on deafness since 1982, conducting numerous workshops related to American Sign Language, interpreting, and deaf studies. He holds a Bachelor's degree in Education from the University of Texas, Austin, and a Masters of Administration in Human Services from St. Edwards University in Austin, Texas.

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REFERENCES

Sprint's customer references similar in nature, size, and scope to the required TRS described in this RFP are:

1. **Maryland Relay**
   Mr. Gilbert Becker
   Telecommunications Access of Maryland
   301 W. Preston Street Room 1008
   Baltimore, Maryland 21201
   (410) 225-6960 (TTY/V)

2. **Relay Missouri**
   Mr. Charlie Brown
   Missouri Public Service Commission
   P.O. Box 360
   Jefferson City, Missouri 65102
   (573) 751-8516 (V)

3. **Minnesota Relay Service**
   Mr. Jim Alan
   Department of Public Service
   Telecommunications Access for Communicatively Impaired Persons
   121 7th Place East Suite 200
   St. Paul, Minnesota 55101-2145
   (612) 296-9863 (TTY)
   (612) 296-4565 (Voice)

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C.6 BID SECURITY DEPOSIT

A bid security deposit in the amount of $500,000 shall be furnished to the FPSC with the original of the proposal. The bid security deposit shall be in the form of a bond, a certified or cashier's check, or bank money order that is valid through at least January 31, 1997 and is payable to the Florida Telecommunications Relay, Inc. The bid security deposit will be held without cashing.

If a bond is used, the bond shall be issued from a reliable surety company acceptable to the FPSC, licensed to do business in the State of Florida and shall be signed by a Florida Licensed Resident Agent. Such a bond shall be accompanied by a duly authenticated power of attorney evidencing that the person executing the bond on behalf of the Surety had the authority do so on the date of the bond.

The unsuccessful bidders' bid security deposit shall be returned, without interest, within thirty (30) days after disqualification, withdrawal or signing of the contract. The successful bidder's bid security shall be returned, without interest, upon signing of the contract and furnishing the Performance Bond as specified herein. If the successful bidder fails to sign a contract within thirty (30) days after the Letter of Intent or fails to deliver the Performance Bond as specified herein, the bid security shall be forfeited to the Telecommunications Access System Fund.

Sprint understands and has complied.

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BID BOND

Conforms with The American Institute of Architects,
A.I.A. Document No. A-310

KNOW ALL BY THESE PRESENTS, That we, SPRINT COMMUNICATIONS COMPANY L.P.

as Principal, hereinafter called the Principal,

and the CONTINENTAL CASUALTY COMPANY,

of CNA PLAZA, CHICAGO, ILLINOIS 60685, a corporation duly organized under

the laws of the State of ILLINOIS, as Surety, hereinafter called the Surety, are held and firmly bound unto

FLORIDA TELECOMMUNICATIONS RELAY, INC. as Obligee, hereinafter called the Obligee,

in the sum of FIVE HUNDRED THOUSAND AND NO/100********** Dollars ($ 500,000.00********), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for PROVIDE TELECOMMUNICATIONS RELAY SERVICE

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 2ND day of OCTOBER, 19 96.

Witness

Witness

SPRINT COMMUNICATIONS COMPANY L.P. (Seal)
Principal

Don A. Jensen, Vice President - LawTitle

CONTINENTAL CASUALTY COMPANY

By Paige M. Turner
PAIGE M. TURNER Attorney-in-Fact

COUNTERSIGNED

JANE C. WARREN, FLORIDA RESIDENT AGENT

original bond returned to Sprint - RJ

SPCNABID

SG-54/EP 3/93

PRINTED IN U.S.A.

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That CONTINENTAL CASUALTY COMPANY, *an Illinois corporation,* NATIONAL FIRE INSURANCE COMPANY OF HARTFORD, a Connecticut corporation, AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA, a Pennsylvania corporation (herein collectively called "the CNA Surety Companies"), are duly organized and existing corporations having their principal offices in the City of Chicago, and State of Illinois, and that they do by virtue of the signature and seals herein affixed hereby make, constitute and appoint

Mickey Bickham, Pamela S. Cocke, James E. Johnson, Individually of Lee's Summit, Missouri
Paige M. Turner, Kelly R. Watson, Individually of Odessa, Missouri
Michael J. Granacher, Jon T. Lohmeier, Individually of Overland Park, Kansas

their true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on their behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind them thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of their corporations and all the acts of said Attorney, pursuant to the authority hereby given are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Laws and Resolutions, printed on the reverse hereof, duly adopted, as indicated, by the Boards of Directors of the corporations.

In Witness Whereof, the CNA Sureties Companies have caused these presents to be signed by their Group Vice President and their corporate seals to be hereto affixed on this 23rd day of August, 1996.

CONTINENTAL CASUALTY COMPANY
NATIONAL FIRE INSURANCE COMPANY OF HARTFORD
AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA

M.C. Vonnahme — Group Vice President

State of Illinois, County of Cook, ss:

On this 23rd day of August, 1996, before me personally came M. C. Vonnahme, to me known, who, being by me duly sworn, did depose and say: that he resides in the Village of Darien, State of Illinois; that he is a Group Vice President of CONTINENTAL CASUALTY COMPANY, NATIONAL FIRE INSURANCE COMPANY OF HARTFORD, and AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA described in and which executed the above instrument; that he knows the seals of said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed pursuant to authority given by the Boards of Directors of said corporations and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporations.

Eileen T. Pachuta — Notary Public

My Commission Expires June 5, 2000

CERTIFICATE

I, John M. Littler, Assistant Secretary of CONTINENTAL CASUALTY COMPANY, NATIONAL FIRE INSURANCE COMPANY OF HARTFORD, and AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of each corporation printed on the reverse hereof are still in force. In testimony whereof I have hereunto subscribed my name and affixed the seals of the said corporations this 2ND day of OCTOBER, 1996.

CONTINENTAL CASUALTY COMPANY
NATIONAL FIRE INSURANCE COMPANY OF HARTFORD
AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA

John M. Littler — Assistant Secretary

(Rev.7/14/95)

Authorizing By-Laws and Resolutions

ADOPTED BY THE BOARD OF DIRECTORS OF CONTINENTAL CASUALTY COMPANY:

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the Board of Directors of the Company.

"Article IX—Execution of Documents

Section 3. Appointment of Attorney-in-fact. The Chairman of the Board of Directors, the President or any Executive, Senior or Group Vice President may, from time to time, appoint by written certificates attorneys-in-fact to act in behalf of the Company in the execution of policies of insurance, bonds, undertakings and other obligatory instruments of like nature. Such attorneys-in-fact, subject to the limitations set forth in their respective certificates of authority, shall have full power to bind the Company by their signature and execution of any such instruments and to attach the seal of the Company thereto. The Chairman of the Board of Directors, the President or any Executive, Senior or Group Vice President or the Board of Directors, may, at any time, revoke all power and authority previously given to any attorney-in-fact.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company at a meeting duly called and held on the 17th day of February, 1993.

"Resolved, that the signature of the President or any Executive, Senior or Group Vice President and the seal of the Company may be affixed by facsimile on any power of attorney granted pursuant to Section 3 of Article IX of the By-Laws, and the signature of the Secretary or an Assistant Secretary and the seal of the Company may be affixed by facsimile to any certificate of any such power and any power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certified by certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Company."

ADOPTED BY THE BOARD OF DIRECTORS OF AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA:

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the Board of Directors of the Company.

"Article VI—Execution of Obligations and Appointment of Attorney-in-Fact

Section 2. Appointment of Attorney-in-fact. The Chairman of the Board of Directors, the President or any Executive, Senior or Group Vice President may, from time to time, appoint by written certificates attorneys-in-fact to act in behalf of the Company in the execution of policies of insurance, bonds, undertakings and other obligatory instruments of like nature. Such attorneys-in-fact, subject to the limitations set forth in their respective certificates of authority, shall have full power to bind the Company by their signature and execution of any such instruments and to attach the seal of the Company thereto. The President or any Executive, Senior or Group Vice President may at any time revoke all power and authority previously given to any attorney-in-fact."

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company at a meeting duly called and held on the 17th day of February, 1993.

"Resolved, that the signature of the President or any Executive, Senior or Group Vice President and the seal of the Company may be affixed by facsimile on any power of attorney granted pursuant to Section 2 of Article VI of the By-Laws, and the signature of the Secretary or an Assistant Secretary and the seal of the Company may be affixed by facsimile to any certificate of any such power and any power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certified by certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Company."

ADOPTED BY THE BOARD OF DIRECTORS OF NATIONAL FIRE INSURANCE COMPANY OF HARTFORD:

This Power of Attorney is made and executed pursuant to and by authority of the following Resolution duly adopted on February 17, 1993 by the Board of Directors of the Company.

"**RESOLVED**: That the President, an Executive Vice President, or any Senior or Group Vice President of the Corporation may, from time to time, appoint, by written certificates, Attorneys-in-Fact to act in behalf of the Corporation in the execution of policies of insurance, bonds, undertakings and other obligatory instruments of like nature. Such Attorney-in-Fact, subject to the limitations set forth in their respective certificates of authority, shall have full power to bind the Corporation by their signature and execution of any such instrument and to attach the seal of the Corporation thereto. The President, an Executive Vice President, any Senior or Group Vice President or the Board of Directors may at any time revoke all power and authority previously given to any Attorney-in-Fact."

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company at a meeting duly called and held on the 17th day of February, 1993.

"**RESOLVED:** That the signature of the President, an Executive Vice President or any Senior or Group Vice President and the seal of the Corporation may be affixed by facsimile on any power of attorney granted pursuant to the Resolution adopted by this Board of Directors on February 17, 1993 and the signature of a Secretary or an Assistant Secretary and the seal of the Corporation may be affixed by facsimile to any certificate of any such power, and any power or certificate bearing such facsimile signature and seal shall be valid and binding on the Corporation. Any such power so executed and sealed and certified by certificate so executed and sealed, shall with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Corporation."

C.7 SUBCONTRACTORS

If the bidder proposes to use subcontractors, the bidder shall identify those subcontractors and indicate the scope of their role in the provision of relay service. The bidder should also indicate what experience the subcontractor has in providing the service for which it would contract with the Provider.

Sprint intends to subcontract with Communications Service for the Deaf (CSD) our existing subcontractor for the operations of Florida Relay Service.

Sprint has joined forces with USA Relay, a division of CSD, to present a nontraditional approach to providing the highest quality TRS service in the industry today. This dynamic relationship combines CSDUSA Relay's first-hand expertise in providing deaf services, relay services and Sprint's technical and management expertise as the largest provider of quality TRS in the world.

CSD - USA Relay was selected as our partner because they:

- Have over 20 years of experience of social and relay services. Their knowledge ant expertise of providing services to the deaf ant hard of hearing community has proven to be highly effective in determining the needs and wants of the deaf and hard of hearing community. CSD - USA Relay share the same commitment to quality service that Sprint has successfully demonstrated.
- Were the first agency to undergo the National Association of the Deaf service evaluation assessment, receiving impressive results.
- CSD began it's service out of a closet in one of the buildings on the Campus of the South Dakota School for the Deaf 20 years ago. In 1992 CSD purchased four (4) buildings and half of the property of the South Dakota School for the Deaf. CSD - USA Relay owns and operates a state-of-the-art relay censor in one of the buildings. Since then, CSD -USA Relay has expanded it's operations to include centers located in Lubbock, Texas and Moorhead, Minnesota. As you can see, CSD-USA Relay has a proven track record of success in the area of TRS, especially since CSD-USA Relay was one of the first to offer basic TTY interpreting services in the nation over 20 years ago.
- Have a proven, seasoned management staff which has been in operation since 1975. CSD-USA Relay is the ONLY relay service provider with a superior management team from a broad spectrum of Telecommunications Relay Service Providers. With this wealth of TRS experience, Sprint/CSD-USA Relay is posed to become the strongest TRS provider in the world.

  - CSD Vice President, Andrew Lange comes from AT&T with 5 years of TRS experience.
  - The Director of the Lubbock TRS Center, Scot Atkins comes from Sprint with 4 years of TRS experience.
  - The Director of the Minnesota TRS Center, Roger Kraft comes from MCI/SAI with 4 years of TRS experience.
  - The Assistant Director of the Sioux Falls TRS Center, Jim Skjeveland comes from Sprint with 4 years of TRS experience.
- Have a deaf professional, grass root management organization with over 20 years experience committed to servicing the needs of the deaf, hard of hearing, and speech disabled communities. It is no wonder that CSD has become the premier deaf and hard of hearing organization in the world.

Likewise, CSD selected to connect with Sprint because of our advanced technical and operational sophistication, as well as our commitment to incorporating dearness into the operations of the relay service. The Sprint/CSD relationship is more than just a concept, we share strong desire of promoting and enhancing opportunities for deaf and hard of hearing people across the nation. We have a proven record of success. Since its formation, we have been awarded eleven (11) individual state TRS contracts, including Colorado, Indiana, Iowa, Minnesota, Montana, North Dakota, Oklahoma, Oregon, South Dakota, Texas, and Wyoming.

The Sprint/CSD partnership has exceeded the requirements of the Americans with Disabilities Act (ADA) Title IV and provides the highest quality relay service in the nation at the lowest possible cost.

With an award winning combination of Sprint/CSD-USA Relay. Florida will receive a state-of-the-art relay center and high quality relay service by the strongest TRS provider in the world. The FPSC can be rest assured that the Florida residents will be satisfied with our service.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

E. THE EVALUATION TO BE USED AND FILING CHECK LIST

Sprint has read and understands.

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ANSI T1.506a-1992
Supplement to ANSI T1.506-1990

American National Standard

for telecommunications –

network performance – supplement to transmission specifications for switched exchange access network (absolute round-trip delay)

Approved April 29, 1992 Secretariat: Exchange Carriers Standards Association

Introduction

This supplement to *American National Standard for Telecommunications – Network performance – Transmission specifications for switched exchange access network* (ANSI T1.506-1990) revises the standard to specify absolute round-trip delay.

The following changes should be made to ANSI T1.506-1990:

Replace 4.7 with the following text and figure:

4.7 Absolute round-trip delay

4.7.1 Definitions

NI-to-POT (POT-to-NI) one-way delay is the period of time that starts when the signal event occurs at the NI (POT), and ends when the corresponding signal detection occurs at the POT (NI). This delay refers to any conventional method of determining one-way delay on the NI-POT (POT-to-NI) directed segment. This one-way delay applies to telecommunication segments that originate at an NI (POT) and terminate at a POT (NI).

NI-POT round trip delay is the sum of the NI-to-POT one-way delay and the POT-to-NI one-way delay. This delay refers to any conventional method of determining round-trip delay on the NI-to-POT segment. This round-trip delay applies to telecommunication segments that are bounded by an NI and a POT.

4.7.2 Guidelines

The evolving exchange access network is changing, in both technology (digital) and architecture (robust, self-healing networks). The introduction of these changes increases the round-trip delay of the access network relative to its analog equivalent. This increase is due to digital processing in fixed elements and the larger propagation delay of fiber routes. Guidance on the round-trip delay between the NI and POT is provided to allow planning of the connection provider's respective networks. The guidance is aimed at allowing flexible evolution of digital networks, while maintaining good quality.

The estimated round-trip delays presented in this subclause are based on a reference

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model reflecting the expected changes. The approach used in developing these delays is provided in clause 8.6 of Appendix B*). The total round-trip delay was calculated using the value for fiber facilities (0.0168 ms/mile), but the estimate is also applicable to T1 facilities in general. The total NI-POT round-trip delay is given by:

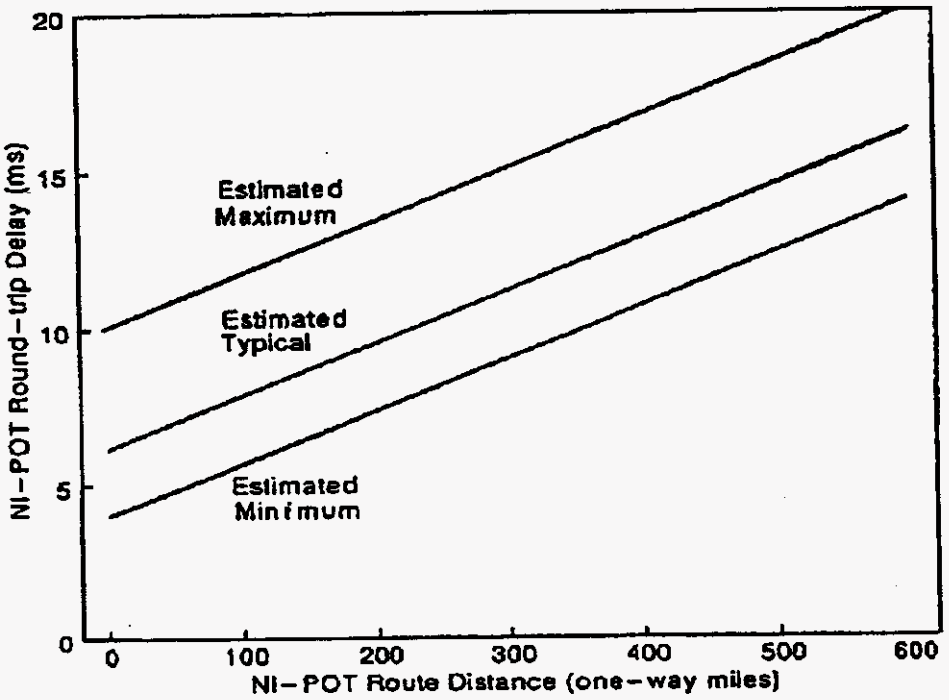
NI POT round trip delay (ms) =
round trip processing delay (ms)
+ Round trip propagation delay (ms/mile) × NI POT route distance (one-way miles)

Where:

	Round-trip processing delay-ms	Round-trip propagation delay-ms/mile
Minimum	4.0	0.0168
Typical	6.1	0.0168
Maximum	10.0	0.0168

The total estimated NI-POT round-trip "Minimum," "Typical" and "Maximum" delays are given in figure 3.

While the delay guidelines provided here are intended for network planning purposes, it should be emphasized that delay is an important performance parameter that should be increased only when the network benefit outweighs the impact on user applications. Network providers should cooperate to seek solutions in those cases where delay is anticipated to be a problem. Examples are: increased echo impairment on connections without cancelers, exceeding of the operational limits of cancelers, and degraded throughput or response time of some voiceband data applications.



NOTE – The estimated delay at 0 miles represents the round-trip processing delay of the network elements.

Figure 3 – Guidelines for NI-POT delay (based on reference model of access)

*) Due to a change in ANSI Style Rules, Appendix B will be retitled annex B in future revisions of ANSI T1.506. Under the new style rules all appendixes appearing in American National Standards are now referred to as annexes.

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Table B.4 – Assumed range and typical round-trip delay values of network elements (ms)

Network element	Typical value	Low value	High value
DEO/HOST (DI-to-LI)	1.3	0.75	1.9
DEO/HOST (DI-to-DI)	1.0	0.9	1.4
RSU (DI-to-LI)	1.2	1.0	1.7
RSU (DI-to-DI)	0.8	0.7	1.0
RDT	0.6	0.5	1.3
DCS	0.8	0.6	1.5
DAT	1.0	0.9	1.3
M13 MUX	0.04	0.04	0.04
EDSX (1/1)	0.2	0.2	0.2

Add clause B.6, table B.4, and figure B.6 to Appendix B:[*]

B.6 Methodolgy used in developing delay guidelines

B.6.1 General

This annex describes the approach used in developing the NI-POT round-trip delay guidelines of 4.7. The NI-to-POT round-trip delay consists of two components: the propagation delay and the processing delay. The propagation delay is a function of the route distance. It is assumed that all the facilities have the delay of fiber with a round-trip propagation delay (ms) equal to 0.0168 x the one-way distance (in miles) between the NI and POT. The processing delay depends on how many network elements are included in the NI-to-POT path, and their types. The characteristics of processing the delay of a network element are summarized by a typical value and a range as displayed in table B.4. The delay guidelines were derived using this information and the reference NI-POT architecture depicted in figure B.6.

There are four representative NI-to-POT paths depicted in the reference architecture (see figure B.6). Three processing delay values are computed for each path using the low, the typical and the high network element values of table B.4, for a total of 12 values. For figure 3, the estimated minimum and maximum processing delay values are taken to be the smallest and largest values obtained. The value used as typical processing delay is taken to be the value of the path using a direct line to an RSU evaluated with typical network element values.

B.6.2 Abbreviations

DAT	digital access tandem
DCS	DS1 to DS0 digital cross-connect system
DEO	digital end office
DI	digital interface at DEO/RSU
EDSX	DS1 TO DS1 digital cross-connect
LI	access line (loop) interface at DEO/RSU
M13 MUX	DS1 to DS3 multiplex
NI	network interface
POT	point of termination
RDT	remote digital terminal
RSU	remote switching unit

NOTE – The choice of the particular access arrangement is not meant to constrain delay values on access to those generated as estimates from the reference model. Deployment of systems with new capabilities and features in the access network is bound to increase delay in that network, since enhanced capabilities and expanded feature sets are associated, by necessity, with additional signal processing. For example, the typical delay given for the RDT applies only for basic service. Additional features such as "Time Slot Interchange," for concentration of IDLC channels, would increase the typical round trip delay.

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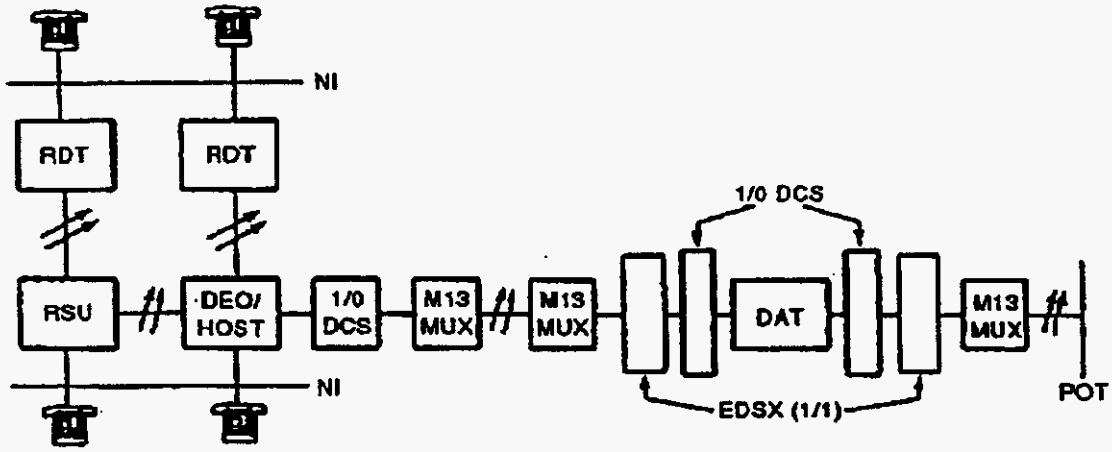


Figure B.6 – NI-POT Digital Reference Architecture

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American National Standard

for Telecommunications –

Network Performance – Transmission Specifications for Switched Exchange Access Network

ANSI T1.506-1990

ANSI American National Standards Institute
1430 Broadway
New York , New York
10018

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ANSI®
T1.506-1990

American National Standard
for Telecommunications –

Network Performance – Transmission Specifications for Switched Exchange Access Network

Secretariat
Exchange Carriers Standards Association

Approved July 10, 1989
American National Standards Institute, Inc

Abstract

This standard provides performance specifications for the two-way transmission path between the exchange carrier's end office and an interexchange carrier's point of termination. This set of specifications will enable the provision of quality *end-to-end* performance for switched voice and voiceband data telephone services. This standard defines analog performance-related transmission parameters and specifies limits. The parameter values are specified in terms of transmission facility groupings and types of end offices.

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American National Standard

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Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

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Foreword

(This Foreword is not part of the American National Standard T1.506-1990.)

The specification of performance standards for the exchange access network was initiated under the auspices of the Accredited Standards Committee on Telecommunications, T1.

The use of this standard will allow the provision of high-quality service to end users by the telecommunications industry and ensure the ability of an exchange carrier (EC) to provide, operate, and maintain the exchange access network. The standard was developed to allow accommodation of the characteristics of the existing network, but recognizes the differing characteristics of the digital technology being increasingly deployed.

This standard is one part of a series of documents on network performance. Other documents that are planned are:

(1) Network interface (NI) to point of termination (POT) performance
(2) End-to-end (NI-to-NI) performance
(3) Connection availability/dependability parameters
(4) Digital parameters
(5) Nonswitched services

The specifications stated in this standard reflect the following considerations:

(1) End-user perception of end-to-end service
(2) Network architectures and switches used in providing switched exchange access services at the time of the development of this standard, as offered by many ECs as Feature Group C and Feature Group D
(3) Normally occurring variations in parameter characteristics of transmission facilities used in providing exchange access services
(4) Service affecting limits for voiceband data
(5) Feasible operational and economic effects of the standard on service providers
(6) Current performance and technical capabilities of terminal equipment, as specified in EIA and CCITT standards
(7) Evolution of the network towards full digital connectivity

Discussion of these considerations is provided in the Appendixes

Suggestions for improvement of this standard are welcome. They should be sent to the Exchange Carriers Standards Association, Suite 200, 5430 Grosvenor Lane, Bethesda, MD 20814-2122.

This standard was processed and approved for submittal to ANSI by Accredited Standards Committee on Telecommunications, T1. Committee approval of this standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, Committee T1 had the following members:

Ivor N. Knight, Chairman
Arthur K. Reilly, Vice-Chairman
Alvia Lai, Secretary

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Organization Represented	*Name of Representative*
EXCHANGE CARRIERS	
Alltel Service Corporation	John B. Kokut
Ameritech Services, Inc	Timothy D. Timmons
	Robert Koren (Alt)
Bell Atlantic	John W. Seaskoltz
	Roger Nucho (Alt)
Bellcore	Ian M. Llfchus
	Martin T. Sullivan (Alt)
BellSouth Services	Leonard Strickland, Jr
	William J. McNamara III (Alt)
Contel Corporation	Joseph J. Olejar
	James W. Welth (Alt)
Contel Corporation	Russell G. DeWitt
	Stephen P. Welsh (Alt)
GTE SC/Telephone Operations	Greg L. Theus
	Richard L. Cochran (Alt)
National Telephone Cooperative Association	Joseph M. Flanigan
NYNEX	J. Fey
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Pacific Bell	Fred Doell
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Southern New England Telephone	David M. Mangini
	David B. Montgomery (Alt)
Southwestern Bell Telephone Company	Joseph Mendoza
	Bob Caskey (Alt)
Telephone & Data Systems	Rudolph E. Hornacek
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American National Standard
for Telecommunications –

Network Performance – Transmission Specifications for Switched Exchange Access Network

1. Scope, Purpose, and Application

1.1 Scope. This standard provides performance specifications for the transmission parameters of the switched exchange access network covering the bidirectional transmission path between an exchange carrier's (EC) end office (EO) and an interexchange carrier's (IC) point of termination (POT) (see Figure 1). Within this document the term, IC, refers to interexchange carriers and any other connecting entities. The transmission parameters included are specified in Sections 4 and 5. At this time, absolute delay and transient impairments affecting voiceband data are *not included*, but are under study. Both originating (access) and terminating (egress) switched services are covered, and are referred to in this standard simply as exchange access services.

The performance specifications are given in terms of acceptance limits, restoral limits, immediate action limits, and service affecting limits. In-service parameter performance will be distributed statistically. The actual parameter performance is characterized by the parameter distributions and not by the limits alone. On this basis, although the parameter distributions are not requirements of this standard, network providers and equipment vendors should take into account the parameter distributions as well as the individual trunk limits in their plans and designs. The statistics in Appendix A reflect an estimate of the characteristics of the statistical distributions that are expected for a large number of channels from a specific tier.

1.2 Purpose. This standard is intended to be used by the telecommunications industry to provide high-quality service to end users. The use of this standard helps to assure the ICs about the quality of exchange access services and to provide exchange carriers the ability to implement and maintain the exchange access network. This standard is a product of a number of considerations. Among them are customer service perception, network architectures [1,2][1], the technical capabilities of transmission and switching systems [3,4], and terminal equipment (as described in American National Standard Telephone Instruments with Loop Signaling, ANSI/EIA RS-470-A-1987), as well as operational and economic concerns. Some of these considerations are discussed in Appendix B.

1.3 Application

1.3.1 Architectures. This standard applies to switched exchange access provided by an EC to an IC between an EC end office and a POT. Switched exchange access service is an element of voicegrade service similar to that provided in what has historically been referred to as the "public switched network."

Two basic exchange access network arrangements are included, as illustrated in Figure 2. Both arrangements allow for direct and tandem switched connections between an end office and a POT. In the first arrangement, referred to as Group 1, the standard provides one set of requirements between the end office and the POT that apply independent of routing of the call through the exchange carrier's network. Guidelines are provided between the POT and the EC access tandem (AT). In the second arrangement, referred to as Group 2, the standard provides two sets of requirements between

1. Numbers in brackets refer to corresponding numbers in 2.4, Related Publications.

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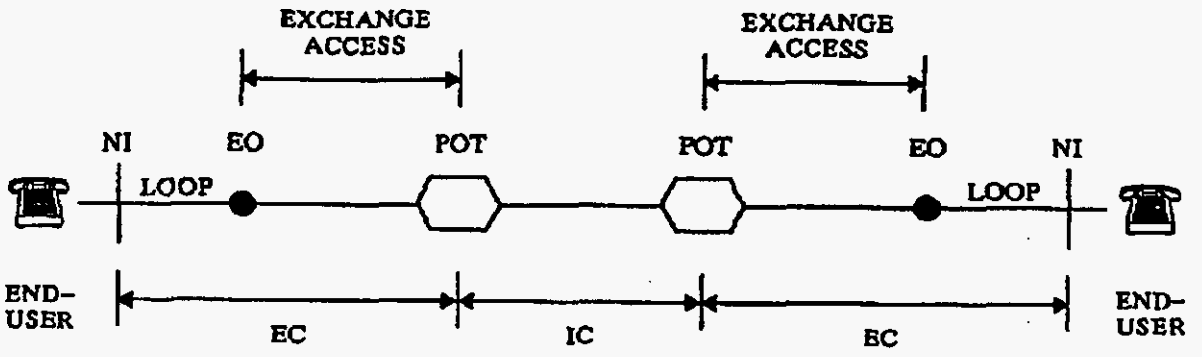


Figure 1
Illustration of the Various Portions of a Typical End-to-End Connection, Showing the Relationship of Exchange Access Portions to Service Providers

the end office and the POT, one set of requirements each for connections with and without intermediate switching. In Group 2, these two types of connections are not necessarily equivalent in performance. The use of Group 2 tandem architecture is decreasing with time as more end offices are converted to provide the exchange access service offerings discussed in the next paragraph. Guidelines covering the connection between the AT and the POT are also given.

When the standard was developed, the Group-1 arrangement was modeled after the capabilities of a service offering provided by many ECs and identified as Feature Group D. Similarly, the Group-2 arrangement was modeled after the capabilities of Feature Group C. However, the standard is intended to be completely generic and may apply to future EO service offerings. For arrangements that differ from the original Feature Group models used to develop this standard, values for absolute delay and other performance parameters, such as post-dialing delay, need to be considered. Moreover, arrangements involving more than one EC between a POT and an end office were not evaluated in developing this standard. Such arrangements require further study.

1.3.2 Facilities. Different types of transmission facilities are used within the exchange access network. Because of the differences in technical capability between digital and analog systems, a single set of requirements covering all facilities would not reflect the capabilities of either type of facility. As a result, two separate transmission facility categories are defined and a two-tier structure has been adopted for the performance specifications. Separate requirements and guidelines are stated for each tier. (In all cases, guidelines are not part of American National Standard T1.506-1990.) A given channel between a POT and an end office or between a POT and an AT is assigned to Tier 1 or Tier 2 according to its facilities.

Tier 1 applies generally to digital facilities and limited-mileage cable facilities. Specifically, Tier 1 covers channels provided by the following facilities and combinations:

(1) 64-kbit/s pulse code modulation (PCM) systems using 8-bit encoding, with or without Robbed-Bit signaling, and a μ-law characteristic with μ=255. Examples are channels using newer-design digital systems (D2, D3, D4, D5 channel banks, or their equivalent) on wire, radio, or fiber media.

(2) Tier-1 digital facilities of any length with cable extensions that are 1 mile or less in length.

(3) Cable that is 1 mile or less in length.

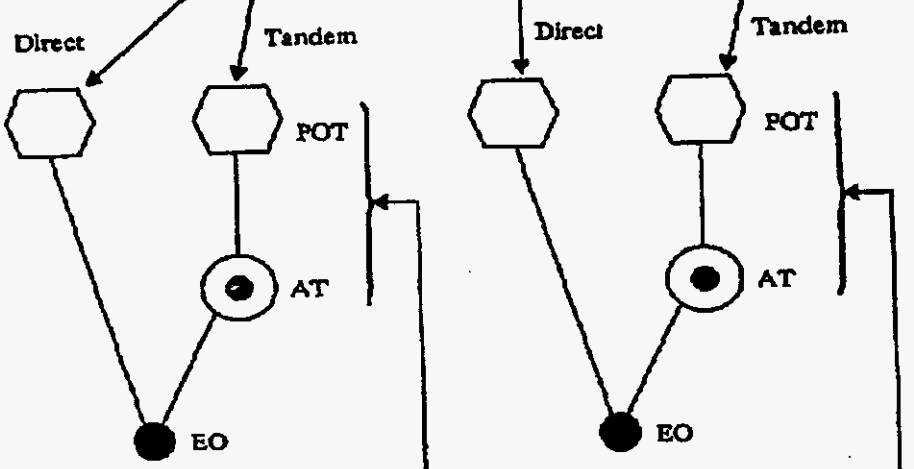
(4) Any combination of the above Tier-1 facility types, with or without intermediate switching (total cable not to exceed 1 mile in length).

The limits for Tier 1 reflect the transmission performance capabilities of newer-design digital facilities (D2, D3, D4, D5 channel banks or their equivalent). Excluded from Tier 1 are the early-design 7-bit PCM systems (such as D1 or

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x.x.x Requirements (between POT and EO)

Limits	Group 1 / Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL AL				



x.x.x Guidelines* (between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL AL				

*These guidelines are not part of the American National Standard T1.506-1990.

Figure 2
Typical Presentation of the Requirements and Guidelines Specifications

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the equivalent) and low-bit-rate-encoding systems such as 32-kbit/s adaptive differential pulse code modulation (ADPCM) systems. Cable extensions of 1 mile or less are included since they are sufficiently short to allow the combined facility to approximate the performance of a digital facility alone. Short cable facilities of 1 mile or less are also included in Tier 1.

Tier 2 covers channels provided by the remaining facility types and multifacility combinations. Specifically, Tier 2 applies to:

(1) Companded analog carrier facilities

(2) Noncompanded analog carrier facilities

(3) 7-bit PCM digital facilities (such as D1 or the equivalent)

(4) 32-kbit/s ADPCM systems and other low-bit-rate-encoding systems

(5) Frequency-division-multiplex to DS1 trans-multiplexers

(6) Tier-1 digital facilities of any length with cable extensions longer than one mile[2]

(7) Cable longer than one mile[2]

(8) Tier-2 facilities with cable of any length[2]

(9) Tier-2 facilities in combination with Tier-1 facilities

The limits for Tier 2 reflect the transmission performance capabilities of companded and noncompanded analog facilities. For some parameters, the Tier-2 specifications reflect the performance of companded analog carrier (CAC) facilities. In these cases, the limits are based on the later CAC facilities such as N2, N3, and N4 facilities, and not on the earlier CAC facilities such as N1 or ON carrier. However, the latter are satisfactory for exchange access if they meet the requirements for Tier 2. For other parameters, the Tier-2 specifications are based on noncompanded analog carrier (NCAC) systems such as analog radio or L-multiplex (LMX) carrier systems for coaxial cable. (Radio digital systems are included as digital carrier in Tier 1.) The development of this standard did not include the effects of systems such as digital cross-connect systems (DCS). Deployment of such systems may increase impairments such that exchange access service may not meet Tier-1 requirements.

This document specifies performance limits for numerous architecture configurations and facility and switch combinations applicable to exchange access services. The actual facilities and switches used to provide service are a function of the existing telephone plant and may be influenced by the location of the POT. The existing telephone plant may vary by geographical area and between any pair of points within a geographical area (i.e., both analog and digital facilities may coexist between the same two points). Therefore, all the specific configurations described in this standard might not be offered or available between all point pairs within an EC area. Additionally, the designation of tier assignment between two points could change. The expected migration is from Tier 2 to Tier 1. It is recommended that if cases arise that have not been addressed in this standard, the EC and the IC cooperate to negotiate needed requirements.

This standard does not include the effects of low-bit-rate encoding techniques such as those employed in 32-kbit/s ADPCM as specified in American National Standard for Telecommunications—Digital Processing of Voice-Band Signals—Line Format for 32-kbit/s Adaptive Differential Pulse-Code Modulations (ADPCM), ANSI T1.302-1989, and American National Standard for Telecommunications—Digital Processing of Voice-Band Signals- Algorithms for 24-, 32-, and 40-kbit/s Adaptive Differential Pulse-Code Modulation (ADPCM), ANSI T1.303-1989. A separate standard, American National Standard for Telecommunications—Network Performance—Tandem Encoding Limits for 32-kbit/s Adaptive Differential Pulse-Code Modulation (ADPCM), ANSI T1.501-1988, deals with the performance impact and deployment guidelines for ADPCM. This exchange access standard is independent of ADPCM deployment. In addition to the requirements of this standard, the deployment guidelines contained in ANSI T1.501-1988 are needed to control service performance.

1.3.3 Measurements. This document provides specifications for a set of analog parameters that relate to voice and voiceband data network performance that apply between an end office and a POT. The numerical values contained in this

2. For C-message noise, the limits for cable up to 15 miles are the same as those for Tier 1. For C-notched noise, the limits for cable of any length are the same as those for Tier 1.

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standard include the contributions of D/A conversion at a digital POT as found in commonly used channel banks. These numerical values, however, do not include the contribution of impairments caused when digital loss is placed in the measurement path to the test terminations of a digital AT or digital IC switch. For further information on the effect of digital loss pads, see Appendix B. As discussed in 1.3.3.1 and 1.3.3.2, measurements can be made using analog or digital methods. Further, under specific conditions, measurements can be made switch-to-switch.

1.3.3.1 Measurement Method—Analog. At an analog test access point, the parameters may be measured directly, using methodologies defined in American National Standard Methods and Equipment for Measuring the Transmission Characteristics of Analog Voice Frequency Circuits, ANSI/IEEE 743-1984. At a digital POT, using analog measurement methods, specifications in this standard apply to measurements that include encoding or decoding with a 4-wire D4 channel bank, or equivalent, except that its contribution to the loss measurement error shall be less than 0.1 dB [5].

1.3.3.2 Measurement Method—Digital. Measurements of analog parameters that are performed directly on a digital bit stream at the DS0 rate (64 kbit/s) may use a technology that does not contribute significant degradations that are associated with the D/A conversion process. It follows that the results of such measurements should generally be better than, or at least equal to, those that would be obtained after such a conversion. Therefore, the specifications in this document can be used as bounds or guidelines for digital measurements. This standard does not provide guidelines for discounting the effects of digital-to-analog conversion on the analog specifications. Note that the digital measurement method is not covered in ANSI/IEEE 743-1984, but is commonly used in remote measuring systems.

1.3.3.3 Switch-To-Switch Testing. The specific recommended numeric values contained in the requirements sections in the standard apply between the end office and the POT. However, testing is usually most conveniently done switch-to-switch. If the IC switch is co-located with the POT, the standard may be used as the basis for switch-to-switch testing after accounting for the effect of the IC switch and office wiring, if any. If the switch and POT are not co-located, the switch-to-switch analog test results may need to be corrected by compensating for the contribution of the IC transmission facilities between the POT and the test position at the IC switch.

2. Referenced and Related Standards and Publications

2.1 Referenced American National Standards. This standard is intended to be used in conjunction with the following American National Standards. When these referenced standards are superseded by a revision approved by the American National Standards Institute, Inc, the revision shall apply:

ANSI T1.302-1989, Telecommunications - Digital Processing of Voice-Band Signals - Line Format for 32-kbit/s Adaptive Differential Pulse-Code Modulation (ADPCM)

ANSI T1.303-1989, Telecommunications - Digital Processing of Voice-Band Signals - Algorithms for 24-, 32-, and 40-kbit/s Adaptive Differential Pulse-Code Modulation (ADPCM)

ANSI T1.501-1988, Telecommunications - Network Performance - Tandem Encoding Limits for 32-kbit/s Adaptive Differential Pulse-Code Modulation (ADPCM)

ANSI/IEEE 743-1984, Methods and Equipment for Measuring the Transmission Characteristics of Analog Voice Frequency Circuits

2.2 Other Referenced Standards. This standard is also intended to be used with the following standards:

CCITT Recommendation G.711, Pulse Code Modulation (PCM) of Voice Frequencies, Blue Book, Volume III, Fascicle III.3[3]

CCITT Recommendation G.121, Corrected Reference Equivalents (CREs) and Loudness Ratings (LRs) of National Systems, Blue Book, Volume III, Fascicle III.1[3]

3. Available from American National Standards Institute, 1430 Broadway, New York, NY 10018.

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IEEE 823-1989, Standard Methodologies for Specifying Voice Grade Channel Transmission Parameters and Evaluating Connection Transmission Performance for Speech Telephony[4]

2.3 Related Standards. The standards listed here are for information only and are not essential for the completion of the requirements of this standard:

ANSI/EIA 470-A-1987, Telephone Instruments with Loop Signaling

CCITT Recommendation P.11, Effect on Transmission Impairments. Blue Book, Volume V[3]

2.4 Related Publications

[1] Bellcore. Notes on the BOC intra-LATA networks—1986. Technical Reference TR-NPL-000275. Piscataway, NJ: Bellcore; 1986.[5]

[2] Bellcore. Voice grade switched access service—Transmission parameter limits and interface combinations. Technical Reference TR-NPL-000334. Piscataway, NJ: Bellcore; 1988.[5]

[3] Bellcore. 1983 exchange access study: Analog voice and voiceband data transmission performance characterization of the exchange access plant. Technical Reference TR-NPL-000037. Piscataway, NJ: Bellcore, 1984.[5]

[4] Carey, M.B.; Chen, H.T.; Descloux, A.; Ingle, J. F.; Park, K. I. 1982/83 end office connection study: Analog voice and voiceband data transmission performance characterization of the public switched network. AT&T Bell Laboratories Technical Journal. 63(9): 2059-2119; 1984 November.

[5] AT&T. Digital channel bank requirements and objectives. Technical Reference PUB 43801. New York: AT&T, 1982.[6]

[6] AT&T. Notes on the network. 1980[6]

3. Definitions

The following definitions apply in this standard:

acceptance limit (AL). The bound on performance that is allowed at service turnup or acceptance of a circuit or connection by the IC, or when corrective action is taken to restore a parameter after a failure of the immediate action limit (IAL). Performance as measured by a parameter is satisfactory if the value of the parameter is equal to or better than the limit.

access line (loop). A channel between an end user's network interface and local end office.

access tandem (AT). An exchange carrier switching system that provides a traffic concentration and distribution function for inter-LATA traffic originating or terminating within a LATA.

channel. A transmission path between two points (one or both points may be a POT or NI). The term channel may refer to a unidirectional path or a bidirectional path.

connection. A temporary concatenation of transmission channels or telecommunication circuits, switching, and other functional units set up to provide for a transfer of information between two or more points in a telecommunication network.

end office (EO). An exchange carrier switching system where access lines (loops) are terminated for purposes of interconnection to each other and to trunks.

end user (EU). The calling party, or the called party, or both involved with a switched telecommunications connection. Customers who use (rather than provide) telecommunication services are end users.

exchange carrier (EC). The telecommunications common carrier franchised to provide service in specific geographic areas.

immediate action limit (IAL). The bound on performance allowed for a circuit or connection that is in service. When any parameter value exceeds the IAL, the circuit or connection is considered defective and corrective action is necessary.

interexchange carrier (IC). A carrier that provides telecommunication services between LATAs. In this standard, the term, IC, is also used to refer to any other entity that connects to the exchange access network at a POT.

local access and transport area (LATA). A geographic area within each EC's franchised

4. Available from the Institute of Electrical and Electronics Engineers, 345 East 47th Street, New York, NY 10017.

5. Available from Bellcore Documentation Coordinator, 60 New England Avenue, Piscataway, NJ 08854-4196.

6. For information on availability, contact AT&T.

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area, where an EC may offer local access and transport telecommunications services as well as local telecommunications services.

loop. See *access line (loop)*.

network interface (NI). The point of demarcation between the carrier's facilities and the end-user installation that establishes the technical interface and division of operational responsibility.

point of termination (POT). The point of demarcation between exchange carriers and interexchange carriers that establishes the technical interface and division of operational responsibility.

restoral limit (RL). The bound on performance that is allowed when corrective action is taken to restore a parameter after an IAL failure. Performance as measured by a parameter is satisfactory if the value of the parameter is equal to or better than the limit.

service affecting limit (SAL). A parameter value consistent with minimum service objectives that are necessary to support high-speed modems. When any parameter value exceeds the SAL, voiceband data performance may be adversely affected, depending on the performance of the remainder of the connection.

switched exchange access network. The network of switching systems, interconnecting facilities, and equipment provided by an EC to provide telecommunications services between the EO and POT. Also referred to in this document as *exchange network*.

terminal equipment. Equipment at the end of a communication circuit, such as telephone sets, PBXs, voiceband data modems, and teletypewriters.

4. Requirements and Guidelines for Voice Transmission Parameters

The requirements and guidelines section for voice parameters is organized on a parameter-by-parameter basis. The parameters specified are:

- loss and level
- loss deviation
- three-tone slope (attenuation distortion)
- echo return loss
- singing return loss
- C-message noise
- C-notched noise

Specifications are not currently supplied for:

- absolute delay

From a service performance perspective, the most important specifications are those between the POT and the EO. Thus, requirements are given for acceptance limits (AL) and immediate action limits (IAL) for the transmission path between the POT and the EO. As the path between the POT and the EO in a tandem arrangement will contain more than one link, parameter guidelines are given for the segment between the POT and the AT. These parameter guidelines are intended to assist the EC in providing specifications for particular service offerings where configurations between the POT and the AT are provided, and to ensure that the requirements between the POT and the EO are met.

4.1 Loss and Level

4.1.1 Definitions. The 1004-Hz loss is the loss at 1004 Hz. In this section, *1004-Hz loss is simply* called "loss," except when referring to loss at other frequencies.

The *loss* of a *channel* or *connection* between two interfaces is the difference between the level at one point and the level at the other point, i.e., the input level minus the output level.

NOTE: As discussed in this subsection, the levels in this loss definition can both be analog, both digital, or one analog and one digital.

The level (analog level, absolute transmission level, power level, or simply power) at any point is the power in dBm of the signal into a resistive load equal to the designated impedance at the point of measurement, i.e., level is the ratio in dBm, of the received power at the point (power dissipated in a specified impedance at that point) to 1 milliwatt. Thus, 1 milliwatt corresponds to 0 dBm.

The transmission level (TL) at any point on a transmission system is the ratio in dB of the power of a signal at that point to the power of the same signal at a reference point, i.e., the design loss or gain, expressed in dB, between that point and some other point in the same circuit chosen as a reference.

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The transmission level point (TLP) is a point in a transmission system at which is specified the ratio in dB of the power of a test signal at that point to the power of the test signal at a reference point. The reference point, called the zero transmission level point (0 TLP), is an arbitrarily established point (which may be a hypothetical point unavailable for actual measurement) relative to which transmission levels at all other points are specified. A signal level of X dBm at the 0 TLP is designated X dBm0.

The digital milliwatt (DMW) is a defined digital representation of a 0-dBm 1000-Hz sine wave applied at the 0 TLP. The digit sequence established by the CCITT in CCITT recommendation G.711 as the standard representation of the digital milliwatt is defined for 8-kHz sampling and a full 8-bit, μ255 15-segment A/D conversion with sampling instants at phases $\frac{\pi}{8} + s\frac{\pi}{4}$, $s = 0, 1, 2, 3, 4, 5, 6, 7$ of the sine wave. The resulting bit sequence is:

		Bit Number							
		1	2	3	4	5	6	7	8
Word Number	1	0	0	0	1	1	1	1	0
	2	0	0	0	0	1	0	1	1
	3	0	0	0	0	1	0	1	1
	4	0	0	0	1	1	1	1	0
	5	1	0	0	1	1	1	1	0
	6	1	0	0	0	1	0	1	1
	7	1	0	0	0	1	0	1	1
	8	1	0	0	1	1	1	1	0

The digital reference signal (DRS) is a digital representation of a 0-dBm0 1004-Hz analog sinusoid, such that it will be decoded into an analog signal equal in level to the analog signal obtained by decoding a digital milliwatt using the same decoder.

The encode level point (ELP), or e-dB encode level point (e-dB ELP), is a point at which an analog 1004-Hz sinusoid of e dBm would be encoded into a DRS.

The decode level point (DLP), or d-dB decode level point (d-dB DLP), is a point at which a DRS would be decoded into an analog 1004-Hz sinusoid of d dBm.

The digital level is the analog level that would result from decoding the digital stream at 0 DLP. Thus, DRS + P is the digital level of the bit stream that represents P dBm.

The switch reference point, or center, of a digital switch is any point at which a DRS appears in response to either a DRS on a digital facility or an encoding that would result from a 0-dBm0 analog test signal from the test position. (The test position is assumed to be 0-dB TLP.)

The switch reference point, or center, of an analog switch is any point at which the level is equal to the designated TLP of the switch when a 0-dBm test signal is applied at the test position. By convention, this point is taken to be the outgoing trunk appearance.

4.1.2 Measurement. The loss (loss, level, and loss deviation) specifications and measurements are applicable in both directions from POT to EO and from EO to POT. Also, for the case of tandem access, an additional specification is applicable in both directions from POT to AT and from AT to POT.

Although loss is specified in this standard, actual loss is not directly measured. The quantity actually measured is level. Loss is administered by level specifications. Control of level and loss is accomplished via the loss deviation parameter.

Loss at frequency f is determined by applying a tone of known level in dBm at one end of a channel or connection, measuring the received signal level in dBm at the other end of the channel or connection, and subtracting the received signal level from the source signal level. The source and the detector should have the nominal (resistive) impedances specified for their corresponding end of the channel or connection.

Requirements that shall be met by the source and the detector, and the detailed measurement technique, shall be as specified in ANSI/IEEE 743-1984. The applied signal should be within the dynamic range of the channels included in the connection, and the received signal should be at a level sufficiently higher than the noise.

4.1.3 General Information. Loss is introduced into the transmission path of a telephone connection to control echo performance. The goal of the connection design loss is to provide sufficient loss to control echo performance while ensuring adequate received signal levels. This specification of loss is compatible with the recommended U.S. / North American Transmission Loss/Level Plan for interexchange service using the public switched telephone network.

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(See CCITT Recommendation G.121. Also, see "Notes on the Network," AT&T, 1980 [6].) This CCITT Recommendation specifies that loss be inserted at the end office for an analog NI. At the time of the writing of this standard, loss recommendations for services using a digital NI are under development in T1Q1.1, Voice and Voiceband Data Performance Working Group of Committee T1 - Telecommunications.

The loss of a channel or connection between two analog points is expressed in decibels as

$$Loss = 10 \log \left(\frac{p_1}{p_2} \right),$$

where p_1 is the input power and p_2 is the output power and both powers are expressed in watts. The loss in decibels can also be expressed as

$$Loss = P_1 - P_2,$$

where P_1 and P_2 are the input and output power levels, i.e., the input and output powers expressed in dBm, i.e.

$$P_1 = 10 \log \left(\frac{p_1}{10^{-3}} \right),$$

$$P_2 = 10 \log \left(\frac{p_2}{10^{-3}} \right).$$

Also, the *nominal* loss between the two points can be expressed in terms of the nominal TLPs as

$$Loss = X_1 - X_2,$$

where the input point is nominally an X_1 TLP and the output point is nominally an X_2 TLP.

Loss can be defined in several ways, depending on the various ways of defining the input and output powers. The definition of loss used in telephony is based on the definition of loss known in transmission engineering as transducer loss. The transducer loss of a channel or connection between two specified points is the ratio expressed in dB of the maximum power available from a source applied at one end of the channel or connection, and the actual power received (dissipated) in a specified impedance at the other end of the channel or connection. Maximum available power from a source is the power that would be dissipated in a load impedance conjugate to the source impedance. In telephony, the source impedance is, by design, always resistive and the specified standard impedance at the receiving end of the channel is, by convention, also resistive. Then the definition of transducer loss can be expressed as the difference in levels measured by instrumentation, as specified in ANSI/IEEE 743-1984. (Further discussion of loss definitions can be found in Appendix B of IEEE 823-1989.)

The loss of a channel or connection is a function of frequency. The loss at a nominal frequency of 1004 Hz is the quantity most often used to specify the loss of a channel or connection. For various purposes, loss is often measured at frequencies other than 1004 Hz. For example, frequency response (attenuation distortion) is specified in terms of the loss at a given frequency or over a specified frequency range, relative to the loss at a reference frequency, which is usually 1004 Hz (see 4.3).

It is useful to extend the definition of loss to apply to two points where one or both of the points is in a digital bit stream. This is done by providing a definition for digital level (i.e., level at a digital point) that is consistent with conventional analog level. Digital level is defined as the analog level that would result from decoding the digital bit stream at 0 DLP. Thus, DRS + P is the digital level of the bit stream that represents P dBm. This definition of digital level in terms of 0 DLP, which relates the digital bit stream to an equivalent analog level, permits defining loss between any two points in the path of an end-user call whether the points are analog or digital. Thus, loss between two digital points having digital levels DRS + P_1 and DRS + P_2 is $P_1 - P_2$. Similarly, the loss between an analog point having level P_1 and a digital point having level DRS + P_2 is $P_1 - P_2$.

4.1.4 Requirements for Loss. The requirements for loss apply between the EO and the IC switch, for both direct trunks and connections via access tandem. This goes beyond exchange access, which is only the segment between the EO and the POT. Achievement of the desired loss requires EO/IC cooperation. Compliance with the loss requirements by the exchange carrier is achieved by provision of the proper levels at the EO and POT.

4.1.4.1 Group 1. For Group 1, the design loss is given in Table 1, except as stated in Table 13. The requirements in Table 1 are independent of whether access is direct or via access tandem. It is assumed that access tandems are designated as digital or as analog TP2 (i.e., −2 TLP at the

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Table 1
Design Loss in dB between
EO Access Line (Loop) Interface (Analog) and Center of IC Switch
Group 1
Tier 1 and Tier 2

IC Switch Type	EO to IC	IC to EO	Notes*
Digital	0	6	1,2
Analog (TP0)	0	6	1,2
Analog (TP2)	3	3	1,2

* Text for the notes listed in this table appear in Table 13.

switch center). The requirements are also independent of the facility type(s) in the connection.

For tandem access, there is an alternate design loss (IC option) for arrangements in which the trunks between the access tandem and the IC switch have a digital POT and interface with the switches as follows:

(1) Digitally with a digital IC switch and at VF with an analog TP2 access tandem

(2) At VF with an analog TP0 IC switch and at VF with an analog TP2 access tandem

(3) At VF with an analog TP2 IC switch and digitally with a digital access tandem

The alternate design loss for these arrangements is given in Table 2, except as stated in Table 13.

The result of the exceptions described in Table 13 and the alternate designs in the tables is a range of acceptable loss values for exchange access. The plan embodied in these requirements achieves a total loss for the combined access and egress links (EO to IC switch + IC switch to EO) of nominally 6 dB, ranging from a low of 4 dB for the case of an analog combined AT/EO at each end or the case of cable with 2-dB loss at each end, to a high of 10 dB for the case of an alternate-design trunk at each end and cable with 4-dB loss at each end.

For each design case of Tables 1 and 2, the access line (loop) interface is assumed to be analog. If the EO is a digital switch, the specified loss includes the effects of encode/decode operations.

For a digital IC switch, the level at the center of the switch is digital level relative to DRS. Loss is the difference between the analog level at the EO and the digital level at the center of the IC switch. The loss that may be introduced by ELP/DLP of other then 0/0 and by test pads at a digital IC switch are not included in the loss requirements in Tables 1 and 2. Examples of loss associated with commonly used ELP/DLP and test pad values are given in Tables 3 and 4.

4.1.4.2 Group 2. For Group 2, the loss requirements are the same as those of Group 1 except that:

(1) The design loss for a combination trunk between the AT and the POT should normally be that of the alternate design using the levels of Tables 11 and 12, and the overall exchange access loss will be 1 dB higher as in Table 2. However, when agreed by the EO and the IC, the design loss can be that used for Group 1.

(2) The design loss of an analog trunk between the AT and the POT should have a value of *VNL* dB and the overall exchange access loss will be *VNL* dB higher, where *VNL* denotes the loss value specified in the Via Net Loss (VNL) plan.

(3) The design loss of an analog trunk between the EO and the AT or between the EO and the POT should have a value of 2.5 + *VNL* dB and the overall exchange access loss will be *VNL* − 0.5 dB higher.

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Table 2
Alternate Design Loss in dB between
EO Access Line (Loop) Interface (Analog) and Center of IC Switch
for Tandem Access Using the Applicable Arrangements
Group 1
Tier 1 and Tier 2

IC Switch Type	EO to IC	IC to EO	Notes*
Digital	1	7	1,2
Analog (TP0)	1	7	1,2
Analog (TP2)	4	4	1

* Text for the notes listed in this table appear in Table 13.

Table 3
Examples of Loss Associated
with Commonly Used Encode/Decode Levels

ELP/DLP at Digital IC Switch	Loss in dB between EO and IC Encode/Decode Point	IC Test Pad Value	Loss in dB between EO and IC Test Position
0/0	6/0	0	6/0
0/−6	6/6	0	6/6
−3/−3	3/3	3	6/6

NOTE: In each example, the loss in dB is 6/0 between the analog loop interface at the EO and the center of the digital switch, as stated in Table 1.

Table 4
Examples of Loss Associated
with Commonly Used Encode/Decode Levels
for Tandem Access Using the Alternate
Design Loss of Table 2.

ELP/DLP at Digital IC Switch	Loss in dB between EO and IC Encode/Decode Point	IC Test Pad Value	Loss in dB between EO and IC Test Position
0/0	7/1	0	7/1
0/−6	7/7	0	7/7
−3/−3	4/4	3	7/7

NOTE: In each example, the loss in dB is 7/1 between the analog loop interface at the EO and the center of the digital switch, as stated in Table 2.

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The Via Net Loss (VNL) plan and values, and the definitions of combination and analog trunks, are given in Notes on the BOC Intra-LATA Networks [1].

4.1.5 Requirements for Levels at the EO and POT. The requirements for levels apply between the EO and the POT for both direct access and connections via access tandem. For direct access, the level entries in the tables can be interpreted as either levels in dBm or as TLP transmission levels in dB, and can be used as line-up values. For tandem access, the level entries should be interpreted as levels in dBm, but not as TLP transmission levels and not necessarily as line-up values since the line-up values could be different on the individual trunks. The levels at the end office are measured at the switch test position or analog access line (loop) interface.

The levels corresponding to the design losses of Table 1 are given in Tables 5 and 6. The levels corresponding to the alternate design losses of Table 2 are given in Tables 7 and 8.

Notes that qualify the requirements in Tables 5-8 are given in Table 13.

4.1.6 Guidelines for Levels at the Access Tandem.[7] The following guidelines apply only to tandem access and, in particular, only to channels between the AT and the IC. The level entries in these guideline tables can be interpreted as either levels in dBm or as TLP transmission levels in dB, and can be used as line-up levels. The levels at the access tandem are measured at the switch test position. It is assumed that analog access tandems are designated as TP2 (i.e., −2 TLP). It is assumed that digital access tandems equivalently encode such that the combination of the ELP and any test pads results in a DRS when 0 dBm is applied and equivalently decode such that the combination of the DLP and the test pads results in a -6 dBm signal level when a DRS is applied.

The levels corresponding to the design losses of Table 1 are given in Tables 9 and 10. The levels corresponding to the alternate design losses of Table 2 are given in Tables 11 and 12.

Notes that qualify the guidelines in Tables 9-12 are given in Table 13.

7. These guidelines are not part of the American National Standard T1.506-1990.

4.2 Loss Deviation

4.2.1 Definition. Loss deviation (LD) is the difference between the measured level and the specified level of a received 1004-Hz tone.

4.2.2 Measurement. Loss deviation is specified at the end office and at the POT.

Loss deviation is measured in terms of analog levels in dBm and digital levels relative to a DRS. The measured level is subtracted from the specified level to obtain the loss deviation in dB. A positive loss deviation results when the measured level is lower than the specified level.

The discussion of loss, level, and loss and level measurement in 4.1 applies also to the loss deviation parameter. Measuring equipment specifications shall be as described in ANSI/IEEE 743-1984.

4.2.3 General Information. The purpose of the loss deviation parameter is to control the departure of the actual line-up value of the 1004-Hz loss or level from the design value. Historically, loss was specified. Currently, level is specified for exchange access.

Loss deviation is a two-sided parameter. Limits are therefore specified by two values, one for high loss (+) and one for low loss (−). High loss corresponds to a level that is lower than specified.

In the case where the test tone traverses a complete trunk and test pads at each end, loss deviation can be stated in terms of either loss or level. In terms of loss, it is the difference between the Actual Measured Loss (AML) and the Expected Measured Loss (EML), LD = AML − EML. Also, if the test tone is transmitted at 0 dBm0 (i.e., 0 dBm at a 0 TLP), then the loss deviation is the difference between the measured level and the TLP value at point of measurement.

4.2.4 Requirements. Table 14 and Table 15 provide the requirements for the limits between the POT and the EO.

4.2.5 Guidelines.[8] Table 16 provides guidelines for the limits between the POT and the AT.

8. These guidelines are not part of the American National Standard T1.506-1990.

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Table 5
Requirements for Power in dBm at the End Office

IC Switch Type	EO to IC (Trans)	IC to EO (Rec)	Notes*
Digital	0	−6	3,4
Analog (TP0)	0	−6	3,4
Analog (TP2)	0	−5	3,4

* Text for the notes listed in this table appear in Table 13.

Table 6
Requirements for Power in dBm at the POT

IC Switch Type	AT Switch Type	EO to IC (Rec)	IC to EO (Trans)	Notes*
Digital POT (Direct Access)		DRS	DRS	—
Digital POT (Tandem Access)				
Digital	Digital	DRS	DRS	—
Digital	Analog (TP2)	DRS	DRS	7
Analog (TP0)	Digital	DRS	DRS	—
Analog (TP0)	Analog (TP2)	DRS−1	DRS	7
Analog (TP2)	Digital	DRS	DRS+1	7
Analog (TP2)	Analog (TP2)	DRS−1	DRS	—
Analog POT (4-wire)		−16 to +7	−16 to +7	3,5
Analog POT (2-wire)		−3	−3	3,6

* Text for the notes listed in this table appear in Table 13.

Table 7
Alternate Requirements for Power in dBm at the End Office for Tandem Access Using the Alternate Design Loss of Table 2

IC Switch Type	EO to IC (Trans)	IC to EO (Rec)	Notes*
Digital	0	−7	3,4
Analog (TP0)	0	−7	3,4
Analog (TP2)	0	−6	3,4

* Text for the notes listed in this table appear in Table 13.

Table 8
Alternate Requirements for Power in dBm at the POT for Tandem Access Using the Alternate Design Loss of Table 2

IC Switch Type	AT Switch Type	EO to IC (Rec)	IC to EO (Trans)	Notes*
Digital POT				
Digital	Analog (TP2)	DRS−1	DRS	—
Analog (TP0)	Analog (TP2)	DRS−1	DRS	—
Analog (TP2)	Digital	DRS	DRS	—
Analog POT (4-wire)		−16 to +7	−16 to +7	3,5

* Text for the notes listed in this table appear in Table 13.

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Table 9
Guidelines for Power in dBm at the Access Tandem

IC Switch Type	AT Switch Type	AT to IC (Trans)	IC to AT (Rec)	Notes*
Digital	Digital	0	−6	—
Digital	Analog (TP2)	0	−5	7
Analog (TP0)	Digital	0	−6	—
Analog (TP0)	Analog (TP2)	0	−5	7
Analog (TP2)	Digital	0	−5	7
Analog (TP2)	Analog (TP2)	0	−4	—

* Text for the notes listed in this table appear in Table 13.

Table 10
Guidelines for Power in dBm at the POT

IC Switch Type	AT Switch Type	AT to IC (Rec)	IC to AT (Trans)	Notes*
Digital POT				
Digital	Digital	DRS	DRS	—
Digital	Analog (TP2)	DRS+1	DRS	7
Analog (TP0)	Digital	DRS	DRS	—
Analog (TP0)	Analog (TP2)	DRS	DRS	7
Analog (TP2)	Digital	DRS	DRS+1	7
Analog (TP2)	Analog (TP2)	DRS	DRS	—
Analog POT (4-wire)		−16 to +7	−16 to +7	5

* Text for the notes listed in this table appear in Table 13.

Table 11
Alternate Guidelines for Power in dBm at the Access Tandem for Tandem Access Using the Alternate Design Loss of Table 2

IC Switch Type	AT Switch Type	AT to IC (Trans)	IC to AT (Rec)	Notes*
Digital	Analog (TP2)	0	−6	—
Analog (TP0)	Analog (TP2)	0	−6	—
Analog (TP2)	Digital	0	−6	—

* Text for the notes listed in this table appear in Table 13.

Table 12
Alternate Guidelines for Power in dBm at the POT for Tandem Access Using the Alternate Design Loss of Table 2

IC Switch Type	AT Switch Type	AT to IC (Rec)	IC to AT (Trans)	Notes*
Digital POT				
Digital	Analog (TP2)	DRS	DRS	—
Analog (TP0)	Analog (TP2)	DRS	DRS	—
Analog (TP2)	Digital	DRS	DRS	—
Analog POT (4-wire)		−16 to +7	−16 to +7	5

* Text for the notes listed in this table appear in Table 13.

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Table 13
Notes to Tables 1 Through 12

(1)	If a cable facility without gain is used in the access connection, the loss can vary by ± 1 dB.
(2)	If the EO is at an analog co-located AT/EO, the loss in each direction is 1 dB less. The 4-wire interface at the analog AT should consist of a 4-wire trunk circuit with interprocessor trunk, 2.0-dB switched pad, or the equivalent.
(3)	When a cable facility without gain is used in the access connection, the receive level can vary by ± 1 dB.
(4)	When the EO is at an analog co-located AT/EO, the receive (Rec) level is 1 dB higher. (This corresponds to 1 dB less loss.)
(5)	The levels at the POT depend on the specific hardware arrangement and corresponding interface code. For details, see TR-NPL-000334 [2].
(6)	When the IC switch has a 2-dB test pad (TP2, or −2 TLP at the switch reference point), the IC to EO (transmit) level can be −2 dBm rather than −3 dBm.
(7)	Alternate design loss can occur for these cases.

Table 14
Requirements for Loss Deviation in dB between POT and EO
(4-Wire POT)

	Group 1 Group 2 Direct		Group 2 Tandem	
Limits	Tier 1	Tier 2	Tier 1	Tier 2
IAL	±2.0	±2.5	±2.5	±3.0
AL	±0.7	±0.7	±1.0	±1.0*

* The AL is ±1.2 dB for channels using cable without gain.

Table 15
Requirements for Loss Deviation in dB between POT and EO
(2-Wire POT)

	Group 1 Direct Group 2 Direct		Group 2 Tandem	
Limits	Tier 1	Tier 2	Tier 1	Tier 2
IAL	±2.0	±2.5	NA	NA
AL	±0.7*	±0.7*	NA	NA

* The AL is ±1.2 dB for channels using cable without gain.

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Table 16
Guidelines for Loss Deviation in dB between POT and AT
(4-Wire POT)

	Group 1		Group 2	
Limits	Tier 1	Tier 2	Tier 1	Tier 2
IAL	±1.5	±2.0	±2.0	±2.5
AL	±0.7	±0.7	±0.7	±0.7

4.3 Three-Tone Slope

4.3.1 Definition. Three-tone slope (TTS) is a measure of frequency response consisting of the values of the frequency response at 404 Hz and 2804 Hz relative to the value at 1004 Hz.

Frequency response at frequency f is the difference in dB between the level at a reference frequency and the level at frequency f, i.e., the level in dBm at the reference frequency minus the level in dBm at frequency f.

4.3.2 Measurement. The general definition of frequency response applies at any frequency. Frequency response specifications in this standard are made in terms of three-tone slope. The measurements usually are made at a transmit level of −16 dBm0 for each of three tones. The slope for 404 Hz is obtained by subtracting the received level at 404 Hz from the received level at 1004 Hz,

$$TTS_{404} = L_{1004} - L_{404}.$$

The slope for 2804 Hz is obtained by subtracting the received level at 2804 Hz from the received level at 1004 Hz,

$$TTS_{2804} = L_{1004} - L_{2804}.$$

L signifies the level. TTS signifies the three-tone slope and its value is defined as a loss.

Measuring equipment specifications are contained in ANSI/IEEE 743-1984.

4.3.3 General Information. Frequency response of a channel is one of the characteristics that define the linear properties of a channel. Frequency response is the gain or loss versus frequency. In telephony, it is customary to use the *loss* versus frequency, where loss is as defined in 4.1.

The purpose of controlling the frequency response is to preserve harmonic relationships for speech and the waveform for voiceband data. For this purpose, it is sufficient to work with the frequency-dependent loss relative to the minimum loss in the band. The minimum loss typically occurs near 1000 Hz. The reference frequency is defined to be a fixed value of 1004 Hz. In this standard, the working definition is stated in terms of levels that are the actually measured quantities.

It is desirable from a service viewpoint to control the entire frequency response. However, it has been found by experience that control at one low frequency and one high frequency is usually adequate to control the complete frequency response.[9] In this standard, the specifications relative to 1004 Hz are at the frequencies of 404 Hz and 2804 Hz. Two values are given, in the format $-x/+y$, one for low loss or high level (−), and one for high loss or low level (+). The values at frequencies between 404 and 2804 Hz are rarely worse than the values at 404 and 2804 Hz. The frequency response values at 404 and 2804 Hz relative to that at 1004 Hz are commonly called low- and high-frequency slope, respectively. It should be recognized that this is a specific terminology in telephony since the three-tone slope parameter is not a slope in the widely understood mathematical sense. Frequency response and three-tone slope have units of dB, not dB/Hz. Also, to avoid sign confusion, the commonly-used term "gain slope" is not recommended since the three-tone slope parameter is defined as loss not gain. The three-tone slope requirements are sometimes referred to as attenuation distortion requirements.

9. These requirements will not necessarily control frequency response ripple which may be service limiting.

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Table 17
Requirements for Three-Tone Slope in dB at 404 Hz and 2804 Hz between POT and EO
(4-Wire POT)

Limits	Group 1 Group 2 Direct		Group 2 Tandem (4-Wire AT-EO Trunk)		Group 2 Tandem (2-Wire AT-EO Trunk)	
	Tier 1	Tier 2*	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	−1.5/+2.5	−2.0/+4.0	−2.0/+3.5	−2.0/+5.5	−2.0/+3.5	−2.0/+6.5
AL	−1.0/+2.0	−1.5/+3.5	−1.5/+3.0	−1.5/+5.0	−1.5/+3.0	−1.5/+6.0

* When the POT is an interface with SF signaling, an IAL of −1.0/+3.5 dB and an AL of −1.0/+2.5 dB applies between the EO SF unit and the POT.

Table 18
Requirements for Three-Tone Slope in dB at 404 Hz and 2804 Hz between POT and EO
(2-Wire POT)

Limits	Group 1 Direct Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	−1.5/+2.5	−2.0/+5.5	NA	NA
AL	−1.0/+2.0	−1.5/+5.0	NA	NA

Table 19
Guidelines for Three-Tone Slope in dB at 404 Hz and 2804 Hz between POT and AT
(4-Wire POT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2*	Tier 1	Tier 2†
IAL	−1.0/+2.0	−1.5/+3.0	−1.5/+2.5	−2.0/+4.0
AL	−0.5/+1.5	−1.0/+2.5	−1.0/+2.0	−1.5/+3.5

* When the POT is an interface with SF signaling, an IAL of −1.0/+3.0 dB and an AL of −0.5/+2.5 dB applies between the EC SF unit and the POT.

† When the POT is an interface with SF signaling, an IAL of −1.0/+3.5 dB and an AL of −1.0/+2.5 dB applies between the EC SF unit and the POT.

4.3.4 Requirements. Tables 17 and 18 provide the requirements for the limits between the POT and the EO.

4.3.5 Guidelines.[10] Table 19 provides guidelines for the limits between the POT and the AT.

4.4 Echo Return Loss and Singing Return Loss

4.4.1 Definition. Echo return loss (ERL) at any point in a channel or connection is a frequency-weighted average, over the middle of the voiceband, of the return losses RL(f) at that point, with the output of the channel terminated with a specified standard impedance. The weighting is given in ANSI/IEEE 743-1984. The 3-dB bandwidth of the weighting is 560 Hz to 1965 Hz.

Singing return loss (SRL) is the minimum of SRL-low and SRL-high. SRL-low is the frequency-weighted average of return losses in a low-frequency band (with 3-dB bandwidth from 380 Hz to 500 Hz). SRL-high is the frequency-weighted average of return losses RL(f) in a high-frequency band (with 3-dB bandwidth from

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2200 Hz to 3400 Hz). The weightings are given in ANSI/IEEE 743-1984.

Return loss RL(f) at any interface in a transmission path is the ratio, expressed in dB, of the transmitted power to the reflected or returned power at a single frequency, with the channel terminated in a standard impedance at a specified point.

Equal-level echo return loss (ELERL) at any 4-wire interface is the 4-wire ERL measured by a return loss measuring set at the interface, adjusted by the difference in TLPs at the interface,

$$ELERL = (\text{4-wire } ERL) - (TLP_T - TLP_R),$$

where TLP_T is the transmitting TLP from the POT in the direction toward the EO, and TLP_R is the receiving TLP at the POT in the direction from the EO.

Equal-level singing return loss (ELSRL) at any 4-wire interface is the 4-wire SRL measured by a return loss measuring set at the interface, adjusted by the difference in TLPs at the interface,

$$ELSRL = (\text{4-wire } SRL) - (TLP_T - TLP_R).$$

NOTE: The 4-wire performance specifications are limits on ELERL and ELSRL, at the POT. The 2-wire performance specifications are limits on the 2-wire ERL or SRL at the POT.

4.4.2 Measurement. The ERL and SRL specifications and measurements apply in the direction toward the EO. Incident power is transmitted toward the EO and reflected power is received in the direction from the EO.

The ERL and SRL specifications and measurements apply from the POT to the EO whether routing is direct or tandem. For the case of tandem access, additional ERL and SRL guidelines apply from the POT to the AT. For testing to the EO of a combined AT/EO switch, the POT-to-EO requirements apply. In either case, the ERL and SRL measurements require a nominal termination at the distant end of the channel (EO or AT). Nominal terminations shall be as defined in ANSI/IEEE 743-1984.

For direct access the POT can be a 4-wire or 2-wire interface. For tandem access the interface at the POT is always a 4-wire interface.

The ERL and SRL measurements are made using a return loss measuring set (RLMS). The measurements are made at both 2-wire and 4-wire interfaces. At 2-wire interfaces, a hybrid is a necessary part of the measuring system to permit application of the transmit signal and measurement of the reflected power. Measurements at 4-wire interfaces do not require the use of a hybrid in the measuring system. A typical RLMS has selector knobs on the panel. The interface selector knob can be set for a 2-wire 600-ohm, 2-wire 900-ohm, or 4-wire interface. The 2-wire positions insert the appropriate hybrid. For a given interface selection, the other selector knob can be set to read either ERL, SRL-low, or SRL-high, and the appropriate frequency weighting is applied. Thus, 2-wire ERL or SRL is the ERL or SRL measured at a 2-wire interface by a RLMS, and 4-wire ERL or SRL is the ERL or SRL measured at a 4-wire interface by a RLMS. The term *return loss* is also used colloquially to refer generically to either an ERL or SRL measurement made by a return loss measuring set at either a 2-wire or 4-wire interface. The term *echo path loss* (EPL) is also used in the same way but usually only at a 4-wire interface.

The raw ERL and SRL measurements need to be corrected using the TLPs at the measurement interface, as discussed below.

Measurement equipment specifications for RLMSs are contained in ANSI/IEEE 743-1984.

4.4.3 General Information. Echo is power that has been reflected from the primary signal path. Talker echo is the echo that reaches the ear of the talker or the transmitting data set. Listener echo is the echo that reaches the ear of the listener or the receiving data set. For exchange access, the main control of echo is required in the direction looking from IC toward the EO, i.e., in the terminating exchange access channel. The subjective effect of the echo is governed by both the magnitude and delay of the echo. In the originating exchange access, delay is sufficiently short that any echo is perceived as sidetone. Echo control looking into the egress exchange access channel from the IC is necessary and sufficient (assuming proper IC echo control) to control both talker and listener echo.

Return loss (RL) is the basic measure of echo power reflected back to the originating end of a channel because of impedance mismatches throughout the channel. Return loss (RL) at any interface in a transmission path is the ratio,

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expressed in dB, of the transmitted power to the reflected or returned power at a single frequency, with the channel terminated in a specified standard impedance. Mathematically, return loss is equal to

$$RL(f) = 10 \log \left(\frac{p_t}{p_r} \right)$$
$$= -20 \log_{10} |\rho|,$$

where p_t is the transmitted power and p_r is the reflected or returned power, and ρ is the reflection coefficient. This is the fundamental definition.

RL(f) is a single-frequency measure of the echo. To cover both customer perception of the echo and singing more realistically, echo return loss and singing return loss are actually specified.

Echo return loss (ERL) is a frequency-weighted average of return losses RL(f) over the middle of the voiceband (560 Hz to 1965 Hz), where talker echo is most annoying. The frequency weights are given in Table 9 of ANSI/IEEE 743-1984.

Singing return loss (SRL) is the frequency-weighted average of return losses RL(f) at the edges of the voiceband (200 Hz to 500 Hz and 2200 Hz to 3400 Hz), where singing (instability) problems are most likely to occur. The frequency weights for SRL-low are given in Table 10, and for SRL-high in Table 11, of ANSI/IEEE 743-1984.

The intent of the ELERL, ELSRL, and 2-wire specifications is to provide the same performance that the predivestiture terminal balance ERL and SRL specifications provided. In fact, the numerical values are the same. However, when the POT is located at a point that is different from the traditional terminal balance point, it is necessary to correct the ERL and SRL values measured at the POT by referring them to the traditional terminal balance point. The appropriate correction would be the sum of the losses in each direction (L_1 and L_2) between the traditional terminal balance point and the POT. For convenience, however, the correction has been defined in terms of the TLPs at the POT rather than these losses. The results are exact for direct access and within 1 dB for typical designs for the EO-to-AT-to-POT case. Thus,

$$ELRRL = ERL - (TLP_T - TLP_R)$$
$$\approx ERL - (L_1 + L_2),$$

$$ELSRL = SRL - (TLP_T - TLP_R)$$
$$\approx SRL - (L_1 + L_2).$$

This relationship has been commonly stated elsewhere as equal level echo path loss,

$$ELEPL = EPL - (TLP_T - TLP_R)$$
$$\approx EPL - (L_1 + L_2),$$

where the echo path loss (EPL) is either the ERL or SRL, measured at the POT. The term EPL has also been used for several other concepts, including analytic modeling and engineering of specific circuit designs. For example, see IEEE 823-1986.

4.4.4 Requirements. Tables 20, 21, and 22 provide the requirements for the POT-to-EO limits.

4.4.5 Guidelines.[11] Table 23 provides guidelines for the POT-to-AT limits.

4.5 C-Message Noise

4.5.1 Definition. C-message noise (CMN) is the C-message frequency-weighted, short-term-average noise power on an idle channel, i.e., a channel with a termination and no signal at the transmitting end.

CMN is expressed in dBrnC.

The CMN performance specifications in this document are expressed in dBrnC0.

4.5.2 Measurement. The measurement of C-message noise consists of a short-term average of the noise within a voicegrade channel, as measured by a standard noise measuring set equipped with C-message frequency weighting. C-message noise is measured at the receiving end of a channel or connection with a measuring set incorporating C-message weighting. The sending end of the channel or connection is terminated in its nominal impedance, i.e., in a quiet termination. The C-message noise measuring set is also terminated in the nominal impedance. The C-message noise is measured in dBrnC, which is the C-message weighted noise power in dB relative to 1 picowatt (10^{-12} watts or -90 dBm). In ANSI/IEEE 743-1984, the standard measurement methods and equipment characteristics, including the C-message weighting, are defined.

The C-message noise performance specifications are expressed in terms of dBrnC0, which is the level in dBrnC referred to the channel 0 TLP (zero transmission level point). See 4.1 regarding TLP.

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Table 20
Requirements for ELERL and ELSRL in dB
POT to EO
(4-Wire POT)

Limits	Group 1* Group 2 Direct				Group 2 Tandem* (4-Wire AT-EO Trunk)			
	Tier 1		Tier 2		Tier 1		Tier 2	
	ELERL	ELSRL	ELERL	ELSRL	ELERL	ELSRL	ELERL	ELSRL
IAL	16	11	16	11	16	11	16	11
AL	21	14	21	14	21	14	21	14

* For testing to the EO of a combined AT/EO switch, the POT-to-EO requirements apply.

Table 21
Requirements for ELERL and ELSRL in dB
POT to EO
(4-Wire POT)

Limits	Group 2 Tandem* (2-Wire AT-EO Trunk)			
	Tier 1		Tier 2	
	ELERL	ELSRL	ELERL	ELSRL
IAL	13	6	13	6
AL	18	10	18	10

* For testing to the EO of a combined AT/EO switch, the POT-to-EO requirements apply.

Table 22
Requirements for ERL and SRL in dB
POT to EO
(2-Wire POT)

Limits	Group 1 Direct Group 2 Direct				Group 2 Tandem	
	Tier 1		Tier 2		Tier 1	Tier 2
	ERL	SRL	ERL	SRL	ERL	SRL
IAL	13	6	13	6	NA	NA
AL	18	10	18	10	NA	NA

Table 23
Guidelines for ELERL and ELSRL in dB
POT to AT
(4-Wire POT)

Limits	Group 1				Group 2			
	Tier 1		Tier 2		Tier 1		Tier 2	
	ELERL	ELSRL	ELERL	ELSRL	ELERL	ELSRL	ELERL	ELSRL
IAL	25	18	25	18	21	18	21	18
AL	27	20	27	20	27	20	27	20

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Table 24
Requirements for C-Message Noise in dBrnC0
(between POT and EO*)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2†	Tier 1	Tier 2†
IAL				
0 to 50 miles	30	34	32	35
51 to 100 miles	30	36	32	37
101 to 200 miles	30	38	32	39
201 to 400 miles	30	41	32	42
> 400 miles	30	43	32	44
AL				
0 to 50 miles	28	31	30	32
51 to 100 miles	28	33	30	34
101 to 200 miles	28	35	30	36
201 to 400 miles	28	38	30	39
> 400 miles	28	40	30	41

* For a digital EO using digital loss, add 1 dB to the Tier-1 *acceptance limits, for* the terminating (POT-to-EO) direction.

† For Tier-2 channels derived from cable facilities only or from digital facilities with cable extensions, the limits are the same as the Tier-1 limits if the cable is 15 miles or less; add 3 dB if the cable is longer than 15 miles.

4.5.3 General Information. Idle-circuit noise of a channel or connection is the weighted average noise power during the quiescent state, i.e., with no signal on the channel or connection. Idle-circuit noise is the total effect of various noise sources such as white noise, crosstalk, and other interferences. In speech transmission, the quantity of interest is the interfering effect of noise rather than the absolute noise power. To reflect the detection characteristics of the human ear, idle-circuit noise measurements are frequency weighted. The most common weightings used to reflect the interfering effect of noise on speech transmission are the C-message weighting used in this standard and the psophometric weighting used in international applications and in CCITT Recommendations.

The performance specifications in this subsection are for the C-message frequency weighting. This weighting is used to account for the frequency characteristics of 500-type, or similar, telephone set transducer efficiency as well as end-user annoyance to tones as a function of frequency.

Digital switches using digital loss pads to provide loss introduce additional OMN compared with digital switches using analog loss pads. An allowance of 1 dB is provided as a correction to the OMN requirements for acceptance limits for Tier 1. The allowance of 1 dB may not fully represent the potential impact of digital loss on CMN. (See Appendix B for more details.) The correction should be applied only in the POT-to-EO direction when digital loss is used. The more stringent limit for offices that do not use digital loss should be used in the EO-to-POT direction.

4.5.4 Requirements. Table 24 provides the requirements for the limits between the POT and the EO.

4.5.5 Guidelines.[12] Table 25 provides guidelines for the limits between the POT and the AT.

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Table 25
Guidelines for C-Message Noise in dBrnC0
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL				
0 to 50 miles	28	33	30	34
51 to 100 miles	28	35	30	36
101 to 200 miles	28	37	30	38
201 to 400 miles	28	40	30	41
> 400 miles	28	42	30	43
AL				
0 to 50 miles	26	30	28	31
51 to 100 miles	26	32	28	33
101 to 200 miles	26	34	28	35
201 to 400 miles	26	37	28	38
> 400 miles	26	39	28	40

* For Tier-2 channels derived from cable facilities only or from digital facilities with cable extensions, the limits are the same as the Tier-1 limits if the cable is 15 miles or less; add 3 dB if the cable is longer than 15 miles.

4.6 C-Notched Noise

4.6.1 Definition. C-notched noise (CNN) is the C-notched (C-message with a notch) frequency-weighted, short-term-average noise power on a channel with an applied 1004-Hz holding tone. The notch filter of the C-notched weighting eliminates the holding tone.

CNN is expressed in dBrnC.

The CNN performance specifications in this document are expressed in dBrnC0.

4.6.2 Measurement. CNN is measured in a manner similar to CMN, but the sending end of the channel or connection transmits a 1004-Hz holding tone from a source terminated in the nominal impedance. The level of the holding tone should be either −13 dBm0 or −16 dBm0, as discussed below. C-notched noise is measured at the receiving end of a channel or connection with a measuring set terminated in the nominal impedance, incorporating notched C-message weighting. The filter has the C-message contour and a notch in the 995- to 1025-Hz band, which notches out (attenuates) the holding tone. For measurements to be significant, the attenuation of the holding tone should be large enough so that its residual power is small compared to the remaining "noise" power. Harmonic distortion, quantizing noise, and phase and amplitude jitter components contribute to the CNN measurement value. The CNN is measured in dBrnC, which is the C-notched weighted noise power in dB relative to 1 picowatt (10^{-12} watts or −90 dBm). In ANSI/IEEE 743-1984, the standard measurement methods and equipment characteristics, including the C-message weighting and the requirements on the holding tone and the notch, are defined.

The CNN performance specifications are expressed in terms of dBrnC0, which is the level in dBrnC referred to the channel 0 TLP (zero transmission level point). See 4.1 for a definition of TLP.

4.6.3 General Information. CNN is measured and specified to characterize the performance of digital carrier systems, which use quantizers, and companded analog systems such as N-carrier. In systems using quantizers or compandors, the noise increases in the presence of a signal. To measure this noise, a test tone (holding tone) is transmitted from the sending end of the channel or connection under test to activate signal-dependent equipment on the channel or connection. The level of the holding tone used for measurement of CNN in the Exchange Access Study was approximately −13 dBm0 (data level). Some automatic measuring systems, such as

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Table 26
Requirements for C-Notched Noise in dBrnC0 for −16-dBm0 Holding Tone (between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	42	47	44	49
AL	41	43	43	45

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

Table 27
Requirements for C-Notched Noise in dBrnC0 for −13-dBm0 Holding Tone (between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	45	48.5	47	50.5
AL	44	44.5	46	46.5

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

CAROT, use a −16-dBm0 holding tone. The tone is then filtered out ahead of the noise measuring set. The filter used to remove the tone is a narrow-notched filter centered at the frequency of the tone; hence, the name C-notched noise.

The 1004-Hz holding tone is usually transmitted at −16 dBm0 (voice holding-tone level) or at −13 dBm0 (data holding-tone level). Specifications are given below for both levels. The specifications are equivalent. The specifications were converted using the following rules: On digital-carrier systems, C-notched noise increases dB for dB with the increase in holding-tone level for input signals in the approximate range between −30 dBm0 and 0 dBm0. Therefore, an increase in holding-tone level from −16 dBm0 to −13 dBm0 results in a 3-dB increase in CNN. On N-carrier systems, the syllabic compandor characteristics cause a 0.5-dB increase in C-notched noise for each dB of increase in holding-tone level. Therefore, a 3-dB increase in holding-tone level results in a 1.5-dB increase in CNN.

Digital switches using digital loss pads to provide loss introduce additional CNN compared with digital switches using analog loss pads. Separate tables are provided for the case when digital loss is used at a digital end office. The amount of degradation is roughly comparable to that of a pair of digital channel banks. The CNN values for this case were obtained by power summing the CNN requirement for offices that do not use digital loss with 39 dBrnC0 (for a −16-dBm0 holding tone) or 42 dBrnC0 (for a −13-dBm0 holding tone). The resulting requirement for the case of digital loss should be applied only in the terminating (POT-to-EO) direction. The more stringent requirement for offices that do not use digital loss should be used in the originating (EO-to-POT) direction.

The CNN specifications in this subsection correspond exactly to the S/CNN specifications in 5.2. The relationship is given in 5.2.

4.6.4 Requirements. Tables 26 through 29 provide the requirements for the limits between the POT and the EO. For exchange access made through a digital end office using digital loss, Tables 28 and 29 provide the requirements in the terminating (POT-to-EO) direction.

4.6.5 Guidelines.[13] Tables 30 and 31 provide guidelines for the limits between the POT and the AT.

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Table 28
Requirements for C-Notched Noise in dBrnC0 for −16-dBm0 Holding Tone
(For Digital EO Using Digital Loss)
(POT to EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	44	48	45	49
AL	43	44	44	46

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

Table 29
Requirements for C-Notched Noise in dBrnC0 for −13-dBm0 Holding Tone
(For Digital EO Using Digital Loss)
(POT to EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	47	49	48	51
AL	46	46	47	48

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

Table 30
Guidelines for C-Notched Noise in dBrnC0 for −16-dBm0 Holding Tone
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	40	45	42	47
AL	39	41	41	43

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

Table 31
Guidelines for C-Notched Noise in dBrnC0 for −13-dBm0 Holding Tone
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	43	48.5	45	48.5
AL	42	42.5	44	44.5

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

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4.7 Absolute Delay

4.7.1 Definition. Absolute delay, also called *one-way delay, transmission delay, or propagation delay*, is the time it takes for a signal to go between two points in a transmission channel. For a transmitted sinusoid, it is also called *phase delay* and is equal to the ratio of the phase shift between the two points to the frequency of the sinusoid.

Round-trip delay is the sum of the one-way delays in each direction between two points. It is usually twice the one-way delay, or twice the average of the one-way delays if they are different. Round-trip echo path delay is the round trip delay of an echo path.

4.7.2 Measurement. (not available at this time)

4.7.3 General Information. (not available at this time)

4.7.4 Requirements. Requirements for this parameter are under study and not available at this time.

4.7.5 Guidelines.[14] Guidelines for this parameter are under study and not available at this time.

5. Requirements and Guidelines for Voiceband Data Transmission Parameters

The requirements and guidelines for voiceband data parameters are specified for most cases of:

— signal-to-C-notched-noise ratio,

— signal-to-intermodulation-distortion ratios,

— envelope delay distortion (relative envelope delay),

— amplitude jitter and

— phase jitter.

Specifications are not currently supplied for:

— impulse noise,

— gain hits,

— phase hits and

— dropouts.

These voiceband data parameters are recognized as being significant for quality voiceband data transmission; however, the voice transmission parameters of Section 4 are also important.

The requirements and guidelines are given by service affecting limits (SALs), restoral limits (RLs), and immediate action limits (IALs). Service affecting limits are intended to provide parameter values consistent with minimum service objectives that are necessary to support voiceband data modems (see Appendix B). The service affecting limits are provided in 5.1.

Voiceband data restoral limits and immediate action limits for Tier 1 and Tier 2 represent the limiting values of facility performance. The limits are based on the 95th (or 5th) and 99th (or 1st) percentiles, respectively, of the parameter statistical distributions (see Appendix A). The limits are provided in 5.2 and subsequent sections. Requirements are given for restoral limits and immediate action limits for the transmission path between the POT and the EO. Performance guidelines are given for RLs and IALs for the segment between the POT and the AT.

5.1 Guidelines for Service Affecting Limits.[15] Service affecting limits are a set of values for important voiceband parameters that are useful for cooperatively identifying the portion of the network that might be contributing to voiceband data customer service difficulties. This is useful for cooperatively resolving such difficulties. The guidelines for the exchange access portion are based on an allocation of the preliminary minimum end-to-end service objectives (see Appendix B). These guidelines assume the use of metallic loops that have a negligible contribution to signal-to-C-notched-noise ratio and signal-to-intermodulation-distortion ratio. The effect on these parameters of digital loop carrier systems has not been evaluated. Table 32 contains the guideline values. The numbers in this table represent parameter values beyond which voiceband data performance may be adversely affected, depending on the performance of the remainder of the connection.

A high percentage of Tier-1 and Tier-2 facilities are expected to meet the service affecting limits. However, for Tier-2 facilities it is expected that

14. These guidelines are not part of the American National Standard T1.506-1990.

15. These guidelines are not part of the American National Standard T1.506-1990.

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Table 32
Guidelines for Service Affecting Limits
For High-Speed Voiceband Data
(between POT and EO)

Parameter	Service Affecting Limit
Signal-to-C-notched-noise ratio	31 dB
Signal-to-intermodulation-distortion ratio	
Second order, R2	40 dB
Third order, R3	40 dB
EDD (RED)	
604 Hz	1500 μs
2804 Hz	1000 μs
Amplitude jitter	
20-300 Hz	5%
4-300 Hz	6%
Phase jitter	
20-300 Hz	6.5° p-p
4-300 Hz	10° p-p
Impulse noise	RFS
Gain hits	RFS
Phase hits	RFS
Dropouts	RFS

NOTE: RFS = Requires Further Study.

the requirements of 5.2 through 5.10 will be met but the service affecting limits may not be met on all services in all locations. When these guidelines are not met, the network providers (IC and EC) will work jointly with the end user in an attempt to achieve satisfactory performance. However, satisfactory modem performance cannot be guaranteed. In some cases resolution of the problem may lie outside the switched access service such as obtaining a "data-conditioned" loop.

5.2 Signal-to-C-Notched-Noise Ratio

5.2.1 Definition. Signal-to-C-notched-noise ratio (S/CNN) is the ratio in decibels of a received 1004-Hz holding tone signal power to the corresponding C-notched-noise power.

This definition may be expressed as:

$$S/CNN(\text{dB}) = S_{1004}(\text{dBm}) - CNN(\text{dBrnC}) + 90.$$

S_{1004}(dBm) is the received level of a 1004-Hz holding tone expressed in dBm.

CNN(dBrnC) is the received noise measured through a C-notch filter and expressed in dBrnC.

A conversion factor of 90 is added to compensate for the different units of the noise and tone power. This conversion factor is part of the definition of S/CNN and its use assumes that the noise will be measured through a C-notch filter (dBrnC).

5.2.2 Measurement. The measurement of S/CNN is made in a manner similar to CNN but the signal is measured as well as the noise. The channel is terminated in its nominal impedance. A 1004-Hz holding tone is transmitted from the sending end from a source terminated in the nominal impedance. The level of the holding

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tone is usually −13 dBm0 or −16 dBm0. A level of −13 dBm0 more closely relates to data signal levels. However, because of existing automated test equipment and testing procedures, measurements will also be made at −16 dBm0. Two components are measured: signal and noise. When the 1004-Hz signal component is measured, the notch filter is not used. When the noise component of the measurement is performed, a filter is inserted that has the C-message contour and a notch in the 995- to 1025-Hz band, which attenuates (notches out) the holding tone. For measurements to be significant, the attenuation of the holding tone should be large enough so that its residual power is small compared to the remaining "noise" power. Harmonic distortion, quantising noise, and phase and amplitude jitter components contribute to the CNN measurement value and therefore to the S/CNN measurement value. In ANSI/IEEE 743-1984, the standard measurement methods and equipment characteristics, including the C-message weighting and the requirements on the holding tone and the notch, are defined.

5.2.3 General Information. Probably the most important steady-state parameter that affects voiceband data communication performance is S/CNN. Proper modem operation requires low noise relative to received power level. Since data communication systems use modulated carriers, the noise measurements need to be performed with power on the connection to activate equipment having signal-level-dependent noise sources. For 4-kHz channels, a 1004-Hz holding tone is used to activate signal-dependent equipment on the channel or connection.

The 1004-Hz holding tone usually is transmitted at −16 dBm0 (voice holding tone level) or at −13 dBm0 (data holding tone level). Specifications are given below for both levels. The specifications are equivalent. The specifications were converted using the following rules:

On digital-carrier systems, S/CNN remains roughly constant or, equivalently, C-notched noise increases dB-for-dB with the increase in holding-tone level for input signals in the approximate range between −30 dBm0 and 0 dBm0. On N-carrier systems, the syllabic compandor characteristics cause a 0.5-dB increase in C-notched noise, or an equivalent 0.5-dB increase in S/CNN, for each dB of increase in holding-tone level. Therefore, a 3-dB increase in the holding-tone level results in a 1.5-dB increase in S/CNN.

On cable and radio systems, the holding tone should have no effect on C-notched noise values, and therefore, S/CNN should improve dB-for-dB with increases in the holding-tone level.

Digital carrier and companded analog carrier systems show the lowest mean S/CNN because of the quantizers and compandors associated with these facilities. However, digital carrier shows a tight S/CNN distribution about its mean value, which is a recognized property of the digital carrier *D*-channel bank.

Digital switches using digital loss pads to provide loss introduce additional CNN, and thereby degrade the S/CNN ratio, compared with digital switches using analog loss pads. Separate tables are provided for the case when digital loss is used at a *digital end office*. The amount of degradation is roughly comparable to that of a pair of digital channel banks. The CNN values for this case were obtained by power summing the CNN requirement for offices that do not use digital loss with 39 dBrnC0 (for a −16-dBm0 holding tone) or 42 dBrnC0 (for a −13-dBm0 holding tone). The S/CNN requirement corresponds directly to the CNN requirement. The resulting requirement for the case of digital loss should be applied only in the POT-to-EO direction. The more stringent requirement for offices that do not use digital loss should be used in the EO-to-POT direction.

The S/CNN specifications in this section correspond exactly to the CNN specifications in 4.6. The relationship is given in 5.2.1.

5.2.4 Requirements. Tables 35 through 36 provide the requirements for the limits between the POT and the EO. Also see 5.1 for service affecting limits.

For exchange access made through a digital end office using digital loss, Tables 35 and 36 provide the requirements in the terminating (POT-to-EO) direction.

5.2.5 Guidelines.[16] Tables 37 and 38 provide guidelines for the limits between the POT and the AT.

16. These guidelines are not part of the American National Standard T1.506-1990.

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Table 33
Requirements for S/CNN in dB for −16-dBm0 Holding Tone
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	32	27	30	25
RL	33	31	31	29

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

Table 34
Requirements for S/CNN in dB for −13-dBm0 Holding Tone
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	32	28.5	30	26.5
RL	33	32.5	31	30.5

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

Table 35
Requirements for S/CNN in dB for −16-dBm0 Holding Tone
(for Digital EO Using Digital Loss)
(POT to EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	30	26	28	25
RL	31	30	30	28

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

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Table 36
Requirements for S/CNN in dB for −13-dBm0 Holding Tone
(for Digital EO Using Digital Loss)
(POT to EO)

Limits	Group 1 *Group 2 Direct*		Group 2 Tandem	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	30	28	29	26
RL	31	31	30	29

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

Table 37
Guidelines for S/CNN in dB for −16-dBm0 Holding Tone
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	34	29	32	27
RL	35	33	33	31

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

Table 38
Guidelines for S/CNN in dB for −13-dBm0 Holding Tone
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2*	Tier 1	Tier 2*
IAL	34	30.5	32	28.5
RL	35	34.5	33	32.5

* For Tier-2 channels derived from digital facilities with cable extensions, the limits are the same as the Tier-1 limits.

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5.3 Signal-to-Intermodulation-Distortion Ratios

5.3.1 Definitions. Signal-to-second-order-intermodulation-distortion ratio (R2) is the ratio in decibels of the composite power of four received test tones to the total power of the measured second-order intermodulation products.

Signal-to-third-order-intermodulation-distortion ratio (R3) is the ratio in decibels of the composite power of four received test tones to the total power of the measured third-order intermodulation products.

Intermodulation distortion is the power generated at extraneous frequencies (intermodulation products) when a multi-tone signal is applied.

5.3.2 Measurement. Nonlinearities in 4-kHz circuits are presently evaluated by an intermodulation-distortion measurement using the four-tone method. Four equal-level tones are transmitted at a composite signal level of −13 dBm0. The transmitted multi-tone signal consists of four equal-level test tones at 860 Hz±3 Hz (called A) and 1380 Hz±8 Hz (called B). A selective detector is used in the test equipment to measure the appropriate second-order intermodulation-distortion products at B−A and B+A and the third-order intermodulation-distortion products at 2B−A. The result is reported as the ratio of the received four-tone level to the second- or third-order distortion products. R2 and R3 are signal-to-distortion ratios. Therefore, higher values mean better performance.

Measured values of R2 and R3 may contain extraneous components caused by background or quantizing noise. The performance specifications given in 5.3.4 and 5.3.5 assume that these components have been removed and only the nonlinear distortion products are present. The procedure for removing these extraneous components is to perform an associated signal-to-noise-ratio check in which R2 and R3 are measured when only two of the four tones are transmitted. The level of the two tones is increased by 3 dB to maintain the same composite signal level so that compandors or codecs, or both are excited by the same power. The corrected R2 or R3 is obtained by power subtraction of the 2-tone R2 or R3 from the 4-tone R2 or R3.

Instruments intended to measure signal-to-intermodulation-distortion ratio shall be as described in ANSI/IEEE 743-1984.

5.3.3 General Information. The purpose of controlling R2 and R3 is to control channel nonlinearity. Modem error performance can be affected by channel nonlinearities, such as compression and clipping, which cause harmonic and intermodulation distortion in a voiceband signal.

Linearity of a channel or connection is the property in which the output level is directly (linearly) proportional to the applied input level, i.e., the output power is a constant multiple of the input power.

For a signal consisting of a single sinusoidal tone, nonlinearity generates harmonics, i.e., harmonic distortion of the signal. For a multi-tone signal, nonlinearity also generates spurious cross-products at other frequencies, i.e., intermodulation distortion.

5.3.4 Requirements. Tables 39 and 40 provide the requirements for the limits between the POT and the EO. Also see 5.1 for service affecting limits. The effect of digital loss pads needs further study (see Appendix B).

5.3.5 Guidelines.[17] Tables 41 and 42 provide guidelines for the limits between the POT and the AT.

5.4 Envelope Delay Distortion (Relative Envelope Delay)

5.4.1 Definition. Envelope delay (ED) is the derivative with respect to frequency of the phase-versus-frequency characteristic $\phi(f)$ of a transmission channel.

$$ED(f) = \frac{d\phi(f)}{df}$$

Envelope delay distortion (EDD), also called relative envelope delay (RED), is the envelope delay at frequency f relative to the value of the envelope delay at a reference frequency, usually 1704 Hz.

$$EDD(f) = RED(f) = \frac{d\phi(f)}{df} - \left[\frac{d\phi(f)}{df}\right]_{f = 1704\ \text{Hz}}$$

Requirements and guidelines for envelope delay distortion (relative envelope delay) are expressed in microseconds (μs).

17. These guidelines are not part of the American National Standard T1.506-1990.

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Table 39
Requirements for R2 in dB
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	33	RFS	31
RL	42	37	40	35

NOTE: RFS = Requires Further Study.

Table 40
Requirements for R3 in dB
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	31	RFS	30
RL	42	34	41	32

NOTE: RFS = Requires Further Study.

Table 41
Guidelines for R2 in dB
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	46	34	RFS	33
RL	52	38	RFS	37

NOTE: RFS = Requires Further Study.

Table 42
Guidelines for R3 in dB
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	50	32	RFS	31
RL	52	35	RFS	34

NOTE: RFS = Requires Further Study.

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5.4.2 Measurement. Envelope delay distortion (relative envelope delay) measurements are based on estimating the phase shift of the envelope of low-frequency modulation at 83-1/3 Hz of a carrier relative to modulation of a reference-frequency carrier or relative to the original modulation. The North American method uses a separate reference path except for the special case of loop-around measurements where the original modulation source itself serves as a reference. Standards for instruments intended to measure EDD (RED) are contained in ANSI/IEEE 743-1984. The resulting implementation provides the following estimate of the above formula:

$$EDD(f) = RED(f)$$

$$\cong \frac{\Delta\phi(f)}{\Delta f} - \left[\frac{\Delta\phi(f)}{\Delta f}\right]_{f = 1704\ \text{Hz}}$$

where $\Delta f = 166\ 2/3$ Hz.

5.4.3 General Information. Envelope delay distortion (EDD), or relative envelope delay (RED), is a measure of the linearity of the phase-versus-frequency characteristic of a channel. Phase is somewhat difficult to measure. Its derivative, $d\phi(f)/df$, called the envelope delay (ED), is more practical and is used instead as a measure of channel phase linearity.

The phase-versus-frequency characteristic of a channel is one of the characteristics that define the linear properties of a channel. Distortionless transmission requires a linear phase-versus-frequency characteristic or, equivalently, a flat ED-versus-frequency characteristic. A nonlinear phase-versus-frequency characteristic on a connection causes different frequency components of a signal to have different transit times, which in turn leads to distortion in the received signal. Phase linearity is controlled to limit waveform distortion of the speech or data signal. For controlling waveform distortion, the absolute value of phase slope or the absolute value of ED is not relevant. Only the departure of phase from linear or the ED from flat is relevant. Therefore, it would be appropriate to use the ED relative to the minimum ED as in CCITT documents, for example, CCITT Recommendation P.11. However, for consistency, simplicity, and ease of operation, it has been conventional in North America to define instead the envelope delay distortion (EDD) or relative envelope delay (RED) as the ED relative to the ED at 1704 Hz. A negative value can occur if the frequency of minimum ED differs from 1704 Hz.

Envelope delay distortion (relative envelope delay), like attenuation distortion, is specified at two frequencies (relative to the value at the reference frequency). Independent specifications are given at the two frequencies to reflect differing facility characteristics at low and high frequencies. It has been found by experience that control at one low and one high frequency is usually adequate to control the complete envelope delay distortion characteristic.[18]

5.4.4 Requirements. Tables 43 and 44 provide the requirements for the limits between the POT and the EO. Also see 5.1 for service affecting limits.

5.4.5 Guidelines.[19] Tables 45 and 46 provide guidelines for the limits between the POT and the AT.

5.5 Amplitude Jitter

5.5.1 Definition. Amplitude jitter (AJ) is any deviation or fluctuation of the peak value of a 1004-Hz tone from its nominal value, as measured by a standard amplitude-jitter measuring set having demodulated amplitude jitter bands of 20 to 300 Hz and 2 to 300 Hz.

Amplitude jitter is expressed in peak percent (%) amplitude modulation.

5.5.2 Measurement. Amplitude jitter is measured by an instrument that indicates the amount of jitter in the amplitude of a received holding tone (usually 1004 Hz) in a specified amplitude band. The amplitude jitter band is the frequency band of the demodulated amplitude jitter. Two demodulated amplitude jitter bands are usually measured: the 20- to 300-Hz band and either the 4- to 300-Hz or the 2- to 300-Hz band.

The instrument is calibrated in peak percent modulation. This value corresponds to the *quasi-maximum* value of the demodulated amplitude jitter during the measurement interval.

In ANSI/IEEE 743-1984, standards for instruments intended to measure amplitude jitter in

18. These requirements will not necessarily control EDD (RED) ripple, which may be service affecting.

19. These guidelines are not part of the American National Standard T1.506-1990.

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Table 43
Requirements for EDD (RED) in microseconds at 604 Hz
Relative to ED at 1704 Hz
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	720	1450	1250	2500
RL	600	1300	1100	2300

Table 44
Requirements for EDD (RED) in microseconds at 2804 Hz
Relative to ED at 1704 Hz
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	400	1100	750	1550
RL	350	800	650	1250

Table 45
Guidelines for EDD (RED) in microseconds at 604 Hz
Relative to ED at 1704 Hz
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	400	1200	720	1450
RL	350	1050	600	1300

Table 46
Guidelines for EDD (RED) in microseconds at 2804 Hz
Relative to ED at 1704 Hz
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	210	800	400	1100
RL	195	590	350	800

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the 20- to 300-Hz band and in the 4- to 300-Hz band are provided, but not in the 2- to 300-Hz band.

5.5.3 General Information. Amplitude modulation can affect the error performance of voiceband data modems. The 4- to 300-Hz or 2- to 300-Hz band is important for many modern modems, including those that use echo canceling techniques. Measurement in the 20- to 300-Hz band is usually sufficient for modems that do not use echo cancelers. Test sets with the 20- to 300-Hz and 4- to 300-Hz bands are widely available. However, the Exchange Access Study (EAS) data are in the 20- to 300-Hz and 2- to 300-Hz bands. [3]

The measurement of amplitude jitter indicates the total effect on the amplitude of the holding tone of incidental amplitude modulation and other sources including quantizing and message noise, impulse noise, gain hits, phase jitter, and additive tones such as single-frequency interference. Caution should be exercised to ensure that an amplitude jitter measurement is not driven by quantizing noise or impulse noise. Digital loss may also introduce amplitude jitter in an amount roughly equal to that of an encode/decode process. The effect of digital loss on this and other parameters is under study.

Normally performing facilities may generate some amplitude modulation. The quantities generated could adversely affect service if many of these facilities are present in tandem, or if any one or more of these facilities have large amplitude modulation, or both. This standard provides amplitude-jitter limits that reflect the capability of facilities as measured in the EAS [3]. The amplitude jitter performance of facilities should be within these limits. However, when measuring voiceband data parameters, it is not usually necessary to measure amplitude jitter to verify compliance with the amplitude-jitter limits. Amplitude jitter usually can be adequately controlled by measuring and controlling S/CNN and impulse noise.

5.5.4 Requirements. Tables 47 and 48 provide the requirements for the limits between the POT and the EO. Also see 5.1 for service affecting limits. The effect of digital loss pads needs further study (see Appendix B). Table 49 provides a placeholder for requirements that are under study but not available at this time.

5.5.5 Guidelines.[20] Tables 50 and 51 provide guidelines for the limits between the POT and the AT. Table 52 provides a placeholder for guidelines that are under study but not available at this time.

5.6 Phase Jitter

5.6.1 Definition. Phase jitter (PJ) is any deviation or fluctuation of the zero crossings of a 1004-Hz tone from their nominal position in time, as measured by a standard phase-jitter measuring set having demodulated phase jitter bands of 20-to-300 Hz and 2-to-300 Hz.

Phase jitter is expressed in degrees peak-to-peak ($^{\circ}$ p-p).

5.6.2 Measurement. Phase jitter is measured by an instrument that indicates the amount of jitter in the zero crossings of a received holding tone (usually 1004 Hz), in a specified phase jitter band, of the demodulated phase jitter. Two demodulated phase jitter bands are usually measured: the 20- to 300-Hz band and either the 4- to 300-Hz or the 2- to 300-Hz band.

The instrument is calibrated in degrees peak-to-peak ($^{\circ}$ p-p). This value corresponds to the *quasi-maximum* value of the demodulated phase jitter during the measurement interval.

In ANSI/IEEE 743-1984, standards for instruments intended to measure phase jitter in the 20- to 300-Hz band and the 4- to 300-Hz band are provided, but not in the 2- to 300-Hz band.

5.6.3 General Information. Phase jitter is an important impairment parameter that can affect the error performance of voiceband data receivers that use phase detection techniques. There are two significant bands of demodulated phase jitter frequencies. The 20- to 300-Hz band is important to all phase-detecting modems. The wider 4- to 300-Hz or 2- to 300-Hz band is important for many modern modems that use echo-canceling methods. Test equipment with the 20- to 300-Hz and 4- to 300-Hz bands are widely available. However, the EAS data are in the 20- to 300-Hz and 2- to 300-Hz bands.

The measurement of phase jitter indicates the total effect on the holding tone of incidental phase modulation and other sources including

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Table 47
Requirements for 20- to 300-Hz Amplitude Jitter in %
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	4.7	6.2	6.3	6.8
RL	3.4	3.6	4.5	4.4

Table 48
Requirements for 2- to 300-Hz Amplitude Jitter in %
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	5.8	8.9	8.0	13.0
RL	3.8	4.7	5.1	6.6

Table 49
Requirements* for 4- to 300-Hz Amplitude Jitter in %
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

* The actual limits for the 4- to 300-Hz band would be equal to or tighter than the 2- to 300-Hz limits. However, until requirement limits are derived for the 4- to 300-Hz range, the 2- to 300-Hz limits should be met for 4- to 300-Hz measurements.

quantizing and message noise, impulse noise, phase hits, additive tones such as single-frequency interference, and digital timing jitter. Caution should be exercised to ensure that a phase-jitter measurement is not driven by impulse noise. In addition, phase jitter can be created in the channel from amplitude-jitter and vice versa. Therefore, signal-to-noise ratio and amplitude-jitter measurements may need to be performed in conjunction with phase-jitter tests. Digital loss may also introduce phase jitter in an amount roughly equal to that of an encode/decode process. The effect of digital loss on this and other parameters is under study.

Normally performing Tier-2 facilities typically generate significant quantities of phase modulation. The quantities generated could adversely affect service if many of these facilities are present in a connection, or if any one or more of these facilities have sufficiently large phase-modulation values, or both. Normally performing Tier-1 facilities do not typically generate phase modulation in significant amounts. Nevertheless, this standard provides phase-jitter limits for Tier-1 facilities that reflect the capability of digital facilities as measured in the EAS. The phase-jitter performance of Tier-1 facilities should be within these limits. However, when measuring voiceband data parameters, it is not usually necessary to measure phase jitter on Tier-1 facilities to verify compliance with the phase-jitter limits specifications. Phase jitter on

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Table 50
Guidelines for 20- to 300-Hz Amplitude Jitter in %
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	3.3	4.6	4.7	6.2
RL	2.7	2.5	3.4	3.6

Table 51
Guidelines for 2- to 300-Hz Amplitude Jitter in %
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	8.9	6.4	5.8	8.9
RL	2.9	3.4	3.8	4.7

Table 52
Guidelines* for 4- to 300-Hz Amplitude Jitter in %
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

* The actual limits for the 4- to 300-Hz band would be equal to or tighter than the 2- to 300-Hz limits. However, until guideline limits are derived for the 4- to 300-Hz range, the 2- to 300-Hz limits should be met for 4- to 300-Hz measurements.

Tier-1 facilities usually can be adequately controlled by measuring and controlling S/CNN, impulse noise, and DS1 (or higher) digital timing jitter.

5.6.4 Requirements. Tables 53 and 54 provide the requirements for the limits between the POT and the EO. Also see 5.1 for service affecting limits. The effect of digital loss pads needs further study (see Appendix B). Table 55 provides a placeholder for requirements that are under study but not available at this time.

5.6.5 Guidelines.[21] Tables 56 and 57 provide guidelines for the limits between the POT and the AT. Table 58 provides a placeholder for guidelines that are under study but not available at this time.

21. These guidelines are not part of the American National Standard T1.506-1990.

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Table 53
Requirements for 20- to 300-Hz Phase Jitter in ° p-p
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	3.4	7.7	4.7	9.8
RL	2.5	6.1	3.3	8.1

Table 54
Requirements for 2- to 300-Hz Phase Jitter in ° p-p
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2*	Tier 1	Tier 2
IAL	4.4	14.4	6.1	18.5
RL	3.0	11.0	4.1	15.0

Table 55
Requirements* for 4- to 300-Hz Phase Jitter in ° p-p
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

* The actual limits for the 4- to 300-Hz band would be equal to or tighter than the 2- to 300-Hz limits. However, until requirement limits are derived for the 4- to 300-Hz range, the 2- to 300-Hz limits should be met for 4- to 300-Hz measurements.

Table 56
Guidelines for 20- to 300-Hz Phase Jitter in ° p-p
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	2.5	7.0	3.4	7.7
RL	1.5	5.8	2.5	6.1

Table 57
Guidelines for 2- to 300-Hz Phase Jitter in ° p-p
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	2.7	11.0	4.4	14.4
RL	1.8	10.0	3.0	11.0

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Table 58
Guidelines for 4- to 300-Hz Phase Jitter in ° p-p
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

• The actual limits for the 4- to 300-Hz band would be equal to or tighter than the 2- to 300-Hz limits. However, until guideline limits are derived for the 4- to 300-Hz range, the 2- to 300-Hz limits should be met for 4- to 300-Hz measurements.

Table 59
Requirements for Impulse Noise in Counts per Minute
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

Table 60
Guidelines for Impulse Noise in Counts per Minute
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

5.7 Impulse Noise

5.7.1 Definition. Impulse noise (IN) is any large excursion of the total noise waveform that is much higher than the normal peaks of message circuit noise.

5.7.2 Measurement. (not available at this time)

5.7.3 General Information. (not available at this time)

5.7.4 Requirements. Table 59 provides a placeholder for requirements that are under study but not available at this time.

5.7.5 Guidelines.[22] Table 60 provides a placeholder for guidelines that are under study but not available at this time.

5.8 Gain Hits

5.8.1 Definition. A gain hit (GH) is a sudden increase or decrease in the level of a received 1004-Hz holding tone that lasts at least 4 milliseconds.

5.8.2 Measurement. (not available at this time)

22. These guidelines are not part of the American National Standard T1.506-1990.

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Table 61
Requirements for Gain Hits
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

Table 62
Guidelines for Gain Hits
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

5.8.3 General Information. (not available at this time)

5.8.4 Requirements. Table 61 provides a placeholder for requirements that are under study but not available at this time.

5.8.5 Guidelines.[23] Table 62 provides a placeholder for guidelines that are under study but not available at this time.

5.9 Phase Hits

5.9.1 Definition. A phase hit (PH) is a sudden change in the phase of a received 1004-Hz holding tone that lasts at least 4 milliseconds.

5.9.2 Measurement. (not available at this time)

5.9.3 General Information. (not available at this time)

5.9.4 Requirements. Table 63 provides a placeholder for requirements that are under study but not available at this time.

5.9.5 Guidelines.[24] Table 64 provides a placeholder for guidelines that are under study but not available at this time.

5.10 Dropouts

5.10.1 Definition. A dropout (DO) is a decrease in the level of a received 1004-Hz holding tone, relative to the level at the start of the measuring interval, that exceeds 12 dB and lasts for at least 4 milliseconds.

5.10.2 Measurement. (not available at this time)

5.10.3 General Information. (not available at this time)

5.10.4 Requirements. Table 65 provides a placeholder for requirements that are under study but not available at this time.

5.10.5 Guidelines.[25] Table 66 provides a placeholder for guidelines that are under study

23. These guidelines are not part of the American National Standard T1.506-1990.

24. These guidelines are not part of the American National Standard T1.506-1990.

25. These guidelines are not part of the American National Standard T1.506-1990.

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Table 63
Requirements for Phase Hits
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

Table 64
Guidelines for Phase Hits
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

Table 65
Requirements for Dropouts
(between POT and EO)

Limits	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

Table 66
Guidelines for Dropouts
(between POT and AT)

Limits	Group 1		Group 2	
	Tier 1	Tier 2	Tier 1	Tier 2
IAL	RFS	RFS	RFS	RFS
RL	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

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Appendixes (These Appendixes are not part of the American National Standard T1.506-1990, but are included for information only.)

Appendix A

Guidelines for Parameter Statistical Distributions

A1. General

The previous sections provide requirements and guidelines on impairment parameter limits that apply to individual trunks. The IALs are extreme-value limits that nominally correspond to the 99th or 1st percentiles as appropriate of the statistical distributions of the impairment parameters. Except for loss deviation and return loss, the ALs and RLs nominally correspond to the 95th or 5th percentile as appropriate. Such limits are very useful for maintenance purposes.

To do network planning and service performance evaluations, it is necessary to have knowledge of the entire distributions and not just extreme values. This section contains the mean, standard deviation, and selected order statistics describing the impairment parameter statistical distributions for each access arrangement. This information on the parameter distributions was derived from the Exchange Access Study (EAS), which was one basis for establishing the limits, as discussed in Appendix B and in Bellcore Technical Reference TR-NPL-000037 [A1].[26] The statistical distribution characteristics were determined by trimming the data until 1% of the distribution exceeded the IAL, and then calculating the mean, standard deviation and other statistics.[27]

It is important to emphasize that the performance of an end-to-end connection or segment is best characterized by the parameter distributions and not the limits alone. On this basis, although the parameter distributions are not requirements of the standard, network providers and equipment vendors should take into account the parameter distributions as well as the individual trunk limits in their plans and designs.

The statistics in this Appendix reflect the characteristics of the statistical distribution that is expected for a large number of channels from a specific tier. These estimates are based on a finite national survey of BOC facilities made in 1989 [A1]. Generally these distributions are not described by a classical Gaussian distribution. Improvements in technologies in providing access facilities could change these distributions. Also, distributions of measured characteristics on a small number of channels, such as occurring between a POT and any one access tandem or end office, may differ from those shown.

The guidelines in this Appendix are organized on a parameter-by-parameter basis. The facility combinations for which the statistical distributions were derived for each impairment parameter for each arrangement are shown at the top of each table. These particular chosen combinations are in many cases worse than would be usually expected or "typical" but not necessarily the worst combination that could be used. These combinations are equal to or similar to the combinations on which the limits were based. The facility codes used in the tables are:

- T Tier-1 digital facility
- C Voice-frequency cable facility
- N Companded analog carrier facility
- R Noncompanded analog carrier facility

These codes denote a single facility. Thus, for example, T + T denotes two digital facilities in tandem, i.e., two pairs of digital channel banks.

The statistical distribution guidelines do not include the effect of digital loss pads. Digital switches using digital loss pads to provide the loss specifications of 4.1 introduce additional impairments compared with digital switches using analog loss pads. The parameters that are affected are C-message noise, C-notched noise and signal-to-C-notched-noise ratio, signal-to-

26. All numbers in brackets correspond to numbers listed in Section A2 "References".

27. For parameters with an upper and lower limit (i.e., loss deviation and three-tone slope), the data were trimmed such that the upper limit corresponded to the 99.5th percentile and the lower limit to the 0.5th percentile.

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intermodulation-distortion ratios R2 and R3, amplitude jitter, and phase jitter. The effect of digital loss on the statistical distributions of these parameters is under study and has not yet been included in this Appendix.

A2. References

The following document is referenced in this appendix:

[A1] Bell Communications Research. 1983 Exchange access study: Analog voice and voiceband data transmission performance characterization of the exchange access plant. Technical Reference TR-NPL-000037. Piscataway, New Jersey: Bell Communications Research, 1984.[28]

A3. Definitions

Means, standard deviations, medians, and 85th (or 15th) percentiles that are presented in this Appendix have their standard statistical meanings and they are computed from the estimated discrete probability density functions.

A4. Guidelines

A4.1 Loss and Level. Guidelines for the statistical distributions of loss and level can be obtained from the requirements and guidelines for nominal loss and level given in 4.1, together with the guidelines for statistical distributions for loss deviation given in A4.2.

28. Available from Bellcore Documentation Coordinator, 60 New England Avenue, Piscataway, NJ 08854-4196.

A4.2 Loss Deviation. Table A1 provides guidelines for the statistical distribution characteristics between the POT and the EO.

Table A1
Guidelines for Statistical Distribution of Loss Deviation in dB
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 T+N	Tier 1 T+T+T	Tier 2 T+N+N
Mean *	0.14	−0.23	0.23	−0.50
Standard Deviation	0.93	0.96	1.13	1.16
Median *	0.01	−0.31	0.07	−0.59
85th Percentile	0.67	0.48	0.89	0.42

* The nominal value for this statistic that should be used for planning purposes is 0.0 dB.

Table A2 provides guidelines for the statistical distribution characteristics between the POT and the AT.

Table A2
Guidelines for Statistical Distribution of Loss Deviation in dB
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 N	Tier 1 T+T	Tier 2 T+N
Mean *	0.05	−0.34	0.14	−0.23
Standard Deviation	0.68	0.72	0.93	0.96
Median *	−0.01	−0.46	0.01	−0.31
85th Percentile	0.41	0.30	0.67	0.48

* The nominal value for this statistic that should be used for planning purposes is 0.0 dB.

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A4.3 Three-Tone Slope. Tables A3 and A4 provide guidelines for the statistical distribution characteristics between the POT and the EO.

Table A3
Guidelines for Statistical Distribution of Three-Tone Slope in dB at 404 Hz (between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 C+N	Tier 1 T+T+T	Tier 2 C+N+N
Mean	1.10	1.61	1.78	2.64
Standard Deviation	0.41	0.77	0.49	1.05
Median	1.15	1.53	1.75	2.54
85th Percentile	1.49	2.32	2.18	3.67

Table A4
Guidelines for Statistical Distribution of Three-Tone Slope in dB at 2804 Hz (between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 C+N	Tier 1 T+T+T	Tier 2 C+N+N
Mean	0.49	0.60	0.73	0.96
Standard Deviation	0.58	0.85	0.70	1.12
Median	0.34	0.41	0.61	0.76
85th Percentile	1.06	1.41	1.43	2.07

Tables A5 and A6 provide guidelines for the statistical distribution characteristics between the POT and the AT.

Table A5
Guidelines for Statistical Distribution of Three-Tone Slope in dB at 404 Hz (between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 N	Tier 1 T+T	Tier 2 C+N
Mean	0.59	1.02	1.19	1.61
Standard Deviation	0.29	0.72	0.41	0.77
Median	0.56	0.91	1.15	1.53
85th Percentile	0.78	1.65	1.49	2.32

Table A6
Guidelines for Statistical Distribution of Three-Tone Slope in dB at 2804 Hz (between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 N	Tier 1 T+T	Tier 2 C+N
Mean	0.23	0.34	0.49	0.60
Standard Deviation	0.43	0.77	0.58	0.85
Median	0.05	0.16	0.34	0.41
85th Percentile	0.72	1.03	1.06	1.41

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APPENDIX

A4.4 Echo Return Loss and Singing Return Loss. Tables A7, A8, and A9 provide guidelines for the POT-to-EO statistical distribution characteristics.

Table A7
Guidelines for Statistical Distribution of ELERL and ELSRL in dB
POT to EO
(4-Wire POT)

	Group 1 Group 2 Direct Group 2 Tandem (4-Wire AT-to-EO Trunk)			
	Tier 1 T		Tier 2 N	
	ELERL	ELSRL	ELERL	ELSRL
Mean	28.3	24.0	25.3	21.1
Standard Deviation	4.7	4.0	5.8	5.8
Median	27.4	23.5	26.3	21.7
15th Percentile	23.6	19.3	19.0	14.5

Table A8
Guidelines for Statistical Distribution of ELERL and ELSRL in dB
POT to EO
(4-Wire POT)

	Group 2 Tandem (2-Wire AT-to-EO Trunk) Tier 1 & Tier 2	
	ELERL	ELSRL
Mean	21.2	15.1
Standard Deviation	5.2	5.1
Median	20.5	13.7
15th Percentile	16.5	9.9

Table A9
Guidelines for Statistical Distribution of ERL and SRL in dB
POT to EO
(2-Wire POT)

	Group 1 Direct Group 2 Direct Tier 1 & Tier 2 Cable	
	ERL	SRL
Mean	21.2	15.1
Standard Deviation	5.2	5.1
Median	20.5	13.7
15th Percentile	16.5	9.9

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A4.5 C-Message Noise. Table A10 provides guidelines for the statistical distribution characteristics between the POT and the EO.

Table A10
Guidelines for Statistical Distribution of C-Message Noise in dBrnC0*
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2† T+N	Tier 1 T+T+T	Tier 2† T+N+N
Mean	22.6	22.8	24.6	25.0
Standard Deviation	2.5	4.8	2.3	5.9
Median	22.0	22.0	23.9	23.9
85th Percentile	24.5	24.4	26.5	26.1

* The lower limit (threshold) of the test set used to collect the EAS measurements for which these statistics were obtained was 10 dBrnC. Noise readings below this threshold were assumed to be 9 dBrnC. When converting to dBrnC0, these values may be as high as 18 dBrnC0 [A1]. Measurements made using test sets with different thresholds may give different statistics.

† These statistics were obtained for data for which facility length < 50 miles. Longer lengths, particularly if analog radio facilities were used, may be expected to have higher noise.

Table A11 provides guidelines for the statistical distribution characteristics between the POT and the AT.

Table A11
Guidelines for Statistical Distribution of C-Message Noise in dBrnC0*
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2† N	Tier 1 T+T	Tier 2† T+N
Mean	19.2	19.1	22.6	22.8
Standard Deviation	2.3	5.4	2.5	4.8
Median	18.4	18.2	22.0	22.0
85th Percentile	20.7	21.1	24.5	24.4

* The lower limit (threshold) of the test set used to collect the EAS measurements for which these statistics were obtained was 10 dBrnC. Noise readings below this threshold were assumed to be 9 dBrnC. When converting to dBrnC0, these values may be as high as 18 dBrnC0 [A1]. Measurements made using test sets with different thresholds may give different statistics.

† These statistics were obtained for data for which facility length < 50 miles. Longer lengths, particularly if analog radio facilities were used, may be expected to have higher noise.

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A4.6 C-Notched Noise. Table A12 provides guidelines for the statistical distribution characteristics between the POT and the EO.

Table A12
Guidelines for Statistical Distribution of C-Notched Noise in dBrnC0 for −13-dBm0 Holding Tone*
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 T+N	Tier 1 T+T+T	Tier 2 T+N+N
Mean	41.4	41.8	43.2	43.9
Standard Deviation	1.2	2.0	1.0	1.9
Median	41.4	41.5	43.1	43.8
85th Percentile	42.4	43.8	44.1	45.7

* The lower limit (threshold) of the test set used to collect the EAS measurements for which these statistics were obtained was 10 dBrnC. Measurements made using test sets with different thresholds may give different statistics.

Table A13 provides guidelines for the statistical distribution characteristics between the POT and the AT.

Table A13
Guidelines for Statistical Distribution of C-Notched Noise in dBrnC0 for −13-dBm0 Holding Tone*
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 N	Tier 1 T+T	Tier 2 T+N
Mean	38.2	38.5	41.4	41.8
Standard Deviation	1.8	3.5	1.2	2.0
Median	38.0	38.2	41.4	41.5
85th Percentile	39.2	41.8	42.4	43.8

* The lower limit (threshold) of the test set used to collect the EAS measurements for which these statistics were obtained was 10 dBrnC. Measurements made using test sets with different thresholds may give different statistics.

A4.7 Signal-to-C-Notched-Noise Ratio. Table A14 provides guidelines for the statistical distribution characteristics between the POT and the EO.

Table A14
Guidelines for Statistical Distribution of S/CNN in dB for −13-dBm0 Holding Tone
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 T+N	Tier 1 T+T+T	Tier 2 T+N+N
Mean	35.6	35.0	33.9	32.7
Standard Deviation	1.2	2.7	1.1	2.8
Median	35.3	34.8	33.5	32.7
15th Percentile	34.2	32.9	32.6	30.3

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Table A15 provides guidelines for the statistical distribution characteristics between the POT and the AT.

Table A15
Guidelines for Statistical Distribution of S/CNN in dB for −13-dBm0 Holding Tone
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 N	Tier 1 T+T	Tier 2 T+N
Mean	38.9	38.1	35.6	35.0
Standard Deviation	1.4	4.0	1.2	2.7
Median	38.5	37.5	35.3	34.8
15th Percentile	37.4	34.5	34.2	32.9

A4.8 Signal-to-Intermodulation-Distortion Ratios. Tables A16 and A17 provide guidelines for the statistical distribution characteristics between the POT and the EO.

Table A16
Guidelines for Statistical Distribution of R2 in dB*
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T1+T2	Tier 2 T+N	Tier 1 T1+T1+T	Tier 2 T+N+N
Mean	55.0	44.0	53.0	40.0
Standard Deviation	5.9	4.4	4.4	3.5
Median	56.0	44.0	53.0	40.0
15th Percentile	49.0	39.0	50.0	36.0

* The designation T denotes all T-carrier data. The designations T1 and T2 are used to differentiate the direction in which the EAS measurements were made. [A1]. T1 measurements were taken at the toll office, tone sent from the End Office location. T2 measurements were taken at the End Office, tone sent from the Toll Office location. The statistics are computed using measurements at analog offices only.

Table A17
Guidelines for Statistical Distribution of R3 in dB*
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T1+T2	Tier 2 T+N	Tier 1 T1+T1+T	Tier 2 T+N+N
Mean	53.0	42.0	51.0	37.0
Standard Deviation	5.6	6.0	3.7	4.4
Median	54.0	41.0	51.0	35.0
15th Percentile	49.0	35.0	48.0	32.0

* The designation T denotes all T-carrier data. The designations T1 and T2 are used to differentiate the direction in which the EAS measurements were made. [A1]. T1 measurements were taken at the toll office, tone sent from the End Office location. T2 measurements were taken at the End Office, tone sent from the Toll Office location. The statistics are computed using measurements at analog offices only.

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Tables A18 and A19 provide guidelines for the statistical distribution characteristics between the POT and the AT.

Table A18
Guidelines for Statistical Distribution of R2 in dB*
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T1/T2	Tier 2 N	Tier 1 T1+T2	Tier 2 T+N
Mean	59.0/59.0	44.0	55.0	44.0
Standard Deviation	3.9/7.2	4.3	5.9	4.4
Median	60/62	44.0	56.0	44.0
15th Percentile	55.0/51.0	39.0	49.0	39.0

* The designation T denotes all T-carrier data. The designations T1 and T2 are used to differentiate the direction in which the EAS measurements were made. [A1]. T1 measurements were taken at the toll office, tone sent from the End Office location. T2 measurements were taken at the End Office, tone sent from the Toll Office location. The statistics are computed using measurements at analog offices only.

Table A19
Guidelines for Statistical Distribution of R3 in dB*
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T1/T2	Tier 2 N	Tier 1 T1+T2	Tier 2 T+N
Mean	59.0/58.0	43.0	53.0	42.0
Standard Deviation	3.4/7.2	6.8	5.8	6.0
Median	60.0/60.0	42.0	54.0	41.0
15th Percentile	55.0/53.0	35.0	49.0	35.0

* The designation T denotes all T-carrier data. The designations T1 and T2 are used to differentiate the direction in which the EAS measurements were made. [A1]. T1 measurements were taken at the toll office, tone sent from the End Office location. T2 measurements were taken at the End Office, tone sent from the Toll Office location. The statistics are computed using measurements at analog offices only.

A4.9 Envelope Delay Distortion (Relative Envelope Delay). Tables A20 and A21 provide guidelines for the statistical distribution characteristics between the POT and the EO.

Table A20
Guidelines for Statistical Distribution of EDD (RED) in microseconds at 604 Hz
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 C+N	Tier 1 T+T+T	Tier 2 C+N+N
Mean	435	787	653	1334
Standard Deviation	89	382	121	494
Median	426	712	644	1289
85th Percentile	539	1063	817	1801

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Table A21
Guidelines for Statistical Distribution of EDD (RED) in microseconds at 2804 Hz (between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 C+N	Tier 1 T+T+T	Tier 2 C+N+R
Mean	312	347	466	664
Standard Deviation	74	233	90	274
Median	310	328	461	637
85th Percentile	333	517	494	918

Table A22 and A23 provide guidelines for the statistical distribution characteristics between the POT and the AT.

Table A22
Guidelines for Statistical Distribution of EDD (RED) in microseconds at 604 Hz (between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 N	Tier 1 T+T	Tier 2 C+N
Mean	218	573	435	767
Standard Deviation	70	333	99	382
Median	194	462	426	712
85th Percentile	314	829	539	1003

Table A23
Guidelines for Statistical Distribution of EDD (RED) in microseconds at 2804 Hz (between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 N	Tier 1 T+T	Tier 2 C+N
Mean	156	195	312	347
Standard Deviation	53	149	74	233
Median	157	191	310	328
85th Percentile	169	279	333	517

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A4.10 Amplitude Jitter. Tables A24 and A25 provide guidelines for the statistical distribution characteristics between the POT and the EO.

Table A24
Guidelines for Statistical Distribution of 20- to 300-Hz Amplitude Jitter in %
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 T+N	Tier 1 T+T+T	Tier 2 T+N+N
Mean	2.9	2.4	3.8	2.9
Standard Deviation	0.6	1.0	0.6	1.3
Median	2.8	2.1	3.7	2.6
85th Percentile	3.4	3.0	4.4	3.7

Table A25
Guidelines for Statistical Distribution of 2- to 300-Hz Amplitude Jitter in %
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 T+N	Tier 1 T+T+T	Tier 2 T+N+N
Mean	3.1	2.8	4.2	3.7
Standard Deviation	0.6	1.4	0.7	1.8
Median	3.0	2.5	4.1	3.3
85th Percentile	3.5	3.4	4.6	4.7

Table A26 provides a placeholder for specifications that are under study, but not available at this time.

Table A26
Guidelines for Statistical Distribution of 4- to 300-Hz Amplitude Jitter in %
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 T+N	Tier 1 T+T+T	Tier 2 T+N+N
Mean	RFS	RFS	RFS	RFS
Standard Deviation	RFS	RFS	RFS	RFS
Median	RFS	RFS	RFS	RFS
85th Percentile	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

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Tables A27 and A28 provide guidelines for the statistical distribution characteristics between the POT and the AT.

Table A27
Guidelines for Statistical Distribution of 20- to 800-Hz Amplitude Jitter in %
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 N	Tier 1 T+T	Tier 2 T+N
Mean	1.8	1.1	2.9	2.4
Standard Deviation	0.5	1.1	0.6	1.0
Median	1.6	0.7	2.8	2.1
85th Percentile	2.2	1.5	3.4	3.0

Table A28
Guidelines for Statistical Distribution for 2- to 300-Hz Amplitude Jitter in %
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 N	Tier 1 T+T	Tier 2 T+N
Mean	1.8	1.4	3.1	2.8
Standard Deviation	0.5	1.4	0.8	1.4
Median	1.7	1.0	3.0	2.5
85th Percentile	2.1	2.1	3.5	3.4

Table A29 provides a placeholder for specifications that are under study, but not available at this time.

Table A29
Guidelines for Statistical Distribution of 4- to 300-Hz Amplitude Jitter in %
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 N	Tier 1 T+T	Tier 2 T+N
Mean	RFS	RFS	RFS	RFS
Standard Deviation	RFS	RFS	RFS	RFS
Median	RFS	RFS	RFS	RFS
85th Percentile	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

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A4.11 Phase Jitter. Tables A30 and A31 provide guidelines for the statistical distribution characteristics between the POT and the EO.

Table A30
Guidelines for Statistical Distribution of 20- to 300-Hz Phase Jitter in ° p-p
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 T+R	Tier 1 T+T+T	Tier 2 T+R+R
Mean	2.1	3.2	2.7	4.8
Standard Deviation	0.7	1.5	0.9	1.7
Median	2.0	2.9	2.6	4.3
85th Percentile	2.2	4.3	2.9	7.0

Table A31
Guidelines for Statistical Distribution of 2- to 300-Hz Phase Jitter in ° p-p
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 T+R	Tier 1 T+T+T	Tier 2 T+R+R
Mean	2.5	5.2	3.4	8.2
Standard Deviation	0.6	2.3	0.7	2.9
Median	2.4	4.7	3.3	7.8
85th Percentile	2.7	7.4	3.6	11.4

Table A32 provides a placeholder for specifications that are under study but not available at this time.

Table A32
Guidelines for Statistical Distribution of 4- to 300-Hz Phase Jitter in ° p-p
(between POT and EO)

	Group 1 Group 2 Direct		Group 2 Tandem	
	Tier 1 T+T	Tier 2 T+R	Tier 1 T+T+T	Tier 2 T+R+R
Mean	RFS	RFS	RFS	RFS
Standard Deviation	RFS	RFS	RFS	RFS
Median	RFS	RFS	RFS	RFS
85th Percentile	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

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Tables A33 and A34 provide guidelines for the statistical distribution characteristics between the POT and the AT.

Table A33
Guidelines for Statistical Distribution of 20- to 300-Hz Phase Jitter in ° p-p
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 R	Tier 1 T+T	Tier 2 T+R
Mean	1.3	2.6	2.1	3.2
Standard Deviation	0.6	1.5	0.7	1.5
Median	1.2	2.2	2.0	2.9
85th Percentile	1.3	3.7	2.2	4.3

Table A34
Guidelines for Statistical Distribution of 2- to 300-Hz Phase Jitter in ° p-p
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 R	Tier 1 T+T	Tier 2 T+R
Mean	1.5	4.4	2.5	5.2
Standard Deviation	0.5	2.4	0.6	2.3
Median	1.4	3.8	2.4	4.7
85th Percentile	1.6	6.6	2.7	7.4

Table A35 provides a placeholder for specifications that are under study but not available at this time.

Table A35
Guidelines for Statistical Distribution of 4- to 300-Hz Phase Jitter in ° p-p
(between POT and AT)

	Group 1		Group 2	
	Tier 1 T	Tier 2 R	Tier 1 T+T	Tier 2 T+R
Mean	RFS	RFS	RFS	RFS
Standard Deviation	RFS	RFS	RFS	RFS
Median	RFS	RFS	RFS	RFS
85th Percentile	RFS	RFS	RFS	RFS

NOTE: RFS = Requires Further Study.

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Appendix B

Methodology Used in Developing Limit Values

B1. General

This Appendix provides a tutorial guide to the methodologies and rationale used in developing the limits specified in the standard. The limits were derived primarily on the basis of the capabilities of the existing network, although several other considerations, summarized in the Foreword, were used. One of these was the effect of the limit on end-user perception of voice access service. The first part of the Appendix reports on this effect. The second part summarizes the approach used to derive the IALs, ALs, and RLs for voice and voiceband data, reflecting the capabilities of the existing networks; the facilities, network architecture and switches. The third part describes the development of service affecting limits to reflect sensitivity of high-speed modems to voiceband data parameters. The definitions of IAL, AL, RL, and SAL are given in Section 3 of the standard.

B2. References

[B1] IEEE 823-1989, Standard Methodologies for Specifying Voice Grade Channel Transmission Parameters and Evaluating Connection Transmission Performance for Speech Telephony.[29]

[B2] Cavanaugh, J. R.; Hatch, R. W.; Sullivan, J. L., Transmission rating model for use in planning of telephone networks. Conference Record of IEEE Global Communication Conference 1983, New York: IEEE, 1983.

[B3] Cavanaugh, J. R.; Hatch, R. W.; Sullivan, J. L., Models for the effects of loss, noise and talker echo on telephone connections. The Bell System Tech. J., Vol. 55, pp. 1319-1371; 1976 November.

[B4] Bellcore, 1983 exchange access study: Analog voice and voiceband data transmission performance characterization of the exchange access plant, Tech. Ref. TR-NPL-000037. Piscataway, New Jersey: Bellcore, 1984.[30]

[B5] Bellcore, Estimated transmission performance of switched access service feature group-D. Tech. Ref. TR-NPL-000002. Piscataway, New Jersey: Bellcore, 1984.[30]

[B6] Carey, M. B.; Chen, H-T; Descloux, A.; Ingle, J. F.; Park, K. I., 1982/83 End office connection study: Analog voice and voiceband data transmission performance characterization of the public switched network. AT&T Bell Lab. Tech. J., Vol. 63, No. 9, pp. 2059-2119; 1984 November.

[B7] Manhire, L. M., Physical and transmission characteristics of customer loop plant," Bell System Tech. J., Vol. 57, No.1, pp. 35-59; 1978 January.

[B8] IEEE 661-1979, IEEE Standard Method for Determining Objective Loudness Ratings of Telephone Connections.[28]

[B9] CCITT Series V Recommendations, Data Communication over the Telephone Network Interfaces and Voice-Band Modems, Vol. VIII, Fascicle VIII.1, Melbourne, 1988.

B3. End-User Perception of Voice Performance

An important factor in setting the parameter limits is end-user perception. Certainly it is of little consequence if changes in parameter values are not perceived by the end user. However, if the performance deviates beyond the perceived value, corrective action should be taken.

In the postdivestiture environment, there may be three or more separate entities providing portions of the end-to-end service on a single connection. Overall performance is a composite of the performance of each section. Poor performance of any one portion can degrade the

28. Available from Institute of Electrical and Electronic Engineers, 345 East 47th Street, New York, NY 10017.

30. Available from Bellcore Documentation Coordinator, 60 New England Avenue, Piscataway, NJ 08854-4196.

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overall performance. It is possible to assess the effect of poor performance for each portion, independent of other portions since it is rare that more than one portion would be at its limiting value. Ideally, the value of a limit should be specified where end users just begin to perceive a change in quality. This section reports on the limiting values obtained by this approach.

End-user perception is based on many factors; some of which are not related to the performance of the connection. The approach used in evaluating the exchange access limits makes possible an understanding of the effect of the exchange access portion while minimizing the effects of other factors. The approach uses an analytical evaluation of a reference model of typical connections. The end-to-end performance is determined analytically from assumptions on the performance of each part of the reference connection. In each evaluation, the performance of the exchange access is assumed to have one parameter at its limit value. This is analytically combined with "reference" values depicting the performance of other portions of the connection. The end-to-end performance is computed via a method that conforms to the methods of computation described in the IEEE draft standard [B1][31] using a Monte Carlo technique. The change in end-to-end performance due to exchange access limits is determined by changing the access portion and holding the values for the other sections at their "reference" or fixed values. Any changes in the end-to-end parameter estimates are therefore due to the change in limit value in the exchange access portion.

End-user opinion models are used to obtain end-user perception of changes in the access limits. They are based on subjective tests [B2,B3] conducted in the field or in the laboratory in which various controlled combinations of transmission parameter types and magnitude are presented to subjects who are asked to judge the quality. Judgment is made on a four-category scale: excellent, good, fair, and poor. By mathematical modeling, smooth results are obtained that predict end-user opinion of three voice parameters: loss, noise, and echo of the end-to-end connection. One criterion used in end-user opinion estimates is percent good or better, which represents the estimated percent of end users rating the quality of the connection, good or better. The Long Toll model and the 1955 Murray Hill model were used in analysing end-user perception effects of end-to-end service. The Long Toll model is based on subjective tests in which opinions were obtained from over 10,000 Bell System end users who had just completed calls over long toll connections. The Murray Hill model is based on opinions obtained about actual intrabuilding calls between Bell Laboratories employees.

End-user subjective judgment of performance is characterized by a high degree of variability. Small variations in end-user perception, as measured by end-user opinion models, are generally considered to be insignificant. Historically, a 2% drop using the Long Toll model or a 4% drop using the Murray Hill model have been used as the criterion for calculating the values at which end users perceive quality change. For simplicity, a 2% drop in end-user opinion Percent Good or Better (% GoB) is used as the criterion in this appendix for calculating the value at which end users perceive a change in quality for both opinion models.

B3.1 Description of the Reference Model. Because of the probabilistic nature of the telephone network, it is rare for more than one voice parameter to exceed their limit values at the same time. Therefore, the evaluation was modeled by assuming one of the exchange access voice parameter values to be at the limit and varying the limit value for each simulation evaluation. The characteristics of the other portions of the connection were described in terms of normal distributions with appropriate values for the mean and standard deviation. The assumed characteristics of the portions of the connection for the examples cited in this section are provided in Table B1. The table information about the exchange access characteristics were derived from the Exchange Access Study (EAS) [B4] and Feature Group D (FGD) estimated performance [B5]. Interexchange Carrier (IC) link characteristics were derived from the End Office Connection Study (EOCS) [B6]. Loop characteristics were derived from loop surveys [B7].

To evaluate possible interactive effects with the IC portion, the performance effects of three different IC network characteristics were investigated. The assumed performance of the IC portion covered the performance range of typical

31. Numbers in brackets refer to corresponding numbers in Section B2, "References".

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Table B1
Transmission Parameters of Modeled Examples

Network Link	Mean	Std. Dev.
Loop		
TOLR*	−43.8 dB	0.0 dB
ROLR*	47.7 dB	0.0 dB
ERL	11.0 dB	3.0 dB
Exchange Access		
Loss	3.0 dB	1.0 dB
Noise	20.0 dBrnC0	3.9 dB
Delay (round-trip)	1.5 ms	0.0 ms
IC Network (POT-POT)		
Analog (Average Distance)		
Loss	1.0 dB	1.0 dB
Noise	25.0 dBrnC0	5.0 dB
Delay (round-trip)	14.0 ms	5.0 ms
Analog (Distance >720 mi)		
Loss	1.6 dB	1.2 dB
Noise	38.7 dBrnC0	3.9 dB
Delay (round-trip)	30.2 ms	8.9 ms
Digital (Distance about 700 mi)		
Loss	0.0 dB	1.0 dB
Noise	19.4 dBrnC0	5.0 dB
Delay (round-trip)	15.3 ms	0.0 dB

* The Transmitting Objective Loudness Rating (TOLR) and the Receiving Objective Loudness Rating (ROLR) are defined in IEEE 661-1979 [B8] and Appendix C of IEEE P.823 [B1].

facilities from pure digital systems to long analog carrier systems. The IC links evaluated in the "reference connection" were:

(1) The average predivestiture Class 4 to Class 4 intertoll connection, representative of the mileage band from 180 to 720 miles

(2) A long predivestiture Class 4 to Class 4 intertoll connection of distance greater than 720 airline miles

(3) A digital inter-LATA link that represents a pair of channel banks with an associated delay corresponding to about 700 miles

B3.2 End-User Perception Threshold Values. The following subsections indicate the values at which end users might perceive a change in quality for the parameters of loss deviation, noise, and echo return loss. Illustrative examples are based on results using the Long Toll model and the long predivestiture intertoll reference connection. The values at which end users might perceive a change in quality depend on the end-user opinion model used, and the initial service as reflected in the reference connection model. Thus, a range in end-user perception thresholds was determined for each parameter. Certainly it is highly desirable that the limits be within these bounds. Limits allowing worse performance are not desirable. Likewise, it appears unproductive to have limits more stringent than the values at which an end user perceives a change in performance. The limits within the standard are generally within these thresholds.

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The "perception threshold level" is based on changes in *quality ratings* that are not equivalent to an end-user discrimination level. The perception threshold indicates that the models do not predict *significant* impact on the end-user quality rating on connections for parameter values within the threshold, based on end-user expectations at the *time* the models were developed. However, end-user expectation greatly influences the quality rating. Since end-user expectation can change in *time*, the perception thresholds may also change.

B3.2.1 Effect of Exchange Access Loss Deviation Limit. An example of the effect of exchange access loss deviation limits on end-user perception is shown in Figure B1. The actual value of end-user perception also depends on the noise. The shaded area in the figure depicts the range in perception when the noise is varied over the indicated range. For each noise value the end-user opinion is lower at low loss values, partly because the low loss does not compensate for the echo and partly because of the higher received volume associated with low loss. As the loss increases, the loss-noise-echo grade of service improves until the echo opinion value exceeds the loss-noise grade of service. As the loss increases further, the loss-noise-echo grade of service follows the loss-noise grade-of-service end-user perception curve. In Figure B1, the end-user rating peaks at an optimum loss value. The range in perception threshold as indicated in the figure was calculated at the 2-percentage-point drop from the design value rating (% GoB) for each case.

Different perception threshold values were determined for each of the end-user opinion models, and reference connection models. The end-user perception values for exchange access loss deviation have an approximate range of 1.5 to 2.5 dB.

B3.2.2 Effect of Exchange Access Noise Limit. End-user perception as a function of exchange access C-message noise limit values is shown in Figure B2 for the Long Toll model. The shaded area depicts the range in perception for various loss values. In each case, end-user perception of the connection remains almost constant as noise increases for low values of noise up to a point at which it becomes perceptible, beyond which perception ratings decrease monotonically as the noise increases. The end-user perception threshold range was determined from the value at which a 2-percentage-point drop in % GoB occurred. The same phenomenon occurred for all reference connections and end-user opinion models. The value ranged between approximately 28 dBrnC0 and 36 dBrnC0.

B3.2.3 Effect of Exchange Access Echo Return Loss Limit. Deviations in echo return loss (ERL) of the exchange access portion of the connection also causes a change in end-user perception as shown in Figure B3. The shaded area corresponds to a family of curves for different values of round-trip delay. The curves exhibited similar characteristics. For each case, there is a flat range for large ERL values at which end-user opinion is not affected. Below some value, opinion decreases. Threshold values of equal level echo return loss are found to vary, depending on the model, from 17 dB to 22.5 dB for delays from 20 ms to 40 ms.

B3.2.4 Effect of the Interexchange Carrier Performance. Figures B4 and B5 show the effects on end-user perception of changes in the exchange access link loss deviation and noise for three IC choices of network facilities having differing performance. The results were calculated using the Long Toll model. The assumed networks for the IC portion are given in B3.1.

The purpose of this examination was to determine whether the type of IC network has an effect on the choice of limits in the exchange access link. Figures B4 and B5 show a change of about 15 percentage points in end-user perception depending on the length and type of IC link deployed. However, for a given assumed IC network, there is little effect on the value at which the end user perceives a change in service due to changes in exchange access performance. This leads to the conclusion that, from the end-user perception standpoint, the exchange access threshold values are only slightly coupled to the interexchange carrier's choice of network performance.

B4. Capabilities of the Exchange Access Network

B4.1 Capabilities of Exchange Facilities. The major factor in developing the limits was the actual performance of a sample distribution of current access facilities and arrangements. This approach was taken to avoid the need for fundamental design changes. At the time of the development of this standard, measured data for the postdivestiture exchange access network

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Table B2
Assumed Number of Facilities in Each Arrangement

Group	Routing	No. of Facilities
1	between POT and EO, direct or via AT	2
2	between POT and EO, direct	2
2	between POT and EO, via AT	3
1	between POT and AT	1
2	between POT and AT	2

were not available. Considerable changes in the architecture of the access network had occurred. Consensus of the committee was that the best available data were the facility information obtained in the EAS. This field study, conducted in 1983 by Bell Communications Research, characterised the analog voice and voiceband data transmission performance of facilities of the then access network [B4]. This study was supplemented by other information where appropriate.

Performance estimates of two basic arrangements of the postdivestiture access network were obtained by using mathematical models and the measured information. Both arrangements included direct and tandem-switched connections between the POT and the EO. The Group-1 arrangement was derived based on the service architecture of the offering identified as Feature Group D. For Group 1, the performance of the connection between the POT and the AT generally was considered to involve one facility and was estimated directly from the EAS. The performance of the direct and tandem switched connections between the POT and the EO was estimated from that of two tandem facilities. The Group-2 arrangement was derived on the basis of the arrangements of the service offering identified as Feature Group C. In this arrangement, the performance of the direct and tandem connections are not necessarily equivalent. The Group-2 Direct arrangement was estimated to be identical to the Group-1 arrangement between the POT and the EO. The Group-2 Tandem arrangement was estimated to be that of the Group-2 Direct arrangement in tandem with the performance of an additional link between the POT and the AT. This additional link reflected generally the performance of a predivestiture intertoll trunk. The values contained in this standard are derived on the basis of reference connections using the number of facilities in Table B2. Actual service connections covered by this standard may contain a different number of facilities. The performance of each facility in these arrangements was based on measured information from the EAS. Performance of Tier 1 was based on information on newer design digital carrier systems. Performance of Tier 2 was generally based on the lowest performing analog and digital facility combination. The methods of estimating the performance of tandem connections conform to the methods for combining parameters as described in the IEEE draft standard [B1], where applicable. Estimates for other parameters were obtained by methods similar to those used in exchange access performance modeling studies [B5].

The following summing laws were used for each parameter.

(1) For loss, loss deviation, attenuation distortion, and envelope delay, the summing law used was linear algebraic addition, that is, ordinary arithmetic.

(2) For C-message noise, C-notched noise and second-order intermodulation distortion the summing law used was power summing, that is,

$$A\text{"+"}B = 10 \log_{10} (10^{A/10} + 10^{B/10}).$$

(3) For echo return loss, singing return loss, signal-to-C-notched-noise ratio and signal-to-second-order-intermodulation-distortion ratio R2, the summing law used was

$$A\text{"+"}B = -10 \log_{10} (10^{-A/10} + 10^{-B/10}).$$

(4) For third-order intermodulation distortion, the summing law used was power summing modulo 16 (modified voltage addition), that is,

$$A\text{"+"}B = 16 \log_{10} (10^{A/16} + 10^{B/16}).$$

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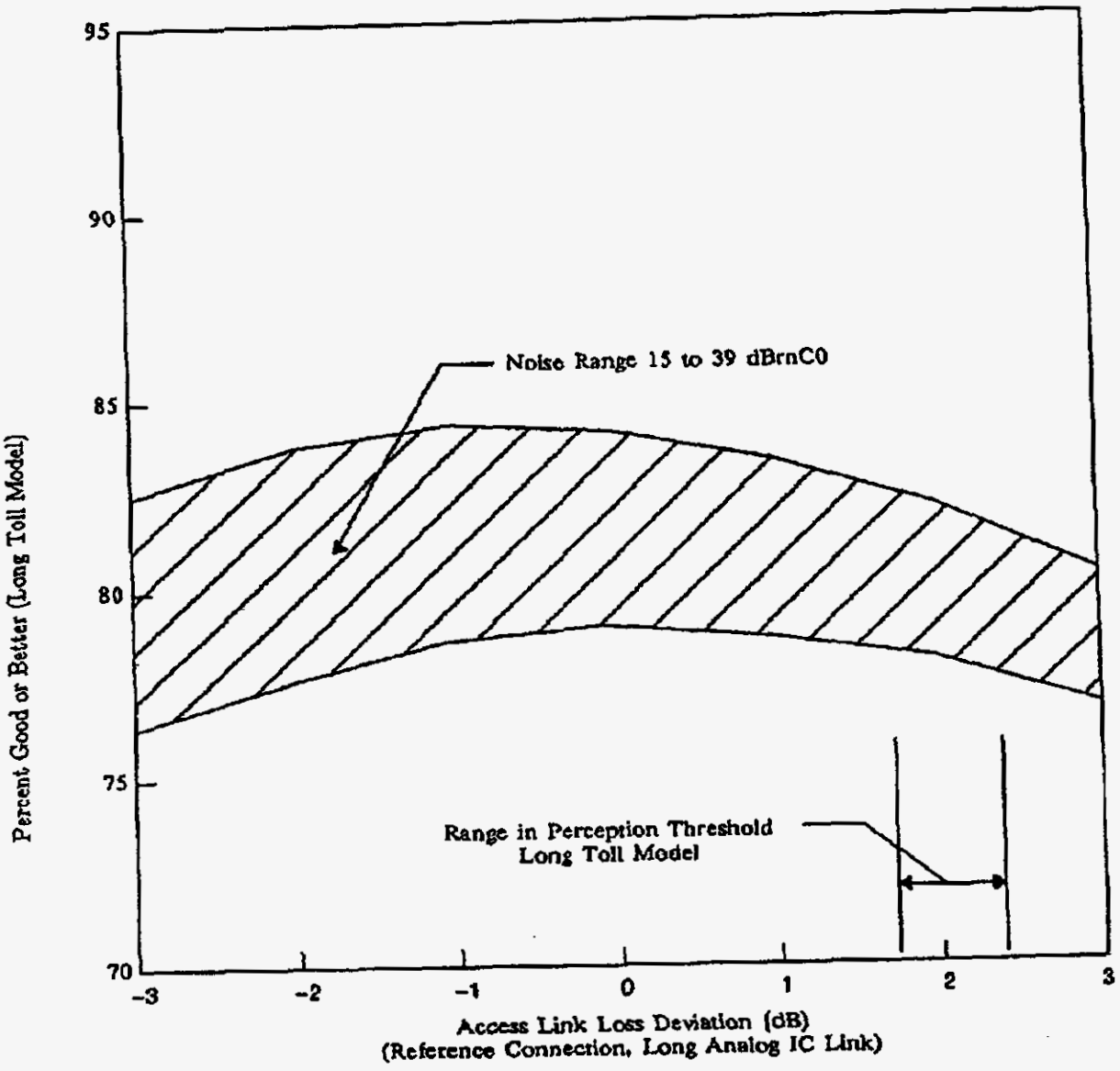


Figure B1. End-User Perception of Loss Deviation at Far-End Access Link

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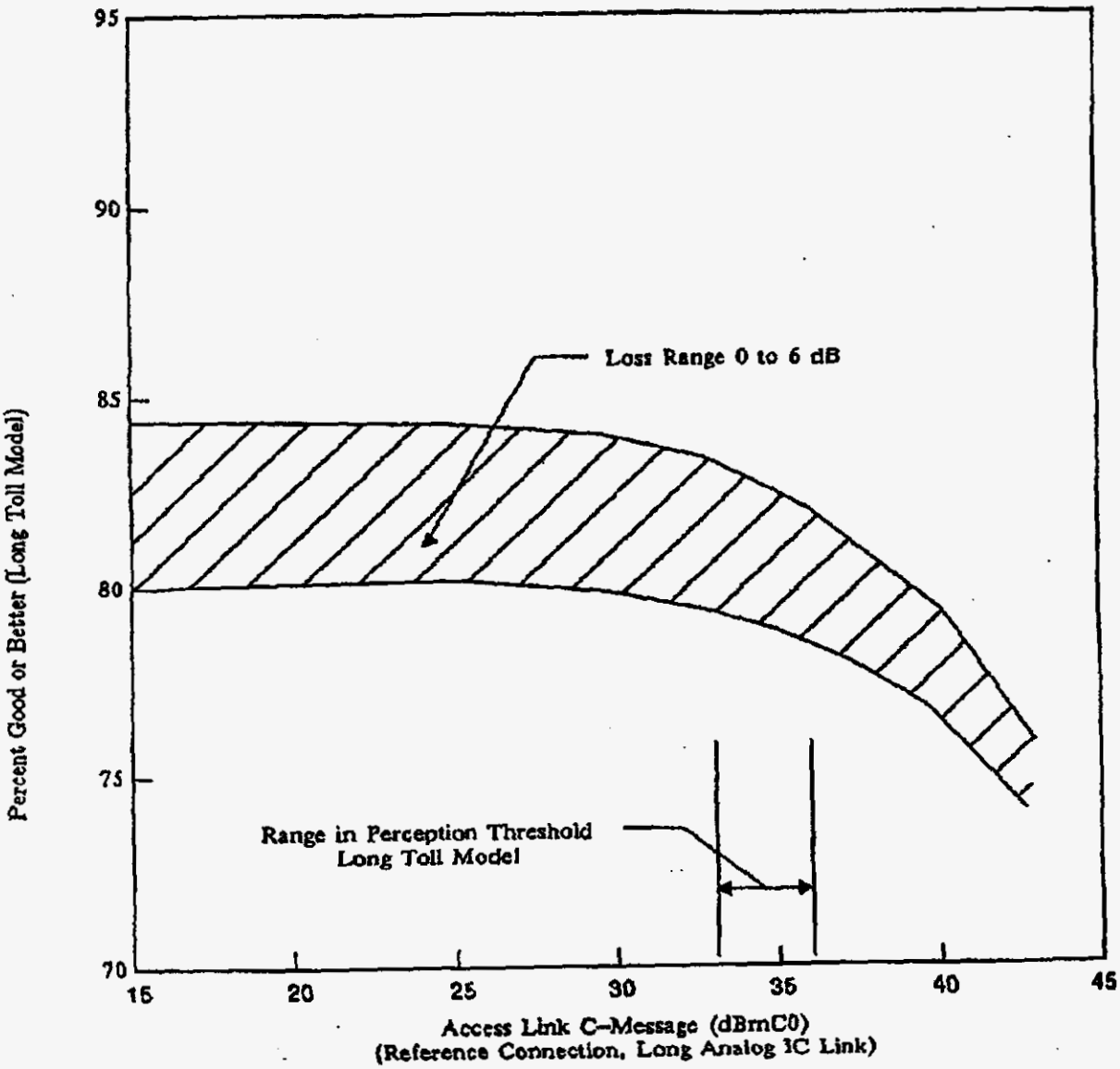


Figure B2. End-User Perception of Noise at Far-End Access Link

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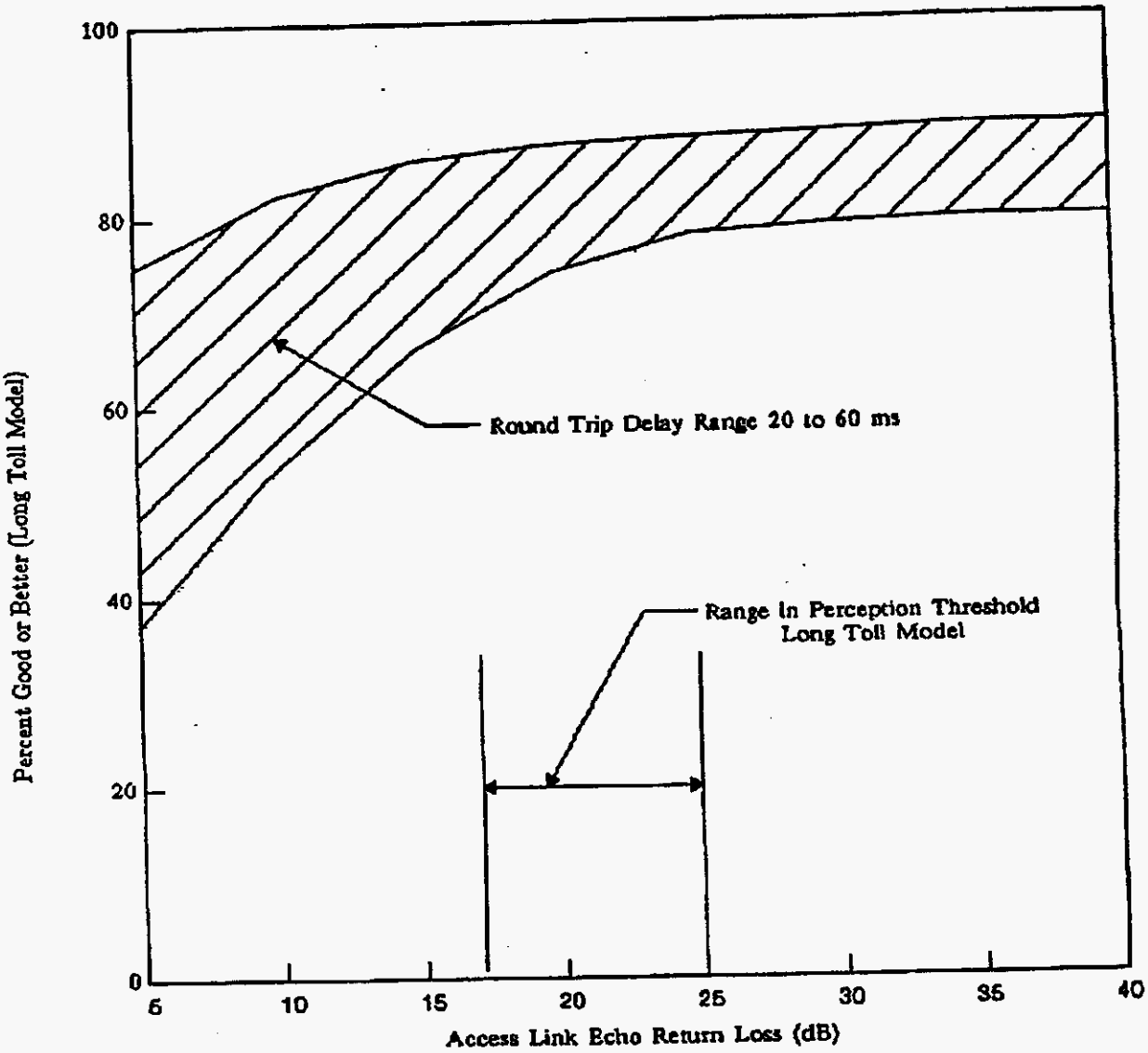


Figure B3. End-User Perception – Talker Echo

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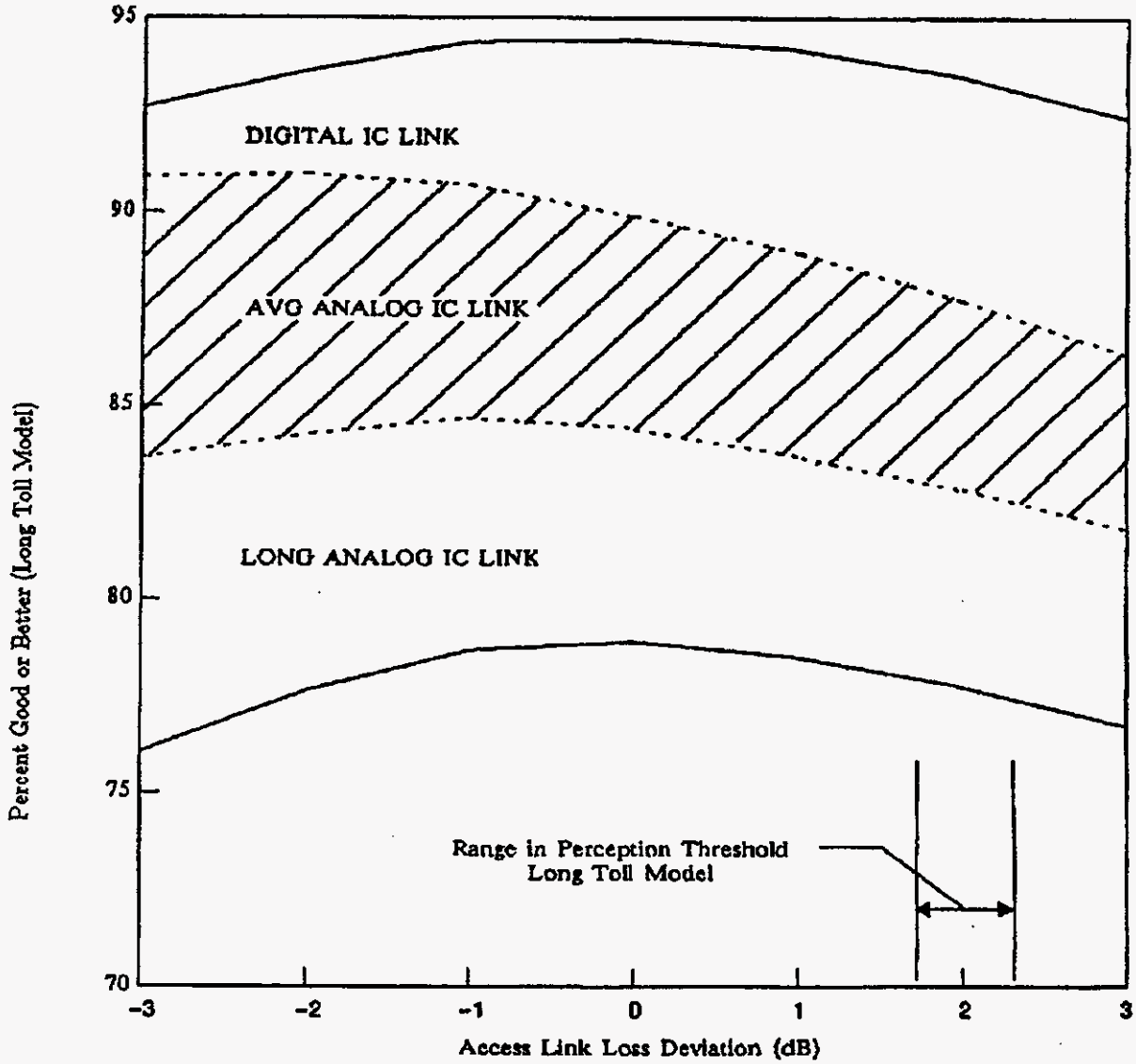


Figure B4. Effect of IC Link on End-User Perception of Loss Deviation

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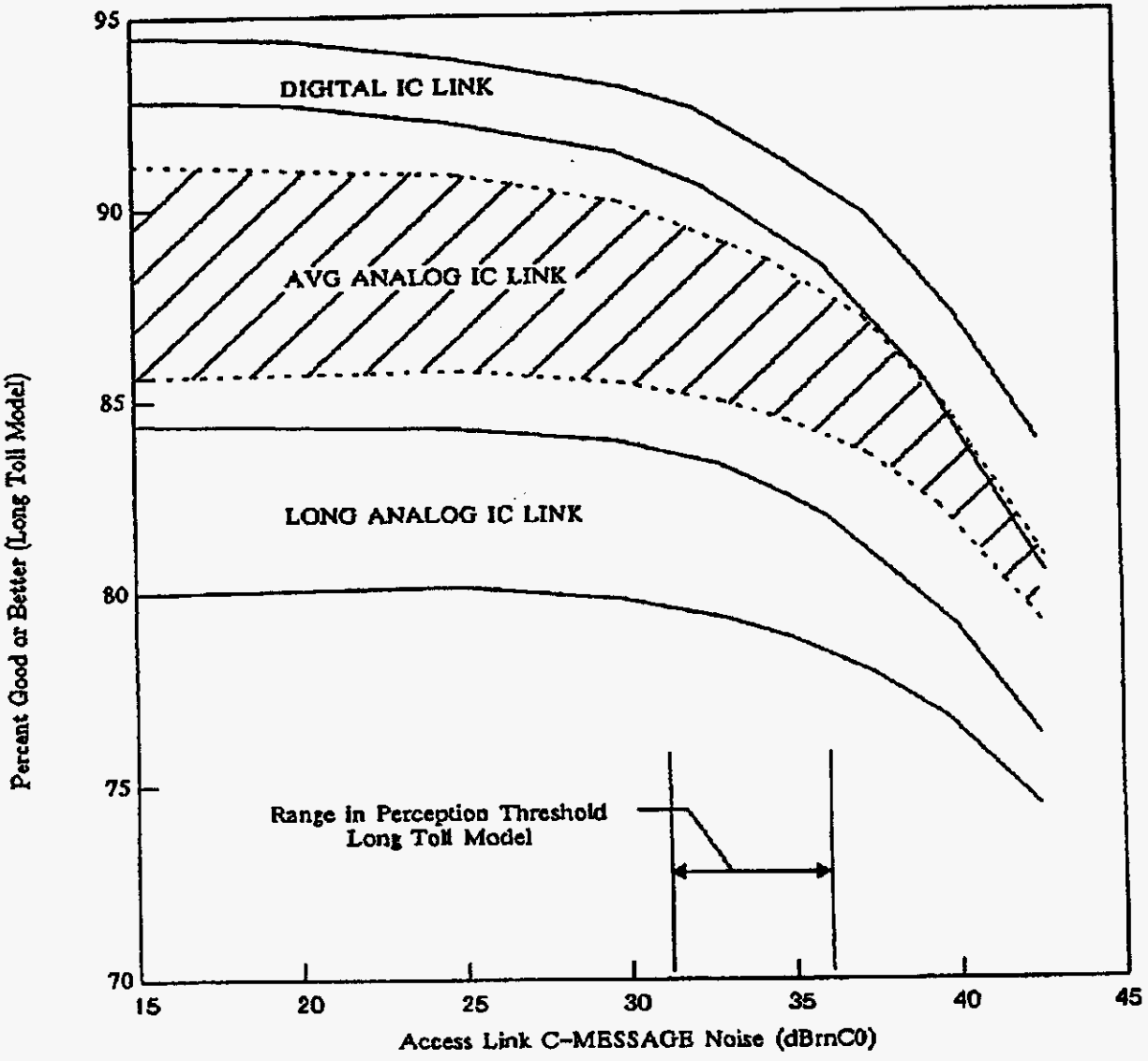


Figure B5. Effect of IC Link on End-User Perception of Noise

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(5) For signal to third-order intermodulation distortion ratio R3, the summing law used was

$$A"+"B = -16 \log_{10} (10^{-A/16} + 10^{-B/16}).$$

(6) For phase jitter and amplitude jitter, the summing law used was

$$A"+"B = (A^n + B^n)^{1/n},$$

with n=1.38 for the 2- to 300-Hz band and n=1.45 for the 20- to 300-Hz band.

B4.2 Methodology for Developing the Limits. The determination of the performance limits is analogous to a quality assurance process in a manufacturing plant. Items falling within a specified set of limits are satisfactory, those outside are rejected. For access network performance, the performance limits are based largely on the worst-performing tail of the estimated distribution for the segment between the POT and the EO or between the POT and the AT. The 99% level or 1% level, or both, depending on the parameter, is taken to be the nominal starting point for the immediate action limit. The 95% value or 5% value, or both, depending on the parameter, is typically used as a nominal starting point for the acceptance limit or restoral limit.

Differing methodologies were used in arriving at an estimate of a "satisfactory" performance distribution from the measured performance distribution, which usually has some percentage of "unsatisfactory" performing circuits. Several approaches were used in the submittals. For example, one approach was to use the properties of idealized distributions such as the Gaussian distribution. Another approach was to estimate the 99%, 95%, 5%, or 1% level by smoothly extrapolating the distribution from the region of regularity. In many cases, either of these estimates of the levels were highly influenced because of a sparse sample of data, or the disproportionate effect of outliers, or both. Approaches included discarding data from non-typical offices, or removing (trimming) outliers that far exceeded reasonable performance.

The values obtained by the above processes were adjusted to accommodate differing views including factors such as interpretation of measurements, parameter stability, measurement accuracy, measurement precision, operations procedures, and standard channel-design considerations. The total process is iterative and reflects the numerous and sometimes conflicting considerations involved.

B4.3 Specific Rationale Variations for Each Parameter. Special considerations associated with each particular parameter are discussed in this section.

B4.3.1 Loss and Level. The loss and level specifications were determined by fixed-loss-plan design considerations rather than from measured data. A loss specification depends on the two points chosen. The loss specifications in 4.1 are stated for the loss between the analog loop interface at the EO and the center (switch reference point) of the IO switch. This definition permits a simple loss specification that is consistent with the classical analog plan and the fixed loss plan, and that reflects the loss experienced by an end-user call.

B4.3.2 Loss Deviation. Loss deviation is specified by a two-valued limit having a negative (less-loss) and a positive (more-loss) specification. Both tails of the measured distributions of loss deviation were examined in the 1% and 5% region and the 95% and 99% region. Although there are slight nonsymmetries in the 1% and 99% regions, symmetric limits appear justified. The worst case of the less-loss and more-loss cases was chosen. The IAL values were rounded to the nearest 0.5 dB. For loss deviation, the ALs were not derived from a nominal starting point of 5% and 95% values. Since loss can be adjusted, established practices were followed and the ALs were set at 0.7 dB for direct trunks. Additional allowance was made for cable facilities without gain and for Group-2 Tandem trunks.

B4.3.3 Three-Tone Slope. Attenuation distortion is specified by a two-valued limit having a negative (less-loss) and a positive (more-loss) specification. Both tails of the measured slope distribution were examined. This was done at both 404 Hz and 2804 Hz. The distributions of slope are very nonsymmetric about zero dB. (Slope is basically a more-loss impairment.) Hence, the negative- and positive-slope limits are stated separately. The worst-case value of either 404 or 2804 Hz was chosen for the common limit to apply at both frequencies. The AL and IAL values were rounded to the nearest 0.5 dB.

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B4.3.4 Echo Return Loss and Singing Return Loss. Echo return loss and singing return loss values were based on long-standing historic standards for terminal balance and not the measured data. Values were suitably adjusted numerically to apply at the POT rather than at a traditional terminal-balance measuring point of the IC switch.

The limits depend on whether 4-wire or 2-wire facilities are used. For tandem access, in which the link between the POT and the AT is always 4-wire, the limits depend on the group and whether 4-wire or 2-wire facilities are used between the access tandem and the end office. For Group 1, the 4-wire limit applies to both the 4-wire and 2-wire cases. For Group 2, there are separate limits for the case where 2-wire cable is used between the access tandem and the end office.

B4.3.5 C-Message Noise. Analog-carrier noise is generally mileage dependent with a slope of 3 dB per double distance. At short distances, analog-carrier noise is dominated by the contributions from the carrier multiplexers. Therefore, the C-message-noise limits are generally specified in mileage bands. The C-message-noise limits for Tier 1 are based on EAS data for digital carriers. Digital-carrier C-message noise is not mileage dependent. Therefore, the same limit values apply to each mileage band. Based on the measured data, Tier-2 cable facilities of 15 miles or less have the same limit as digital carrier in Tier 1. The C-message-noise limits for Tier 2 are based on analog radio facilities as measured in the EAS. The Tier-2 C-message-noise limits between the POT and the EO are based on performance of two analog radio systems. For example, two systems in the 0- to 50-mile band result in a system between the POT and the EO in the 50- to 100-mile band.

Digital switches using digital loss pads to provide loss introduce additional CMN compared with digital switches using analog loss pads. There is little in-service data on this effect, none in the noise range of the limits values. Based on extensive laboratory measurements and analytical studies, it is known that for low-input CMN levels, the nominal output CMN is asymptotic to a value equal to the digital loss plus a noise value of up to 23 dBrnC0, and for high-input CMN levels, the nominal output CMN is asymptotic to the input CMN. This nominal behavior of CMN in the presence of digital loss was modeled by the algorithm of power summing the limit for offices that do not use digital loss with a noise value of 21 dBrnC0. This nominal model results (after rounding to the nearest dB) in a 1-dB increase for any limits between 26 and 30 dBrnC0 and 0 dB for limits above 30 dBrnC0. An allowance of 1 dB was added to the CMN requirements for acceptance limits for Tier 1. The correction should be applied only in the POT-to-EO direction when digital loss is used. The more stringent limit for offices that do not use digital loss should be used in the EO-to-POT direction.

B4.3.6 C-Notched Noise. The C-notched noise limits are specified for both a −16 dBm0 holding tone and a −13 dBm0 holding tone. The EAS data were measured with a −13 dBm0 holding tone, the approximate power of voiceband data modems. Currently, automatic trunk-measuring systems such as CAROT measure at −16 dBm0. The EAS data were adjusted according to the following rules to estimate the C-notched Noise at −16 dBm0:

(1) C-notched noise on digital carrier increases 1 dB for each 1-dB increase in holding-tone level (i.e., digital carrier has constant signal-to-C-notched-noise ratio over the signal levels of interest).

(2) C-notched noise for companded analog carrier (e.g., N-carrier systems) increases 0.5 dB for each 1-dB increase in holding-tone level.

(3) C-notched noise on cable and noncompanded analog carrier (e.g., radio) is essentially independent of holding-tone level.

The Tier-1 limits are based on digital carrier. The Tier-2 limits are based on N-carrier. Mileage effects are found to be insignificant.

Digital switches using digital loss pads to provide loss introduce additional CNN compared with digital switches using analog loss pads. Separate tables are provided for the case when digital loss is used at a digital end office. The amount of degradation is roughly comparable to that of a pair of digital channel banks. The CNN values for this case were obtained by the algorithm of power summing the CNN requirement for offices that do not use digital loss with 39 dBrnC0 (for a −16-dBm0 holding tone) or 42 dBrnC0 (for a

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−13-dBm0 holding tone). The resulting requirement for the case of digital loss should be applied only in the POT-to-EO direction. The more stringent requirement for offices that do not use digital loss should be used in the EO-to-POT direction.

B4.3.7 Signal-to-C-Notched-Noise Ratio. Signal-to-C-notched-noise ratio (S/CNN) and C-notched noise (CNN) are directly related. (See 5.2.1) The limits for signal-to-C-notched-noise ratio are designed to correspond exactly to the limits for C-notched noise.

Digital switches using digital loss pads to provide loss introduce additional CNN, and thereby degrade the S/CNN ratio, compared with digital switches using analog loss pads. Separate tables are provided for the case in which digital loss is used at a digital end office. The amount of degradation is roughly comparable to that of a pair of digital channel banks. The CNN values for this case were obtained by the algorithm of power summing the CNN requirement for offices that do not use digital loss with 39 dBrnC0 (for a −16-dBm0 holding tone) or 42 dBrnC0 (for a −13-dBm0 holding tone). The S/CNN requirement corresponds directly to the CNN requirement. The resulting requirement for the case of digital loss should be applied only in the terminating (POT-to-EO) direction. The more stringent requirement for offices that do not use digital loss should be used in the originating (EO-to-POT) direction.

B4.3.8 Signal-to-Intermodulation-Distortion-Ratios. The Tier-2 guidelines for R2 and R3 are based on the capabilities of N-carrier. The Tier-1 guidelines are based on the capabilities of digital carrier as measured in the EAS at a prelivestiture toll switch. The Tier-2 requirements for Group 1 and Group 2 Direct are based on the concatenation of N-carrier with digital carrier. The Tier-2 requirements for Group 2 Tandem are obtained by adding another N-carrier to the previous concatenation. The Tier-1 requirements for Group 1, Group 2 Direct, and Group 2 Tandem need further study, because of unexplained measured performance that is lower than would be expected from design.

Digital switches using digital loss pads to provide loss introduce additional intermodulation distortion, and thereby degrade R2 and R3, compared with digital switches using analog loss pads. When digital loss is used, low values of R2 and R3 are not significantly affected; however, the average performance could be affected. The effect of digital loss on IALs and RLs for R2 and R3 needs further study.

B4.3.9 Envelope Delay Distortion (Relative Envelope Delay). Separate specifications for envelope delay distortion are given at 604 Hz and 2804 Hz to reflect performance differences at the low and high frequencies. This allowed independent and tighter control at the higher frequencies. To permit a Tier-1 specification that reflects the EDD (RED) performance of digital carrier at high frequencies, only cable of 1 mile or less is included in Tier 1. The EAS data show that although cable performs about as well as digital carrier at the low frequencies, cable performs worse, like N-carrier or radio, at the high frequencies. The Tier-2 limits were derived under the assumption that only one N-carrier or analog radio facility will be used in a connection. The tandem combinations of N-carrier with N-carrier, N-carrier with radio, and radio with radio are considered to be nontypical and undesirable based on performance of EDD and other parameters.

B4.3.10 Amplitude Jitter and Phase Jitter. Amplitude jitter and phase jitter are specified in two frequency bands specified in IEEE 661-1979 [B8] as 20 to 300 Hz and 4 to 300 Hz. The band of 4 to 300 Hz described in IEEE 661-1979 [B8] was not measured in the EAS because of available instrumentation. Thus, values were specified in the 2- to 300-Hz and 20- to 300-Hz bands, which were measured in the EAS.

Digital switches using digital loss pads to provide loss introduce additional amplitude jitter and phase jitter compared with digital switches using analog loss pads. The amplitude jitter and phase jitter specifications should be adjusted when digital loss is used. The amount of jitter degradation is roughly the amount expected from the noise contribution of a pair of digital channel banks. However, the exact appropriate amount of adjustment, which needs study, is not provided.

B5. Methodology for Selecting Service Affecting Limits

The service affecting limits (SALs) are intended to help achieve satisfactory NI-to-NI voiceband data transmission performance. To aid in achieving this goal, EIA Technical Subcommittee

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Table B8
Network Performance Criteria (NPC) of EIA TR-30.3 for Voiceband Data Transmission Basic Data Service

Parameter	Criteria
1004-Hz loss	28 dB max
Three-tone slope	14 dB max
Talker echo	15 dB below received signal level min
Signal-to-C-notched-noise ratio	28 dB min
Signal-to-intermodulation distortion	
Second order, R2	37 dB min
Third order, R3	36 dB min
Envelope delay distortion	
1004 to 2404 Hz	800 μs max
604 to 2804 Hz	2600 μs max
Phase jitter	
20 to 300 Hz	10° max
4 to 300 Hz	15° max
Impulse noise	15 counts in 15 minutes at 6 dB below received tone level
Gain hits	3 in 15 minutes
Phase hits	8 in 15 minutes
Dropouts	2 in 15 minutes
Frequency offset	2 Hz max

NOTE: These limits are based on a test procedure that entails multiple calls. Failure is defined as two calls with one or more parameters exceeding the specified values before:
(1) seven calls can be made with no parameters exceeding its value on any call, or
(2) ten calls are completed with only one call in which one or more parameters are exceeded.

TR-30.3 submitted a proposed "Network Performance Criteria" to subcommittee T1Q1.1. The criteria provided preliminary recommendations for minimum performance objectives for NI-to-NI service. They were based on the predivestiture Minimum Acceptable Performance (MAP) values, modem tolerance to various parameter levels, and predivestiture end-office to end-office connection performance as reported in the EOCS [B6], and loop data [B7]. For reference, these criteria are reproduced in Table B3. The criteria proposed by the EIA and the predivestiture MAP criteria do not contain specifications for amplitude jitter. The amplitude jitter values used here are 8% max for the 20- to 300-Hz band and 10% max for the 4- to 300-Hz band.

In addition, members of subcommittee T1Q1.1 and EIA TR-30.3 ran performance tests on the following extensively deployed modems [B9].

(1) CCITT V.22 bis (224). This modem operates at 2400 bit/s, full duplex over two wires. The technique used is called split-band or frequency-division multiplexing. The modulation technique used is quadrature amplitude modulation (QAM) and transmits 4 bits of information for each symbol time (baud). The two frequency bands that are transmitted are the 900- to 1500-Hz originate band and the 2100- to 2700-Hz answer band.

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(2) CCITT V.26 bis (Bell 201C). This modem operates at 2400 bit/s, half duplex over two wires. The modulation technique is 4-phase modulation and transmits two bits of information for each symbol time (baud). The main carrier frequency is 1800 Hz, with the 3-dB bandwidth frequencies of 1200 Hz and 2400 Hz.

(3) CCITT V.27 bis/ter (Bell 208). This modem operates at 4800 bit/s, half duplex over two wires. The modulation technique used is 8-phase modulation and transmits three bits of information for each symbol time (baud). The main carrier frequency is 1800 Hz, with 3-dB bandwidth frequencies of 1000 Hz and 2600 Hz.

(4) CCITT V.29. This modem operates at 9600 bit/s, half duplex over two wires. The modulation technique used is QAM and transmits four bits of information for each symbol time (baud). The main carrier frequency is 1700 Hz, with 3-dB frequencies of 500 Hz and 2900 Hz.

These four modems were tested using the criteria submitted by the EIA, and the amplitude jitter values. The test results for the V.22 bis, the Bell 201, and the Bell 208 showed satisfactory performance while the V.29 test results showed that the criteria of the EIA represented a threshold of satisfactory performance. Based on this, it was concluded that any further increase in the impairment levels would result in unsatisfactory performance.

As a result of these performance tests, it was decided that the "Network Performance Criteria" for NI-to-NI voiceband data transmission, as submitted by EIA TR-30.3, were a reasonable basis for establishing the SALs. The SALs were established by an allocation to each of the network segments. This allocation was intended to allow the identification of the individual portion of the connection if the NI-to-NI criteria are exceeded. Since it is highly unlikely that more than one segment will be above the SALs, the values for the exchange access segment were chosen to lie between the criteria of the EIA and the values determined by an allocation in which the parts would sum to that criteria.

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Appendix B Florida Relay Service – Disaster Recovery Plan

Notification Procedure

Sprint will notify the Department if there is any type of natural or man-made problem that prohibits 10% or more of the incoming FRS calls from being handled at the level of service required in this RFP for a period of 5 minutes or more. Notification will occur within three hours of initiation of disruption to service. If such notification occurs after normal business hours, the Department will be contacted by 8:30 a.m. on the next business day.

Examples of such a loss in service include:

- Accidental switch rebooting
- Loss of transmission facilities through the Sprint network
- Bomb threat or other relay agent work stoppage
- Sudden loss of relay agent position capabilities.

Performance at each Sprint relay center is monitored continuously 24 hours a day, seven days a week from Sprint's Maintenance Control Center (MCC) in Overland Park, Kansas.

Traffic Reroute Procedure

Sprint will assess the problem, and traffic rerouting will be implemented within one hour after receiving confirmation that relay service is down.

Partial System Failures

In cases of partial system failures--such as inoperable agent position, local area network outages--the Sprint on-site technician will notify Sprint's relay MCC to schedule repair.

Disaster Recovery Follow-up

If the problem is within the relay center, maintenance can usually be performed from Sprint's relay MCC. If the problem requires on-site assistance, Sprint will page the on-site technician at the center to provide service remedies. Sprint retains hardware spares at each center to allow for any type of repair required without ordering additional equipment (except for *complete loss of a building*).

Time Frames For Service Restoration

Complete loss of service

Due to Sprint Equipment- A technician is on site during the normal business day. The technician will provide parts and / or resources necessary to expedite repair within two hours. Outside of the normal business day a technician will be on site within four hours. The technician will then provide parts and /or resources necessary to expedite repair within two hours.

Due to Utilities or Disaster at the Center - Service will be restored as soon as the utility is restored, provided the Sprint equipment has not been damaged. If the equipment has been damaged then refer to the timing in the statement previous (Due to Sprint Equipment).

Due to Telco Facilities Equipment - It will be at Sprint's discretion, whether to dispatch a technician. The normal telco escalation procedures will apply:

- Two hours at first level
- Four hours at second level
- Eight hours to third level

These hours of telco escalation are all during the normal business day; therefore, a trouble may be extended from one day to the next.

Partial Loss of Service

Due to Sprint Equipment - A technician is on site during the normal business day. The technician will provide parts and / or resources necessary to expedite repair within four hours. Outside of the normal business day a technician will be on site within eight hours. The technician will then provide parts and /or resources necessary to expedite repair within two hours.

Due to Sprint Position Equipment - A technician will be on site within eight hours, provided there are not enough positions working to process the forecasted traffic volumes. The technician will provide parts and /or resources necessary to expedite repair within 48 hours. If there are enough positions functional to process the forecasted traffic the equipment will be repaired at Sprint's discretion.

Due to Telco Facilities Equipment - It will be at Sprint's discretion whether to dispatch a technician. The normal telco escalation procedures for a partial outage will apply:

- Eight hours at first level
- Twenty four hours at second level

These hours of telco escalation are all during the normal business day; therefore, a trouble may be extended from one day to the next.

Trouble Reporting Procedures

The following information will be required when reporting trouble:

a. TRS Location
b. Callers Name
c. Contact Number
d. Calling to/Calling from if applicable
e. Description of the trouble

Troubles are to be reported to the TRS Control Room, during normal business hours. Outside the normal business day, the MCC will handle trouble calls 24 hours a day, 7 days a week. They can be reached at
(800) 800-8129 or (913) 661-8090

Escalation Procedures

If adequate results have not been achieved within two hours, service affecting trouble will be escalated to the next level.

Escalation Level	Contact	Phone
2	Regional Maintenance Manager	Office Phone Number (913) 534-7119 Pager -888-242-5656 Pin 385690
3	Staff Director, Systems Maintenance	Office Phone Number (913) 534-7070

Report non service affecting trouble to the TRS Control Room during normal business hours, 8:00 a.m. to 05:00 p.m., Monday through Friday. This does not include Saturday, Sunday, Holidays, Floating Holidays, and Vacation Days that fall on Monday through Friday.

Hours outside of the normal business day are 5:00 p.m. to 8:00 a.m., Monday through Friday. This does not include Saturday, Sunday, Holidays, Floating Holidays, and Vacation Days that fall on Monday through Friday.

If the problem is within the Sprint network, the Sprint Relay technician will call Sprint's Network Control Center to begin diagnosing the problem. Sprint's overall reliability is ensured by the following procedures.

Service Reliability

Sprint's service is provided over an all-fiber backbone network with digital switching architecture and is supported by sophisticated management control networks. These elements are combined to provide a highly reliable, proven, and redundant network. Survivability is a mandatory objective of the Sprint network design. The Sprint network minimizes the adverse effect of service interruptions due to equipment failures or cable cuts, network overload conditions, or regional catastrophes.

A 100 percent fiber-optic backbone network provides significant advantages over the other technologies. These advantages include:

- Quality
- Economy
- Expandability
- Survivability

Quality

Since voice or data will be transmitted utilizing fiber-optic technology, the problems of outdated analog and even modern microwave transmission simply do not apply. Noise, hiss, electrical interference, weather-impacting conditions, and fading are virtually eliminated.

Economy

The overall quality, architecture, and advanced technology of digital fiber optics makes transmission so dependable that it costs us less to maintain, thereby passing the savings onto our customers.

Expandability

As demand for network capacity grows, the capacity of the existing single-mode fiber can grow. Due to the architecture and design of fiber optics, the capacity of the network can be field upgraded to increase 2,000-fold.

Survivability

Network survivability is the ability of the network to cope with random disruptions of facilities and/or demand overloads. Sprint has established an objective to provide 100 percent capability to reroute backbone traffic during any single cable cut. This is a significant benefit to Florida Relay, and a competitive differentiation of the Sprint network.

Fiber-optic facilities are the most secure transmission media available today. The very nature of the fiber makes it difficult to tap. Add to this the fact that

all of Sprint's fiber is buried in steel conduit. National Security Emergency Preparedness standards are met by the basic fiber-optic media. Bulk encryption on the backbone network is a planned feature. Because the network is fully digital, Sprint supports more sophisticated encryption methods than analog or a combination of analog and digital.

Currently, Sprint has over 23,000 miles of its fiber network in place and in service, with a fiber point of presence (POP) in every local access transport area (LATA). There are plans for additional fiber mileage, additional POPs, and added route diversity. There are more than 300 POPs in service on the network.

Switched services are provided via 37 Northern Telecom DMS-250/300 switches at 28 locations nationwide. Three DMS 300s located at New York, NY; Honolulu, Hawaii; and Stockton, California, serve as international gateways. The remaining 40 switches provide switching functions for Sprint's domestic switched services. The Sprint Orlando switch will serve the TRS center in Florida.

Trunking of the 37switches is provided in a non-hierarchical manner. This means that intermachine trunk (IMT) groups interconnect each switch with all other switches within the network. Each of these IMT groups is split and routed through the Sprint fiber network over physically diverse facility route paths for protection and survivability.

Reliability is achieved through a corporate commitment to maintain or surpass our system objectives. Beginning with the network design, reliability and efficiency are built into the system. Sprint continues to improve the network's reliability through the addition of new technologies such as Digital Cross-connect Systems, SONET (Synchronous Optical Network), and Signaling System 7.

The effectiveness of this highly reliable and survivable network is attributed to the redundant transmission and switching hardware configurations, SONET ring loop topology, and sophisticated network management and control centers. These factors combine to assure outstanding network performance and reliability for Florida Relay.

NETWORK CRITERIA

System Capacity

The Sprint network was built with the capacity to support every interLATA and intraLATA (where authorized) call available in the United States. With the continuing development of network fiber transmission equipment to support higher speeds and larger bandwidth, the capacity of the Sprint

network to support increasing customer requirements and technologies is assured well into the next century.

System Availability

1. Switch Availability. It is comprised of two components that are measured separately. It is represented by the percentage of circuit minutes that a switching system is available during the month compared to the total circuit minutes possible using only switch outages or impairments.
2. Fiber Availability. It is represented by the percentage of circuit minutes that transmission facilities are available during the month compared to the total circuit minutes possible.

Sprint's "800" service network operates continually and has never been out of service. This is true because the Sprint "800" service network is derived on the first company owned coast-to-coast, 100% digital fiber-optic network conceived and built in America. Sprint's "800" service is available 24 hours per day, 365 days a year. It is a function of DMS250 switch and fiber availability. The availability of both switch and fiber exceeds the internal objectives set by Sprint for 1996. Table B-1, Sprint Network Availability, lists Sprint's network availability objectives and averages for 1996.

Table B-1 ***Sprint Network Availability***

Availability	1996 Objective	1996 Average
Switch	99.95%	99.96%
Fiber	99.95%	99.96%

System Blocking

Sprint network switch architecture is non-hierarchical, all switches are processor controlled using advanced digital technology. A call across the Sprint network passes over IMTs. IMTs are engineered at P.01 Grade of Service (GOS) to ensure maximum network call completion. Call completion is enhanced by these factors:

- Based on traffic volumes and economic consideration, high usage trunk groups are established directly to a LEC access tandem or end office.
- Calls can originate and terminate on the same Sprint network switch, based on the NPA/NXX homing arrangement across the domestic switch network. For these calls, IMTs are not required and the calls are non-blocking.

- Sprint switches are equipped with standby WATS capability. During conditions of severe network blockage, standby WATS is available to enhance call completion. Standby WATS trunks, which are normally outbound only, can be used to complete inbound traffic.

Sprint continuously monitors the grade of service on the network and makes adjustments in the trunking as necessary to maintain the objective grade of service. In the unlikely event that route blockages occur, courtesy messages are provided to the calling party.

Answer Supervision

Answer supervision is the hardware device or software programming that enables billing of the long distance call to begin.

Hardware supervision is the detection of offhook status at the called or terminating number. It is a well-defined, easily detectable change in the electrical state of the line when the called party answers, and it is available when the LEC end office is equipped for hardware answer supervision. Approximately 99 percent of all calls on the Sprint network are terminated this way.

Software answer supervision is necessary when the local exchange end office is not equipped for hardware answer supervision, such as non-equal access offices. When the LEC is unable to furnish hardware answer supervision, then Sprint uses software to define when billing begins.

Billing begins in the originating DMS-250 call detail record when answer supervision is received. Calls completing on-net receive hardware answer supervision from the terminating DMS-250 switch. A long distance call that completes off-net must go through a LEC as the final step before it reaches the number called. The nature of the LEC equipment determines the kind of answer supervision (hardware or software) available to long distance carriers, such as Sprint.

Mean Time to Repair (MTTR)

Sprint defines MTTR as the average:

TIME TO INVESTIGATE + TIME TO REPAIR +
TIME TO NOTIFY = MTTR

Time to Investigate:	Repair time by Field Operations plus LEC time, if applicable
Time to Notify:	From time repair is completed to time the CSC notifies the customer of repair

Current MTTR objectives are:

Switched Services	8 Hours
Private Lines	4 Hours (electronic failure)
8 Hours (fiber cut)	

MTTR is calculated on a 24-hour basis and therefore, a number of factors will directly affect the actual MTTR including:

- LEC - if a service issue has been determined to be LEC related, Sprint will invoke internal LEC escalation procedures in order to bring the issue to a timely and satisfactory resolution.
- CPE - If Sprint has determined the problem to be CPE, the issue must then be referred to the CPE vendor.
- WEEKENDS/AFTER HOURS - If a service issue is reported late in the afternoon, and after resolution the customer contact cannot be reached, Sprint will continue to log as "Time to Notify."

Sprint Mean Time to Repair is viewed from the customer's perspective. A critical element in the equation is the Time to Notify, because Sprint does not consider a repair complete until the customer accepts the circuit back as satisfactory.

Service Restoration

Sprint provides for the restoration of service in the event of equipment malfunctions, isolated network overloads, major network disruptions and national/civil emergency situations. In the event of service disruption due to Sprint's equipment, service typically is restored within four hours after notification. Sprint does everything possible to prevent a total outage at its switch sites or at any of its POPs through the use of advanced site designs. All processors, memory, and switch networks within our switches are fully redundant. All switch sites are protected by uninterruptible power supplies and halon systems planned in conjunction with local fire departments. Most of our new sites are earth sheltered to increase survivability. Sprint is always on guard for unforeseen "Hinsdale" possibilities. A two-pronged program is used to minimize these possibilities:

1. To do everything possible to minimize the impact of a "single point of failure." This includes:
    a. Diversification of all facilities demands between switch sites. All switch sites are connected to the long haul network over at least two separate Sprint fiber routes; many have three paths.

b. Deployment of multiple switches at large switching centers. This prevents a single switch outage from totally "destroying" the site.

2. To have systems in place allowing for the rapid redeployment of network resources in case of a catastrophic outage. Fiber cuts which can affect thousands of calls at several locations are unavoidable. Response to these outages is maximized through the following procedures:

   a. Utilization of established plans to respond effectively to these outages.

   b. The capability to rapidly deploy network transmission facilities when needed.

   c. Immediate execution of alternate routing in the digital switches and cross-connect systems to assist in the handling of temporary network disruptions and forced overloads.

The entire spectrum of survivability needs, expectations, and requirements can be met by the proper engineering of customer and Sprint switches and facilities.

Fiber Backbone Loop Topology and Reconfiguration

Fiber optic cable routes are designed to include redundant capacity to insure survivable fiber-optic systems. Sprint's SONET network, using four fiber bi-directional line switched ring capability, allows automatic switching to alternate paths to provide for traffic rerouting in the event of a route failure. The SONET fiber-optic backbone topology is currently designed with more than 50 overlapping rings to ensure sufficient alternate paths for total network survivability. Four operating SONET rings currently serve Florida, with two additional rings planned for 1997.

DS-3 level reconfiguration is administered with the deployment of DCS (Digital Cross-Connect System) at all switching and transmission hubs. A digital cross-connect system is an electronic device that interconnects transmission facilities of equal or greater capacity. With deployment of DS-3 level DCSs at all switching and transmission hubs, various levels of reconfiguration will be available. All DCSs can be remotely reconfigured with proper control systems.

Network Redundancy and Service Continuity

Sprint network survivability is a mandatory objective. The Sprint network is able to minimize the adverse affects of service interruptions due to equipment failures, cable cuts, network overload conditions, or regional catastrophes.

Redundancy in the Sprint fiber-optic backbone network and SONET technology makes most network problems transparent to the customer.

The basis for a highly reliable and survivable network is attributed to the redundant transmission and switching hardware configurations, SONET ring topology, and the sophisticated network management and control.

Sprint Route Outage Prevention Programs

Call Before You Dig Program – This program uses a nationwide 1-800 number interlinked with all local/state government utility agencies as well as contractors, rail carriers, and major utilities. Sprint currently receives in excess of 60,000 calls per month for location assistance over the 23,000 mile fiber network.

Awareness Program – This Sprint program proactively contacts local contractors, builders, property owners, county/city administrators, and utility companies to educate them on Sprint's cable locations and how each can help eliminate cable outages.

Route Surveillance Program – This is a Network Operations department program using Sprint employees to drive specific routes (usually 120 miles) and visually inspect the fiber cable routes. This activity is performed an average of 11.6 times per month or approximately once every 2-3 days.

Technician Program – Technicians are stationed at strategic locations and cover an area averaging 60 route miles. Each technician has emergency restoration material to repair fiber cuts on a temporary basis. Total repair is accomplished by other operations forces within a nominal time frame.

Fiber/switch Trending Program – This includes a weekly summary of equipment failure events highlighting bit error rate (BER) and cable attenuation. As a result, Sprint identifies potential equipment problems and monitors performance degradation to establish equipment aging profiles for scheduled repair, replacement, or elimination. Aging profiles are computer-stored representations of the characteristics of a fiber splice. The profile is stored at the time the splice is accepted and put into service. A comparison of the original profile and current profile are compared for performance degradation. Maintenance is scheduled based on this type of monitoring.

Network Management and Control Systems

The Sprint network is managed and controlled by a National Operations Control Center (NOCC) located in Overland Park, Kansas. As a back-up, a secondary National Operations Control Center is located in Lenexa, Kansas. The NOCC is designed to provide a national view of the status of the network

as well as to provide network management from a centralized point. The NOCC interfaces with the Regional Control Centers to obtain geographical network status. The Regional Control Centers are responsible for maintenance dispatch and trouble resolution, and are designed to provide redundancy for each other and back-up status for the National Operations Control Center.

The NOCC and Regional Control Centers (RCC) work closely with the MCC in cases where a network problem may affect TRS operations. In cases such as these, the NOCC or RCC immediately alerts the MCC of the situation so that appropriate steps can be taken to minimize service impacts. The NOCC and RCCs also serve as reference points for the MCC when problems are detected in the TRS center that are not the result of internal center operations.

Regional Switch Surveillance Systems are currently in place in the Regional Control Centers. Surveillance and control of the transmission network is provided by the DATAP Communications Protocol for Sprint. The National Surveillance System, which allows for the control of certain network elements is located in the National Operations Control Center. It interfaces with the Regional Surveillance System,

DATAP, Network Management Command and Control System, and the Digital Cross-Connect Management System.

The Network Management Command and Control System (NMCC) supports the National Operations Center and is designed to manage and control the network switches by:

1. Monitoring the network on a continual basis to ensure that the traffic flow is optimal with respect to the load and design.
2. Responding to unusual traffic conditions by utilizing planned traffic control programs or direct human modifications of routing algorithms.
3. Analyzing network traffic statistics to determine usage and potential needs for additional equipment and/or facilities.
4. Performing required translations to add, change, or delete routing tables.

The NMCC system has redundancy through a collocated back-up processor. In the event of a catastrophic fault causing both processors to fail, the full scale development system located in the Sprint Test Bed will become the operational system. The cross-connect systems and alternate routing systems throughout the Sprint network will be controlled and managed from the Network Operation Control Center.

NETWORK MANAGEMENT

Commitment to a digital fiber-optic network permits Sprint to use a single transmission surveillance protocol to integrate internal network vendor equipment. This enhances Sprint's ability to automate and provide preventive, near real-time detection and isolation of network problems. The controlling principle is identification and correction of potential problems before they affect the Florida TRS call capabilities.

Sprint divides the major functional responsibilities, facilities maintenance and network management, into a two-level organization which maximizes network efficiencies and customer responsiveness. The first level consists of the Regional Control Centers (RCCs) located in Atlanta and Sacramento. RCC personnel focus on the performance of individual network elements within predetermined geographical boundaries. The second level is the National Operations Control Center (NOCC) in Kansas City which oversees traffic design and routing for Sprint's 23,000 mile fiber-optic network and interfaces.

This two-level operational control organization, combined with architectural redundancies in data transport and surveillance, control and test systems, ensures an expedited response to potential problems in both switched and private line networks.

Regional Control Centers

The RCCs are responsible for the routine and emergency maintenance of network components. Technicians at these locations receive alarms and status indications from computer-based surveillance systems. After analysis, the RCCs may dispatch maintenance personnel to the alarm site or perform remote equipment switch-overs on degraded or failed network elements.

Each RCC has separate and redundant surveillance systems for the switches and the fiber-optic transmission system.

All Sprint switch and field operations technicians on record before February 28, 1988, have been certified to support Sprint's "800/900" service support as they came into the organization. These groups currently have a combined total of 401 technicians. Maintenance personnel are strategically placed at the 28 switch locations and throughout the Sprint fiber network. Spare parts, test equipment, fiber-optic cable, splice kits, etc., are available to them. Maintenance crews are available 24 hours per day, 7 days per week.

The Regional Switch Surveillance System (RSS) monitors all system switches including the Signaling System 7, Signaling Transfer Points (STP), Data Control Points (DCP) and the Database Control Point Management System (DCPMS). Continuous status on all fiber-optic equipment is gathered

through the Transmission Surveillance System (TSS). Four levels of alarm collection and processing within the TSS enable RCC personnel, often in cooperation with the NOCC, to take corrective actions with minimal disruption to customer traffic and services.

Redundancy in Sprint's fiber-optic network makes most equipment problems transparent to customers. Alarms are sent to the regional centers simultaneously. The RCC performs remote testing and dispatches maintenance personnel if required.

Similar redundancies are built into systems which monitor and control peripheral network equipment such as back-up generators, commercial power, air conditioners and security devices. Environmental status reports and alarms feed into the RCCs, significantly reducing the likelihood of peripheral facility problems or human errors causing network impairments.

The Atlanta and Sacramento Regional Control Centers also interface electronically with the Trouble Reporting System in Dallas, receiving detailed reports of customer-identified service and equipment problems. The Trouble Reporting System maintenance personnel analyze customer reports and resolve them through the appropriate RCC. As the first level of preventive network maintenance, RCCs analyze all network status and alarm reports to identify potential service affecting problems. RCCs also dispatch maintenance personnel to monitor digging and construction activities reported through Sprint's "Call Before You Dig" program, and automated system that checks activity locations against a cross-referenced database.

National Operations Control Center

Network traffic management and major problem resolution are handled by the Kansas City-based NOCC. The NOCC relies on precise monitoring tools to guarantee maximum responsiveness to potential network traffic problems.

Network alarm reports are received through the National Surveillance System (NSS). While similar to the regional systems, the software-controlled NSS enables NOCC personnel to oversee every fiber-optic facility in the network.

NOCC personnel monitor traffic and change routing, if necessary, via the Network Management Command and Control (NMCC) system, which assimilates traffic flow and hardware and software maintenance data from all Sprint network switches. The NMCC identifies overload conditions and other potential network problems and automatically activates alternate route capabilities.

For problems in the switched message network, the NOCC had the option of allowing the planned programs to take effect or manually modifying the routing algorithms. NOCC personnel also interface closely with local

operating companies' network centers to identify and resolve potential access and traffic problems which impact Sprint's customer's call capabilities.

The Database Control Point Management System (DCPMS) also feeds into the NOCC. It interfaces with three Database Control Points (DCPs) in Sprint's SS7 network and is designed to ensure DCP database integrity and SS7 security processes.

Private Line Service Center

While switched and private line services may reside on the same fiber-optic cable, a separate control center provides an additional network safeguard for private line services. The Atlanta-based Private Line Service Center (PLSC) performs monitoring and digital testing on CLEARLINE private lines.

A Hekimian REACT system interfaces to the digital cross-connect system (DCS) 1/0s, and electronic device which interconnects DS-1s in the network. Access is through the Digital Cross-Connect Management System for 1/0 (DCMS 1/0), a multi-function system designed also for private line planning and preprovisioning. These systems enable Sprint to isolate private line problems quickly and activate alternate route plans with minimal customer service disruption.

Operational Support System Center

Should a disaster strike an RCC or the NOCC, the Kansas City-based Operational Support System Center (OSSC) provides access to Sprint's network and a back-up location for personnel. During normal network operations, the Operational Support System Center provides administrative and technical support for the Network Management Command and Control System, Regional Switch Surveillance System, Transmission Surveillance System, National Surveillance System, and Signaling System 7.

INSITE

Sprint is committed to providing a total, integrated Network Management product that can simultaneously address switched services (e.g., WATS/800/900 and VPN) and data services. To address near term objectives, Sprint provides independent management solutions for each of these service categories. Sprint has also developed a long term strategy that will bring dissimilar services under the control of a single, unified management system. Plans include an open architecture that will ultimately provide for an orderly integration of other vendors management systems into the Sprint environment. The platform for deploying this technology is INSITE (Integrated Network Systems Interface Terminal).

Citibank, N.A.
One Court Square
Long Island City, NY
11120

CITIBANK

Re : SPRINT CORP.

Your inquiry of : 11/28/95

To whom it may concern:

1. Account opened	Over Ten Years
2. Average balance :	Low 7 digits
3. Credit facilities :	Medium 9 digits
4. Financial statements :	Published
5. Comments	Satisfactory

Sincerely yours,

Greg Biddle

GREG BIDDLE
ASSISTANT MANAGER

All persons are informed that this is a strictly confidential response to a request. It is not guaranteed and may be incomplete. Any statement on the part of this bank, or any of its officers, as to the responsibility or standing of any person, firm or corporation, or as to the value of any securities, is as mere matter of opinion for which no responsibility, in any way, is to attach to this bank or any of its officers. Furthermore, no offer or solicitation on our part with respect to the sale or purchase of securities is intended or to be implied.

Sprint

DEFINING THE **Communications** COMPANY OF THE ***Future***

1994 ANNUAL REPORT TO SHAREHOLDERS



Sprint set the standard in long distance with its fiber-optic network. Now competition is coming to a much larger local communications market. By joining with our cable partners in a revolutionary venture, we will be **setting the standard** once again. We're **creating the blueprint**



that other communications companies will have to follow: a new kind of company that delivers the entire interconnected world of globe-spanning voice, video and data – all from a single source. Customers will benefit from better services, competitive prices and pin-drop quality. Sprint shareholders will benefit from long-term value.

We are defining the communications company of the 21st Century... seizing a bold, strategic opportunity that comes only



Sprint is the industry leader in introducing prepaid long distance phone cards in the United States.

Sprint is a diversified telecommunications company providing global voice, data and videoconferencing services and related products. Unique in its major presence in long distance, local and wireless communications, the company is also a founding partner in a joint venture that will offer integrated communications services to approximately one-third of U.S. homes. Sprint has more than 50,000 employees worldwide, annual revenues of more than $12.6 billion and total assets of nearly $15 billion. Founded in 1899, Sprint maintains its world headquarters in Kansas City.

1 **Financial Highlights**
A review of Sprint's key financial results

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William T. Esrey discusses Sprint's results and new strategic alliances

6 **Telecommunications Breakthrough**
Sprint and partners create revolutionary blueprint for the 21st century

8 **Sprint at a Glance**

10 **Long Distance**
Calling volume grows faster than the industry average

15 **Local Telecommunications**
Sprint assumes leadership role in delivering broadband services

19 **Cellular and Wireless**
New records in customers, market penetration, revenues and operating income

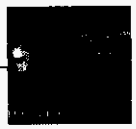
23 **Product Distribution**
Sprint/North Supply diversifies with a solutions-oriented, strategic approach

24 **Directory Publishing**
Exceptional results in Chicago and Sprint/Centel markets

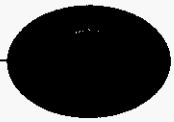
25 **Financial Section and Corporate Information**

As of or for the Years Ended December 31, (in millions, except per share data)	1994	1993	% Change
Net operating revenues			
Long distance communications services	**$ 6,805.1**	$ 6,139.2	11%
Local communications services	**4,412.8**	4,126.0	7%
Cellular and wireless communications services	**701.8**	464.0	51%
Product distribution and directory publishing	**1,108.7**	945.2	17%
Intercompany revenues	**(366.6)**	(306.6)	20%
Total	**$12,661.8**	$11,367.8	11%
Income from continuing operations	**$ 883.7***	$ 480.6*	84%
Earnings per common share from continuing operations	**$ 2.53***	$ 1.39*	82%
Dividends per common share	**$ 1.00**	$ 1.00	—
Average common shares outstanding	**348.7**	343.7	1%
Total assets	**$14,936.3**	$14,148.9	6%

*Sprint Corporation's income from continuing operations and related earnings per common share amounts in 1994 and 1993 were affected by nonrecurring items. During 1994, a nonrecurring gain was recorded related to the sale of an investment in equity securities. During 1993, nonrecurring charges were recorded related to the merger with Centel Corporation; realignment and restructuring actions; and changes in federal tax laws and rates. Excluding such nonrecurring items, 1994 income from continuing operations was $862 million ($2.47 per share), as compared to $687 million ($1.99 per share) in 1993.



Long distance achieves record revenues and operating income. **See page 11**



Local revenues increase 7%... best in the industry. **See page 16**



Cellular and wireless customer base doubles in 18 months. **See page 20**



Product distribution and directory publishing grow and diversify. **See pages 23 and 24**

VISION ► To be a world-class telecommunications company – the standard by which others are measured **GOALS** ► Exceptional Customer Satisfaction ► Inspired, Innovative and Empowered Employees ► Superior Financial Results **VALUES** ► Customer First ► Integrity in All We Do ► Excellence Through Quality ► Respect For Each Other ► Growth Through Change ► Community Commitment ► Productive Work Environment ► Representative Work Force ► Shareholder Value

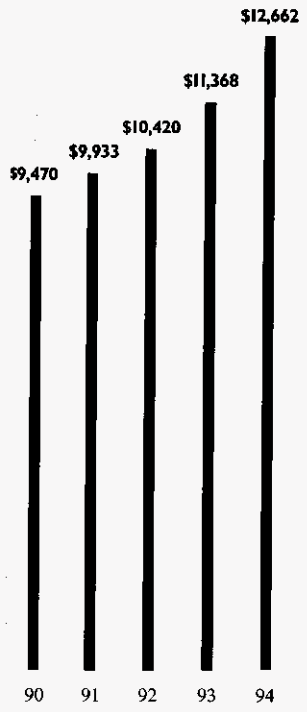
VISION

GOALS

VALUES

NET OPERATING REVENUES

(in millions)



Net operating revenues have increased 11 percent from 1993 to 1994 and have grown at a compounded annual growth rate of 8 percent over the past four years.

INCOME FROM CONTINUING OPERATIONS-EXCLUDING NONRECURRING ITEMS

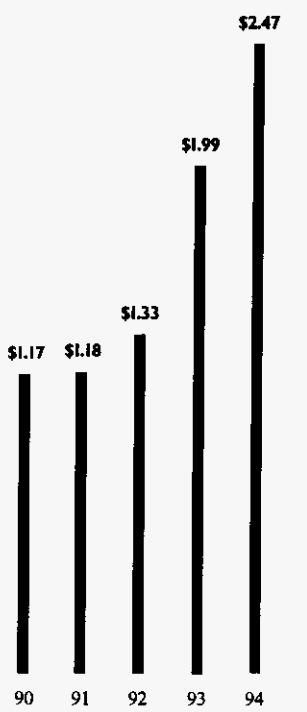
(in millions)



Income from continuing operations, excluding nonrecurring items, increased 25 percent from 1993 to 1994 and has grown at a compounded annual growth rate of 22 percent over the past four years.

EARNINGS PER SHARE FROM CONTINUING OPERATIONS-EXCLUDING NONRECURRING ITEMS

(in millions)



Earnings per share from continuing operations, excluding nonrecurring items, increased 24 percent from 1993 to 1994 and has grown at a compounded annual growth rate of 21 percent over the past four years.

1994: AN exceptional YEAR

To Our Shareholders:

For Sprint, 1994 was an exceptional year of accomplishment, both from a strategic as well as an operational results perspective.

We launched landmark strategic initiatives that may well define the way communications services and products will be delivered in the future and produced record financial results that included a 25 percent increase in earnings and an 11 percent increase in revenues.

WE EMERGED FROM 1994 WITH LANDMARK STRATEGIC ACCOMPLISHMENTS AND RECORD FINANCIAL RESULTS.

Responding to the marketplace

Fundamental changes in technology and customer demand are offering the opportunity to restructure the communications industry. As emerging technologies open vast new pathways for voice, video and data communications, the demand for seamless worldwide connectivity is rapidly growing beyond the individual capabilities of today's communications industry. The lines of distinction between long distance, local and wireless communications are becoming blurred and in the future will probably not be relevant. The convergence of the cable television and telecommunications industries is inevitable.

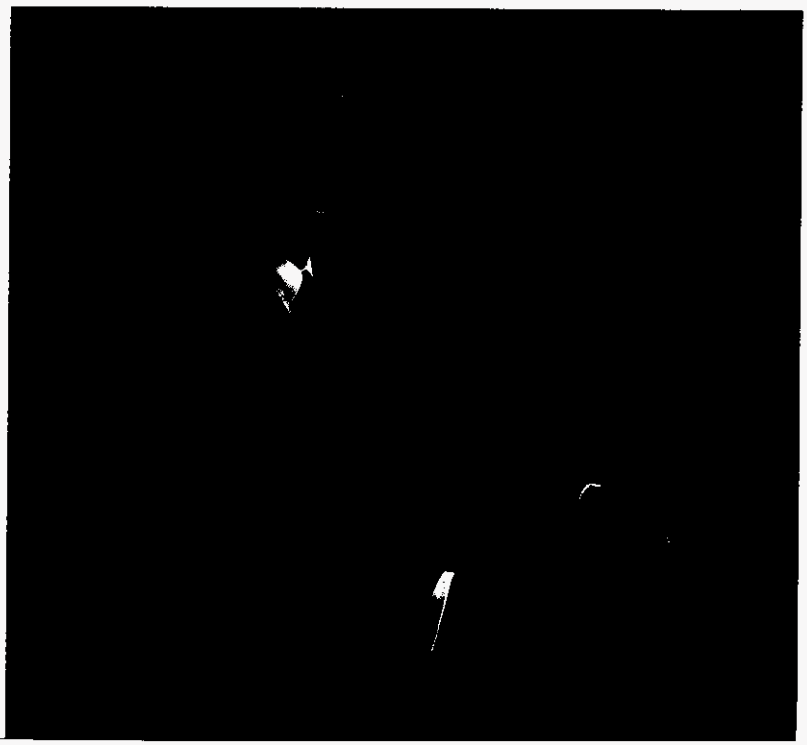
Against this backdrop, we announced the two most significant Sprint initiatives since we redefined quality in the communications industry by building the first and only 100 percent digital, fiber-optic network in the United States.

Sprint Chairman and Chief Executive Officer
William T. Esrey

In June, we signed a Memorandum of Understanding (MOU) with France Telecom and Deutsche Telekom, Europe's two largest telecommunications entities, that could lead to the creation of the most comprehensive partnership ever formed in the international marketplace.

The MOU also calls for France Telecom and Deutsche Telekom to make a major financial investment in Sprint. While there are a number of conditions that need to be satisfied, including reaching detailed definitive agreements and getting government approvals, we are hopeful of implementing the transaction in 1995.

In October, we announced plans for a joint venture with Tele-Communications Inc., Comcast Corporation and Cox Communications, three of the largest cable television operators in the U.S., that will create



an unprecedented communications alternative – packaging local telephone, long distance and wireless communications with cable services into a single offering for consumers and businesses.

With direct access to approximately one-third of America's homes, the Sprint/cable venture represents an extraordinary opportunity as competition comes to the $95 billion local communications marketplace. Our market reach will expand even further as additional cable operators affiliate with the venture. When combined with nationwide personal communications wireless service and Sprint's global long distance operations, the venture will create a seamless communications system that will be difficult, perhaps impossible, for competitors to replicate.

THE SPRINT/CABLE VENTURE WILL CREATE A SEAMLESS SYSTEM THAT WILL BE DIFFICULT, PERHAPS IMPOSSIBLE, FOR COMPETITORS TO REPLICATE.

In 1994 we also engaged in discussions with Electronic Data Systems regarding a strategic relationship that included a possible merger of equals. EDS is a leader in information technology and a pioneer in computer system integration and outsourcing. Sprint and EDS share a similar vision about the convergence of communications and information technology. We were unable to reach agreement on the financial terms of a transaction and terminated our merger discussions; however, we continue to work closely with EDS on a wide variety of efforts to satisfy the needs of customers of both companies.

Strong operating performance

As we expand our interests and reach, we are building from a solid base of core competencies. Each of our major lines of business – long distance, local communications and cellular and wireless – achieved strong operating results in 1994. Revenues grew to $12.66 billion. Earnings per share from continuing operations were $2.47, up from $1.99 in 1993 (excluding the effects of a one-time gain in 1994 and one-time charges in 1993).

Operating in a highly competitive environment, long distance operating income rose 21 percent and revenues grew 11 percent. Sprint's calling volume and revenues grew faster than the industry, indicating strong consumer acceptance of our products and services, and in the fourth quarter our minutes of use growth rate led the industry's largest carriers. We had solid performance in the key international, data and "800" services markets, each of which grew at better than a 20 percent rate in 1994.

Regrettably, in the fourth quarter, a streak of nine consecutive quarters of increased long distance operating income was broken. We experienced a decrease from the third to fourth quarter 1994, the result of a decline primarily driven by intense competition in the long distance marketplace. However, compared to fourth quarter a year earlier, long distance revenues grew 7 percent and operating income increased 4 percent.

We have taken steps to reinforce and build on our market position through new product introductions, marketing initiatives, process and productivity improvements, and investments in new technology that we believe will further differentiate Sprint's services in the marketplace. Already in 1995 we introduced Sprint Sense℠

to the residential market, a simple-to-understand flat rate calling plan designed to improve customer retention.

Sprint's local communications division enjoyed a banner year in 1994, as both revenues and operating income grew 7 percent during the year. Our strong performance in 1994 was fueled by access line growth rates that were among the industry's best, by solid increases in access minutes of use, by strong customer demand for new vertical services and by increases in equipment sales. The local division continues to leverage its advanced network infrastructure, which includes digital switching service to more than 97 percent of our local customers.

Our nationally recognized brand has been a powerful driver in Sprint Cellular's excellent results. More than 1 million customers, a 59 percent increase from a year ago, now have Sprint Cellular service, making Sprint the eighth-largest cellular operator in the nation. Market penetration improved to 5.4 percent of the population we serve. Both our customer growth rate and market penetration are among the best in the industry.

OUR INTENT IS TO EMERGE AS ONE OF A HANDFUL OF TRULY SIGNIFICANT COMMUNICATIONS COMPANIES IN THE WORLD.

Despite the company's strong, across-the-board financial performance, the price of Sprint shares declined in the second half of 1994. We find this disappointing and frustrating.

We believe the decline, which affected most of the telecommunications industry, may be due in part to uncertainties surrounding regulatory and legislative changes that may emerge in coming months, uncertainty related to the completion of our international alliance and the timing and magnitude of our investment in developing a competitive local communications service on a national scale. While there are uncertainties in our business, or in any business, we have no doubt that the company is stronger and better positioned for the future than ever before.

A unique combination of assets

Sprint continues to build on its unique combination of assets – including one of the industry's most highly recognizable brand names; America's only nationwide 100 percent digital, fiber-optic network; a strong presence in long distance, local and wireless communications; a powerful international position; and a team of highly capable, motivated employees.

Our intent is to emerge as one of a handful of truly significant communications companies in the world. Together with our partners, we have taken the necessary steps to create a single-source provider that will define communications in the 21st century. Through prudent, measured investment and constant focus on the needs of our customers, we remain committed to building long-term shareholder value and a company that serves its customers and its employees in a world-class manner.

Sincerely,



William T. Esrey
Chairman and Chief Executive Officer
March 7, 1995

CHOICE





WHAT CONSUMERS

DRAWING THE blueprint FOR THE FUTURE OF communications

A decade ago, Sprint revolutionized the long distance market by building the industry's first 100 percent digital fiber-optic network.

Today, Sprint is blazing a bold new trail toward full competition in the $95 billion local communications marketplace. Our blueprint, which took shape during 1994, promises to define the way communications services are delivered into the next century.

Sprint's vision is anchored in our ability to deliver the industry's best package of integrated communications services – voice, video, data and wireless. While others may talk about creating a total package of services, Sprint has made it a reality through our presence in the local, long distance and wireless businesses, combined with our planned joint venture with three of America's largest cable TV companies – TCI, Comcast and Cox.

By linking brand image and our core strengths with these cable TV partners, Sprint is building a new company. It will offer both wireline and wireless communications delivery to the doorstep of consumers and businesses across the nation and that will bring choice to the local telephone marketplace for the first time on a national basis.

In Little Rock, Ark., Sprint is already testing a new broadband service that demonstrates the power of this integrated communications concept. Called "Customer Choice 2000," the service delivers Sprint long distance, 22 channels of cable TV, plus switched video and data services – all over a single line, at a level of quality rated superior to existing communications delivery systems by those participating in the trial.

The advantages of a service like Customer Choice 2000 are clear: along with improved picture quality, subscribers get lower costs for their voice and data calls. As soon as competition is allowed, competitive local service can be added, too – piggybacking local voice calls onto the same high-capacity line.

OUR BLUEPRINT, WHICH TOOK SHAPE DURING 1994, PROMISES TO DEFINE THE WAY COMMUNICATIONS ARE DELIVERED WELL INTO THE NEXT CENTURY.

This superior broadband technology is just part of Sprint's blueprint for the future of communications. An equally important component is attractive market coverage. Sprint's three cable TV partners today operate networks that pass 30 million homes – about a third of the total households in the U.S. That number is expected to grow as additional cable companies affiliate with the Sprint/cable venture. Because these cable systems cover the "last mile" to the home or office with broadband transmission capacity, they are a perfect complement to Sprint's nationwide fiber-optic long distance network.

Sprint's integrated service strategy includes two other important components as well: global reach and wireless technology. Our 1994 Memorandum of Understanding with Europe's two largest telecommunications carriers – Deutsche Telekom and France Telecom – envisions the establishment of a powerful new global competitor. In the U.S., the Sprint/cable venture will have a growing presence in the wireless market – with the strategic goal of establishing a nationwide wireless service that can be fully integrated with the venture's wireline voice, data and video services.

Just as we reshaped the industry with fiber-optic technology a decade ago, Sprint's bold moves in 1994 began forging a dramatic new model of seamless, integrated communications for the 21st century and beyond. On the strength of Sprint's leadership, competition and innovation will soon transform the market for local communications – and, ultimately, customers will emerge as the big winners.

	DESCRIPTION	MARKETS
LONG DISTANCE	Sprint provides global voice, video and data communications services. The long distance division serves nearly 8 million customers with the only nationwide 100 percent digital, fiber-optic network in the U.S. It also provides voice services to more than 290 countries and locations, including connections to 100 percent of the world's direct-dial countries. Sprint also owns and operates SprintNet®, one of the world's largest global data networks, with switching centers in more than 300 major cities in Europe, Asia and Latin America.	Long distance markets include residential; small, medium and large businesses; domestic and international; and federal, state and local governments. Sprint has as customers 81 percent of the Fortune 500 largest U.S. industrial companies, as well as offshore-based multinational corporations. The company is developing a presence in emerging multimedia markets through rapid deployment of value-added services that are portable, customizable, and easy to use.
LOCAL TELECOMMUNICATIONS	Sprint provides local telephone service through more than 6.4 million customer lines in 19 states. More than 97 percent of local customers are served by digital switching technology; more than 70 percent are served by Signaling System 7 software. Additionally, more than 13,000 sheath-miles of fiber-optic cable is deployed systemwide. This provides a platform for a portfolio of network-based voice, video and data services.	Local markets include residential; small, medium and large businesses; and federal, state and local governments. The operating companies also provide access to local customers for long distance companies. In addition to regulated services, Sprint serves growing markets for unregulated, value-added services, inside and outside its traditional territories. The company is positioned in growing markets for interactive and multimedia services, including telemedicine, distance learning, financial and entertainment applications.
CELLULAR AND WIRELESS	Sprint Cellular is one of the nation's fastest-growing cellular companies. The company operates cellular systems in 87 metropolitan and rural service areas in 14 states, and it has ownership interests in 53 other markets, representing proportionate market ownership of 20.5 million potential customers. In terms of customers, Sprint Cellular's customer base is larger than the cellular operations of two Regional Bell Operating Companies.	Sprint Cellular provides cellular voice and data service to individual consumers; small, medium and large businesses; as well as federal, state and local governments. In 1994, Sprint Cellular closed the year with more than 1 million customers after experiencing a growth rate of 59 percent. Sprint Cellular also is well positioned to participate in emerging markets for wireless data and Personal Communications Services (PCS).
PRODUCT DISTRIBUTION	Sprint/North Supply is one of the nation's largest wholesale distributors of voice, data and teleconferencing equipment, security and alarm systems, cable television and electrical products.	Sprint/North Supply provides equipment and services to major telecommunications companies, various product resellers, cable television companies, and security and alarm dealers. Sprint/North Supply also serves markets with materials management services.
DIRECTORY PUBLISHING	Sprint's publishing companies, comprised of Sprint Publishing & Advertising and Centel Directory Company, collectively are the 10th largest Yellow Pages publisher in the United States.	The Sprint Publishing & Advertising companies publish 335 directories with an annual circulation of 16.1 million across 20 states. The subsidiary also serves markets for specialty directories and integrated marketing services.

We are prepared to **LEAD** our ***industry*** into the **21st Century**

LONG DISTANCE

1994 RESULTS

NET OPERATING REVENUES

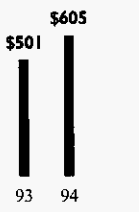
(in millions)



+11% Change

OPERATING INCOME*

(in millions)



+21% Change

*excluding nonrecurring items

OPERATING INCOME MARGIN*

(in percent)



+9% Change

*excluding nonrecurring items

KEY STRATEGIES

Focus resources on key markets: Pursue the extraordinary opportunity to reach millions of additional customers through our new cable venture. Expand Sprint's brand recognition. Position for the future by anticipating regulatory and competitive changes.

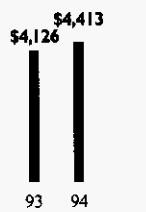
Accelerate revenue while improving operating income growth: Implement an advanced, broadband infrastructure which improves efficiency, reduces costs, and enhances business process improvement. Offer services with a level of reliability previously unheard of in the industry.

Capitalize on our worldwide service offering: Grow international markets through strategic alliances and expansion of Sprint's global network facilities.

LOCAL TELECOMMUNICATIONS

NET OPERATING REVENUES

(in millions)



+7% Change

OPERATING INCOME

(in millions)



+7% Change

*excluding nonrecurring items

ACCESS LINE GROWTH

(in percent)



Accelerate operating income growth and improve cost efficiency: Focus on improvement in operating efficiencies through continued process improvement, selective organizational streamlining and information system enhancements. Increase emphasis on marketing non-regulated, value-added products and services.

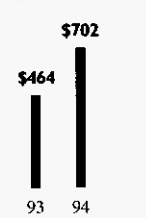
Further enhance network technologies: Deploy technologies to meet emerging demand for advanced broadband services.

Seek regulatory and legislative changes: Encourage progressive public policies to bring the full benefits of communications capabilities to customers.

CELLULAR AND WIRELESS

NET OPERATING REVENUES

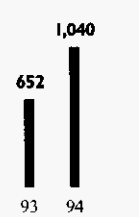
(in millions)



+51% Change

CUSTOMERS

(in thousands)



+59% Change

OPERATING CASH FLOW MARGIN*

(in percent)



+19% Change

*excluding nonrecurring items

Expand customer base: Broaden and diversify our distribution channels and maximize value of customers they attract. Attract and retain customers through exceptional customer service.

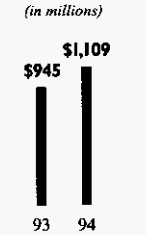
Strengthen our incumbent position: Build on our network infrastructure and maximize our customer service and marketing advantages to prepare for future PCS competition. Leverage the Sprint brand and pursue integration opportunities with Sprint's PCS plans.

Improve operating margins and financial results: Enhance average revenue per customer and improve our yield per minute of use, cut fraud and bad debt, consolidate functions, and utilize more efficient technologies.

PRODUCT DISTRIBUTION

NET OPERATING REVENUES

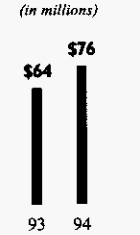
(in millions)



+17% Change

OPERATING INCOME*

(in millions)



+18% Change

*excluding nonrecurring items

Increase operating income: Achieve reduced expenses and improved operational efficiency. Increase emphasis on marketing high-margin products.

Enhance industry position: Concentrate on key strategies, including customer service, process improvement and solution selling – to position as the industry's leading distributor.

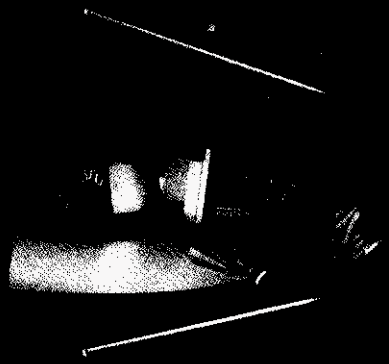
DIRECTORY PUBLISHING

Improve customer satisfaction: Provide the most efficient resource for consumer buying decisions. Implement a market-focused, value-based pricing strategy.

Position for future growth: Grow the core business while investigating alternatives for Yellow Pages delivery. Continue to automate and integrate sales, graphics and production functions.



For the third time, Sprint was the choice to upgrade the Department of Energy's Energy Sciences Network, managed by Lawrence Livermore National Laboratory in Livermore, Calif. *Tim Clifford*, left, director-engineering for Sprint's Government Systems Division in Herndon, Va., worked closely with *Jim Leighton*, Lawrence Livermore's manager-networking and distributed computing, to help complete the $24.7 million contract, which uses advanced broadband communications and ATM (Asynchronous Transfer Mode) technology.



GLOBAL PARTNERSHIP

The long distance division handles a variety of teleradiology, telemedicine and video work for hospitals, physicians, insurance concerns and other health care providers through its Healthcare Application Network Delivery System (HANDS®), a nationwide medical information network.

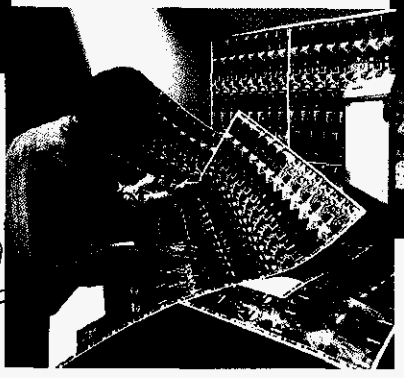


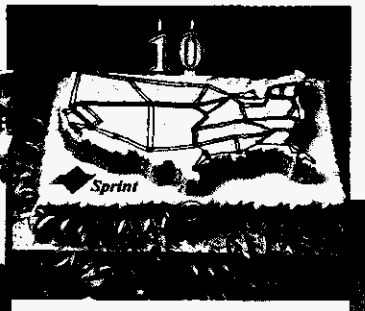
AGGRESSIVELY ANTICIPATING customer NEEDS IN A global ECONOMY

LONG DISTANCE 1994 YEAR IN REVIEW

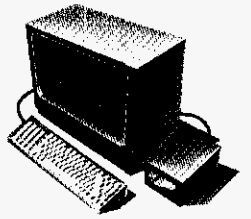


◄ **Targeting the college market in 1994**, Sprint produced significant market share growth. *Sprint's Al Lenio, left,* worked with Barnes & Noble Bookstore Manager *Chuck Booth* on a successful long distance marketing campaign at Old Dominion University in Norfolk, Va.





▼ The year 1994 marked the **10th anniversary celebration** of what is still the only nationwide, 100 percent digital, fiber-optic long distance telephone network. Sprint began construction of the network in 1984.



▲ Sprint will begin **cross-marketing campaigns with its new cable television partners**. Starting in 1995, Sprint will gain direct access to nearly 30 million American homes.



▲ Sprint unleashed **the largest prepaid telephone card promotion in U.S. history**. Under the supervision of Sprint Telemedia's *Harry Campbell*, 4.4 million Sprint prepaid FŌNCARDS℠ have been included in Gillette men's and women's disposable razor packages to promote the 1995 NCAA Men's and Women's Basketball Tournaments.

◄ Sprint launched **several major image campaigns for specific ethnic markets in 1994.** One incorporated the legendary Monkey King in marketing, advertising and community relations programs directed to U.S. Chinese-American communities.



▲ Thanks to **new government regulation**, consumers will soon have the choice to use their own long distance company on any pay telephone. Sprint will benefit from a more level competitive playing field.

In the highly competitive long distance industry, Sprint posted strong gains during 1994, topping 1993's record-setting performance in both revenues and operating income. Our minutes of use also grew faster than that of the industry overall, indicating strong customer acceptance of our products and services.

For the year, the long distance division's operating income rose 21 percent, to $605 million, on an 11 percent increase in revenues, to $6.81 billion. Operating margins also improved to 8.9 percent, from 8.2 percent in 1993. Driving this strong performance were key international, data and "800" service markets, each of which grew at better than a 20 percent rate.

In the fourth quarter, our string of nine consecutive quarters of increased long distance operating income was interrupted, a decline primarily driven by intense competition in the long distance marketplace. We have responded with new product introductions, marketing initiatives, process and productivity improvements, and investments in new technology.

SPRINT'S LONG DISTANCE CALLING VOLUME GREW FASTER THAN THAT OF THE INDUSTRY OVERALL. FOR THE YEAR, THE DIVISION'S OPERATING INCOME ROSE 21 PERCENT AND REVENUE INCREASED 11 PERCENT.

To break through the confusing array of long distance pricing plans that confront consumers, Sprint introduced revolutionary new products and services that markedly differentiate

LONG DISTANCE 1994 YEAR IN REVIEW continued

► Teleport Communications Group (TCG) – a key component of Sprint's partnership with three leading cable companies – is **the nation's largest competitive access provider.** The relationship with Teleport will help Sprint reduce its long distance access costs.



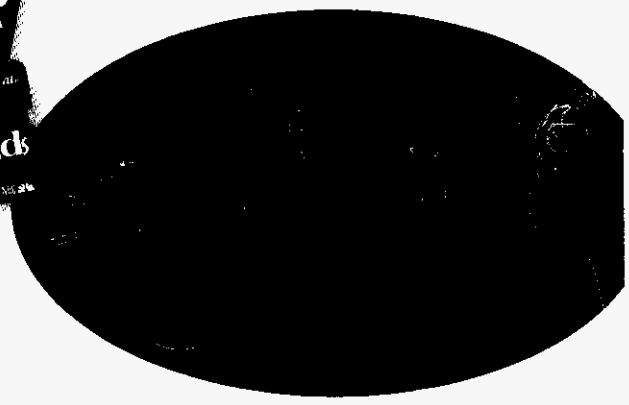
◄ Five international airline carriers – Air France, Air India, LOT Polish Airlines, Mexicana Airlines and Virgin Atlantic Airways – are participating in **Sprint's new international travel rewards program.** Sprint also sponsors frequent flier programs with America West Airlines, Alaska Airlines and TWA.



▲ *George Mattingly*, right, of First Union Corporation in Charlotte, N.C., and *Carol Dempsey*, second from right, of CDP Imaging Systems in Minneapolis, **visit Sprint's technology lab in Burlingame, Calif.**, for a briefing from Sprint's *Terry Kero*, left, and *Sue Sentell*.



▲ **The NBC network used a unique tool to promote all of its new television series for the 1994 Fall Season:** collector-item prepaid long distance telephone cards from Sprint.



▲ Sprint's ability to deliver global data, voice and video services makes the company the ideal choice to become **the carriers' carrier**, providing international transport services for other carriers.

us from our competitors.

Sprint Sense℠, which was launched in early 1995, is a dynamic product that is rapidly generating customer appeal by combining simplicity with the savings consumers seek. Sprint Sense customers pay just 10 cents a minute on their long distance calls after 7 p.m. and all weekend long – the periods when residential costumers make three-fourths of their long distance calls.

Targeted to a variety of ethnic markets, the Sprint Worldwide℠ global calling plan provides unrestricted savings on all calls: domestic or international, placed any time of day, whether direct-dialed or operator-assisted, including calling card and collect calls.

Another solid success is the Sprint Instant FŌNCARD® – a prepaid card which lets callers purchase long distance service in $5, $10 and $20 denominations. The prepaid cards, which can be used at virtually any telephone for domestic or international long distance calls, are now available at over 4,500 retail outlets across the U.S.

IN 1994, WE BEGAN INSTALLING OUR SYNCHRONOUS OPTICAL NETWORK (SONET), AND WE EXPANDED OUR ASYNCHRONOUS TRANSFER MODE (ATM) NETWORK. THESE TECHNOLOGIES SUPPORT ADVANCED MULTIMEDIA APPLICATIONS.

A number of targeted marketing programs including Real Solutions℠ were introduced in 1994 to help us reach and retain business customers. In the residential marketplace, Sprint's Consumer Services Group continued to deliver

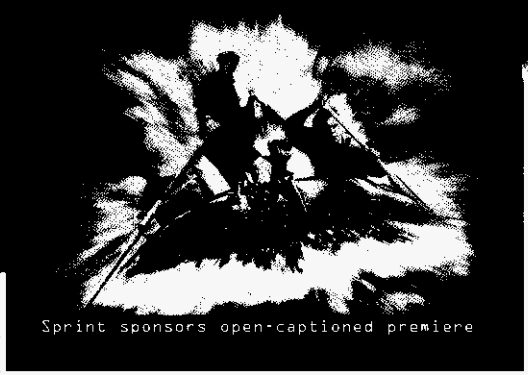


◄ Wireless data helps *Frances Marshall-Brim* keep pace with the **Chicago Board of Trade**. Sprint's Business Services Group major account manager uses a laptop computer to support the world's leading futures exchange. "Every second is money," she says.

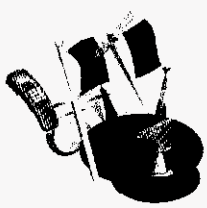


▲ How do you **edit a major movie in simultaneous real-time situations** in Los Angeles and New York? With the technological combination of Silicon Graphics and Sprint. In New York are *Robert Greenberg*, left (standing), CEO of RGA Digital Studios, and Sprint executive *Tom Weigman*, right (standing).

▲ **The New York State Education and Research Network** (NYSERNet) has an agreement with Sprint to upgrade its network. *Dr. Richard Mandelbaum*, right, president of NYSERNet and director-telecommunications at Polytechnic University in Brooklyn, N.Y., consults with Sprint's *Howard McRae*.



▲ **Sprint and Gallaudet University co-sponsored the open-captioned premiere of the movie, "A River Wild,"** in 1994 at Union Station Theater in Washington, D.C. Sprint is the world's largest provider of telecommunications relay service (TRS).



◄ Sprint joined with the International Reading Association and the United Nations Educational, Scientific and Cultural Organization (UNESCO) to sponsor **International Literacy Day**. The event featured an international videoconference between UNESCO's Paris headquarters and Washington, D.C.

exceptional customer satisfaction with innovative and exclusive long distance products and services for USAA (United Services Automobile Association). The San Antonio-based company, which ranks at the forefront of insurance and financial services organizations worldwide, shares Sprint's intense commitment to quality and technology.

Sprint also enhanced its capacity to support sophisticated applications aimed at the data services market, where we hold an industry-leading share of the data delivery business. The construction of Sprint's 100 percent digital, fiber network in the mid-1980s set a standard that forced others in the industry to play catch-up. In 1994, we raised the bar again.

We began installing our Synchronous Optical Network (SONET), and expanded our Asynchronous Transfer Mode (ATM) network. The integration of SONET equipment with a network architecture of bi-directional fiber-optic "rings" is unique to Sprint. When the first phase is fully deployed nationwide in 1996, this technological platform will ensure superior survivability, with restoration times measured in milliseconds, instead of minutes or hours. As a result, service disruptions will be essentially transparent to customers. No other carrier will be within several orders of magnitude of such restoration times.

These high-speed technologies are adding vast capacity to Sprint's network as the demand for multimedia services begins to grow. Sprint's leadership is contributing to our ability to serve the sophisticated needs of such customers as Hughes Aircraft, Amoco and the U.S. government.

Continued growth in international revenues and minutes of use also contributed to Sprint's strong results in 1994. During the year, we announced an agreement in principle to partner with Telmex in developing network links between the U.S. and Mexico. When formed, this partnership will complement the alliance we formed in 1993 to market Sprint long distance services in Canada. Together, these ventures have solidified Sprint's North American strategy.

To further expand our presence in continental Europe, we entered a new joint venture in Poland in 1994. Our 25 percent stake in a local telephone and cable television network there will give Sprint an additional opportunity to showcase our technological capabilities internationally.

The long distance division also continued to focus on customer service and quality improvements in 1994. Since the third quarter of 1992, the division's Sprint Quality initiative has identified significant operating cost and access fee savings.

LONG DISTANCE OUTLOOK



In an industry undergoing rapid and profound change, we believe the Sprint name and brand image is a highly valuable asset. We have invested more than $1 billion over the past 10 years in building the Sprint name to where today it is highly recognized and favorably received by the marketplace, and stands as one of only three national telecommunications brands.

Our challenge is to leverage this formidable brand position to create substantial new business opportunities. To accomplish that goal, the long distance division will focus on several specific initiatives:



INTEGRATED SERVICE OFFERING Our joint venture with TCI, Comcast and Cox provides Sprint with substantial new opportunities to market our services as the only major company capable of packaging long distance, wireless and local service (including cable TV).

BROADBAND DATA SERVICES As the first carrier to introduce high-capacity services like Asynchronous Transfer Mode (ATM), Sprint enhanced its reputation as the innovator in data communications. Our focus on cutting-edge technology will continue, with a long-term goal of making Sprint the first choice for broadband network services – both in North America and around the globe.

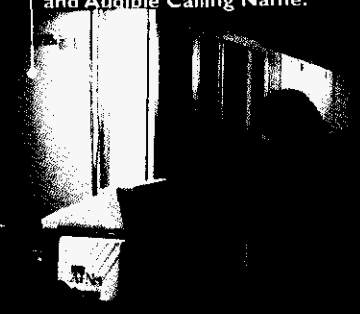
CUSTOMER SATISFACTION Currently considered a leading company in overall customer satisfaction in the consumer market, Sprint will use quality improvement initiatives to widen our competitive advantage by offering targeted service packages, enhanced billing options and highly responsive levels of customer service.

PARTNERSHIPS The proposed global partnership of Sprint, Deutsche Telekom and France Telecom is the most exciting partnership to be discussed in the international marketplace. As envisioned, the transaction would give Sprint added financial and marketing power to further leverage our technological and innovative superiority in the U.S. and around the world.



Sprint will become the nation's first telephone company to carry Sega Channel's interactive game service when Sprint/Carolina Telephone offers the program through televisions in about 1,000 Wake Forest, N.C., homes by mid-year 1995. Sega Channel provides Sega Genesis video games-on-demand, 24 hours a day.

Sprint/Central Telephone-Nevada has built Advanced Intelligent Network capacity into its Las Vegas network. Kelley Ferrence, standing, director-Central Office engineering, and customer service representative Pat Johnson are helping the company introduce four new services in 1995: Voice Activated Dialing, Personal Number Service, Reminder Service and Audible Calling Name.



Las Vegas

ADVANCED INTELLIGENT NETWORK



Sprint's local division brings face-to-face communications to computer terminals with desktop videoconferencing.

BRIDGING THE local NETWORK TO THE international marketplace

LOCAL 1994 YEAR IN REVIEW



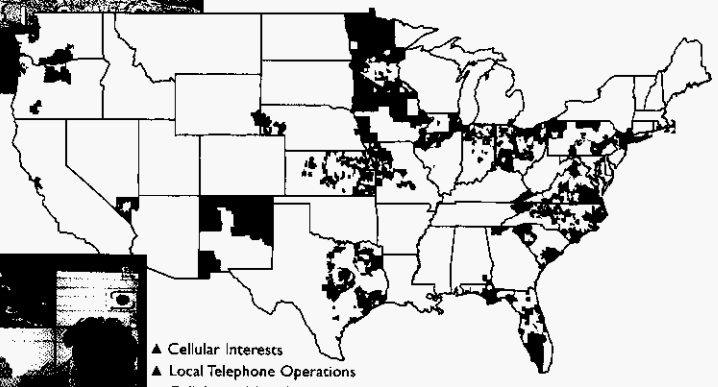
▲ *Jim Kostreba*, left, sheriff of Stearns County, Minn., and St. Cloud, Minn., Chief of Police *Dennis O'Keefe* **use one of the most sophisticated law enforcement networks in the country.** The city and the county selected Sprint/United Telephone-Midwest to integrate their wireless and wireline information systems.



◄ Sprint's existing telephone companies and the corporation's venture with cable TV will offer a host of **new consumer and business applications** as voice, video, data and entertainment services converge.



▲ Sprint partner Comcast Corporation, based in Philadelphia, will be among the companies **upgrading its network** to meet standards needed for telephone service.



▲ Cellular Interests
▲ Local Telephone Operations
Cellular and Local

▲ Sprint provides **local telephone service** through more than 6.4 million customer lines in 19 states. More than 97 percent of Sprint's local customers are served by digital technology.

Sprint's local division is a leader in shaping the future of local telecommunications. For example, Sprint is one of the network managers for the North Carolina Information Highway, which has attracted nationwide attention as a model high-capacity broadband network. The network will soon allow schools, hospitals, libraries, government agencies and other users to communicate not just by voice and fax but through two-way, full-motion video. In a separate initiative, Sprint's local operating company in North Carolina also is conducting a broadband, interactive network trial in the city of Wake Forest. The project will bring various interactive services to televisions and computers in 1,000 homes.

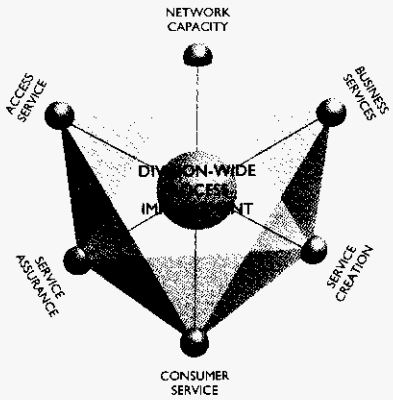
Leadership in delivering broadband communications services is just one of many ways in which Sprint's local division distinguished itself during the year.

THE LOCAL DIVISION'S STRONG PERFORMANCE WAS DRIVEN BY A HEALTHY 4.8 PERCENT INCREASE IN ACCESS LINES SOLD, BY BRISK CUSTOMER DEMAND FOR NEW SERVICES, AND BY EFFICIENCIES ACHIEVED FOLLOWING OUR MERGER WITH CENTEL.

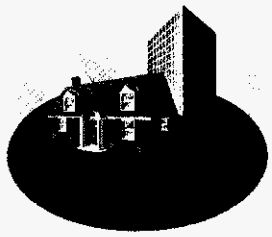
Sprint's financial accomplishments were equally impressive. Revenues from our local telephone operations increased 7 percent in 1994, to $4.41 billion – a rate of growth that was the best in the industry. Operating income also grew 7 percent, to $1.02 billion, exceeding the billion-dollar mark for the first time. This strong performance was driven by a healthy



▲ Sprint/United Telephone-Florida has installed a **Community Health Information Network** for Naples Community Hospital. *Dr. Phillip Francis* can access patient information using the advanced data network designed by Sprint project leader *Bob Busching* and administered by *Sallie Williams*, vice president and chief information officer of the Naples Community Healthcare System.



▲ Already one of the most efficient operations in the country, Sprint's local division launched **six major process improvement efforts** in 1994 – in business service, consumer service, service creation, service assurance, network capacity and access service.



▲ Sprint's **local division is conducting trials** which will lead to such services as movies-on-demand, interactive games, home shopping, work-at-home applications and access to health service providers.

▼ Schools in rural North Carolina are using **distance learning** made possible by the North Carolina Information Highway and Sprint's local division. *Janet Ward* teaches students at St. Stephens High School, while students at Bunker Hill High School participate using interactive video.



4.8 percent increase in access lines sold, by brisk customer demand for new services and by efficiencies gained following the addition of Centel's local telephone properties.

Sprint's local division is focusing on four key areas:

REGULATION

Sprint is seeking changes in price regulation which is now imposed by public utility commissions. In addition, we are aggressively working with regulators to promote competition in the local telephone market.

MORE THAN 97 PERCENT OF SPRINT'S LOCAL CUSTOMERS ARE SERVED BY DIGITAL SWITCHING TODAY. WE INVESTED OVER $900 MILLION TO UPGRADE OUR LOCAL NETWORKS IN 1994, ENHANCING OUR ABILITY TO PROVIDE ADVANCED NETWORK FEATURES.

NEW, VALUE-ADDED SERVICES

In cities like Las Vegas, Sprint's high-capacity fiber-optic "backbone" network lets us offer a range of services beyond voice transmission. These services will include credit card/banking transactions, hotel room reservations and video sporting events.

IMPROVED NETWORK CAPACITY AND QUALITY

More than 97 percent of Sprint's local customers are served by digital switching today. We invested over $900 million to upgrade our local networks in 1994, and we will continue this aggressive effort to ensure that our facilities can deliver the advanced network features tomorrow's customers will demand.

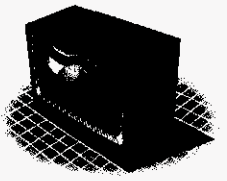
INCREASED OPERATING EFFICIENCIES

Sprint launched a formal process improvement initiative during 1994 designed to increase efficiency and to improve customer satisfaction throughout our local operations. This initiative has already identified significant ways to improve the division's major functions – including a number of processes related to network capacity, access service and business and customer service.

LOCAL OUTLOOK

Competition in the local exchange will stimulate extraordinary change and growth opportunities in the last half of the decade.

Sprint is preparing to seize new opportunities – first, by pursuing regulatory policies that promise a level playing field for all local access providers; and second, by continuing to invest in our local networks so that they are capable of delivering tomorrow's high-speed, high-capacity services.



The North Carolina Information Highway is one example of that strategy in action. It will allow Sprint to offer a new generation of services, such as distance learning, telemedicine, home banking and movies-on-demand.

Another example is the Advanced Intelligent Network (AIN) capacity we have built into our Las Vegas network. It will enable us to introduce four new services in 1995: Voice Activated Dialing, Personal Number Service, Reminder Service and Audible Calling Name. Many more services will follow as we expand new offerings throughout our 19-state area.



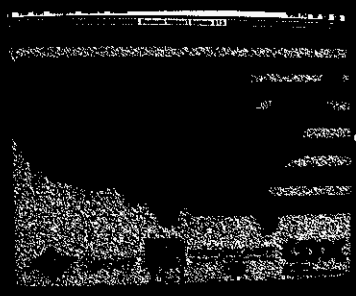
Sprint's alliance with three leading cable television companies should create new opportunities for local division employees whose skills will be valuable to the venture. In addition, we will have access to the technical and marketing skills of our cable partners. These synergies boil down to a tremendous growth opportunity for our local division business as it moves into cable and broadband-related services.



Sprint's increased brand awareness in 1994 helped Susan Boatright of Virginia Beach, Va. reinforce her reputation as one of Sprint Cellular's most productive sales managers. She has been instrumental in developing promotions and tracking results which have achieved 120 percent of market sales objectives for the past two years.

Sprint Cellular considers its empowered workforce a key strategic advantage in a fast-growing marketplace. A quality development team in engineering – including, from left, Maria Santiago, Chris Chisnell, Tyrone Franklin, Geri Ann Freeman and Jennifer Bonifacic – is motivated by a leading-edge human resources program that offers incentive compensation packages for all levels of Sprint Cellular's 2,500-member workforce.

INCREASED BRAND AWARENESS



Sprint Cellular will be a key source of talent and expertise necessary to launch Sprint and its cable TV partners' combined wireless initiatives. Sprint Cellular has built a reputation as a formidable regional competitor, and its participation in the joint venture will catapult the company as a national player with a powerful national brand name.

KEEPING customers IN TOUCH — anytime, anywhere

CELLULAR AND WIRELESS 1994 YEAR IN REVIEW



▲ In 1994, Sprint Cellular expanded its distribution channels and **negotiated non-traditional dealer agreements** with national retailers, such as this Sam's Club in Las Vegas. Sprint sales representatives *Valerie Whitsett* and *Greg Egloff* enjoy brisk day-to-day walk-up business activity.

▲ American Personal Communications (APC), which operates in the Washington, D.C. and Baltimore areas, is the **first wireless affiliate** of the Sprint/cable TV venture.

▼ Cellular customers in Las Vegas helped Sprint test a **personal communications service called FutureLink℠.** It allows customers to communicate via a single personal telephone number from their office, their home, or while traveling with a lightweight pocket telephone.





► Sprint is an investor in the **international Iridium consortium,** which will provide global wireless service through a constellation of 66 satellites in low-earth orbit.

Strong customer growth catapulted Sprint's cellular and wireless division to new heights in terms of customers, penetration, revenue and operating income during the past year. In December, Sprint Cellular reached the one million customer milestone, and market penetration surpassed the 5 percent level, well ahead of the industry average. We also expanded our geographic footprint by activating more than 225 new cell sites – a record number for the division.

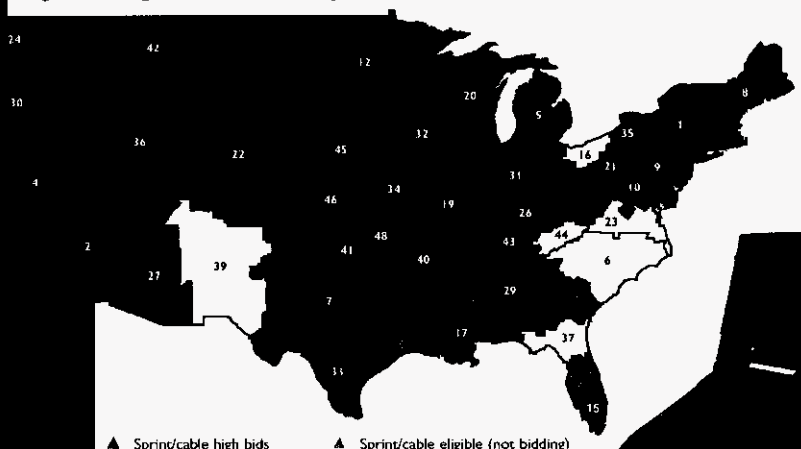
It took Sprint's cellular and wireless division eight years to reach its first half million customers and just 18 months to double its size, closing the year with more than 1 million customers. These achievements place Sprint squarely among the leaders in the industry's fastest-growing segment and position us for greater gains in the years ahead. Sprint now ranks as the eighth-largest cellular company in the U.S., with more customers than the cellular operations of two Regional Bell Operating Companies.

IT TOOK SPRINT CELLULAR EIGHT YEARS TO REACH ITS FIRST HALF MILLION CUSTOMERS AND JUST 18 MONTHS TO DOUBLE ITS SIZE, CLOSING THE YEAR WITH MORE THAN 1 MILLION CUSTOMERS.

Expanded sales distribution channels and a competitive cost structure contributed to the profitable growth. Operating income surged to $86 million in 1994 – a three-fold improvement over the previous year's results –



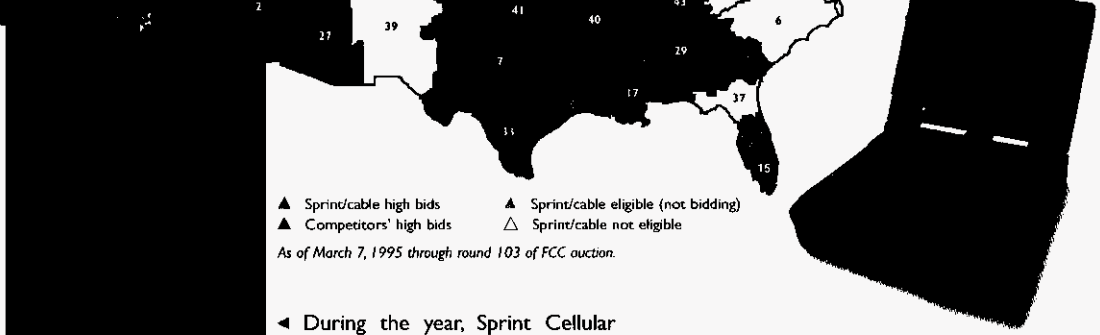
◄ ▼ The Sprint/cable joint venture participated aggressively in the **FCC's auction for Personal Communications Services** (PCS) licenses. Sprint's carefully conceived investment in PCS will enable the Sprint/cable joint venture to provide truly national service. *Gary Forsee*, left, standing, the interim CEO for the project, led Sprint's PCS efforts. Also playing key roles were *Tom Mateer*, right, standing; *Don Goldman*, sitting, left; and *Bill Rector*, foreground.



▲ Sprint/cable high bids
▲ Competitors' high bids
▲ Sprint/cable eligible (not bidding)
△ Sprint/cable not eligible

As of March 7, 1995 through round 103 of FCC auction.

◄ During the year, Sprint Cellular **constructed more than 225 new cell sites** to support strong customer growth, improve portable service and expand coverage. To maintain aesthetic balance in our communities, Sprint Cellular believes in creative tower solutions, such as this recently constructed tower in Charleston, S.C., which was built to resemble a pine tree with branches.



▲ As part of its leadership in wireless data applications, Sprint **has introduced Cellular Digital Packet Data** (CDPD). A special national cellular data team oversees the company's development of wireless data transmission.

on a 51 percent increase in revenue, to $702 million. This record-setting performance in 1994 underscores Sprint's ability to market wireless services. A remarkable 158,000 new customers were added in the fourth quarter alone.

By year's end, our market penetration stood at 5.4 percent – more than double the penetration level of just two years ago. In our Las Vegas market, we put Sprint Cellular service in the hands of more than 10 percent of potential customers, posting the highest penetration rate of any cellular carrier in any U.S. city.

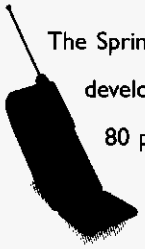
Today, Sprint operates cellular systems in 87 metropolitan and rural service areas, and it has ownership interest in 53 other markets. These franchises represent a combined market of more than 20 million potential customers, adjusted for ownership, giving Sprint excellent prospects for growth through continued market penetration. In 1994, we worked to capitalize on this potential by making Sprint Cellular service available through new and diversified marketing channels. These include major retailers, such as Office Depot, Sam's Club, Sears and Radio Shack, as well as the company's own retail stores, which optimize color, floor space and design in order to merchandise and sell service based on lifestyle needs.

SPRINT CELLULAR IS LARGER THAN THE CELLULAR OPERATIONS OF TWO BELL COMPANIES. AT YEAR-END, MARKET PENETRATION STOOD AT 5.4 PERCENT, WELL AHEAD OF THE INDUSTRY AVERAGE AND MORE THAN DOUBLE OUR PENETRATION LEVEL OF JUST TWO YEARS AGO.

To keep pace with our growth and customer demand for new products and services, Sprint Cellular selected high-growth areas for cell site construction and deployed Narrowband Advanced Mobile Phone Service (N-AMPS). A digitally enhanced technology, N-AMPS triples our call-handling capacity and allows us to introduce new PCS-like services. Sprint Cellular will use N-AMPS as an interim technology until an advanced digital technology is deployed.

The digital technology Sprint Cellular is awaiting is Code Division Multiple Access (CDMA). In 1994, Sprint announced it will become one of the nation's first cellular carriers to debut CDMA. It will be deployed in Las Vegas in 1995. CDMA promises a 10-fold increase in call-handling capacity, while also enhancing the transmission quality and the privacy of calls placed over cellular phones.

CELLULAR AND WIRELESS OUTLOOK



The Sprint brand name represents a key strategic asset in the long-term development of our wireless business. Recognized by more than 80 percent of U.S. consumers, the Sprint name simplifies the task of building a national wireless network by significantly reducing the cost to market the service on a nationwide basis.

Access to customers is an equally important component of our wireless strategy. Through the joint venture with our cable partners, we expect to create a national footprint by acquiring Personal Communications Service (PCS) licenses and by negotiating affiliation agreements with the license holders in key markets where the venture otherwise would not have a presence.



Another crucial component of Sprint's wireless strategy is cutting-edge technology. Sprint Cellular is now working with other Sprint divisions to develop integrated communications services. One example is FutureLink℠, a "personal number" service that keeps customers in touch through a single phone number for home, office or travel. FutureLink was tested in Las Vegas during 1994, and we plan commercial deployment this year.

Increased sales to Sprint's local telephone operations and to non-affiliated companies contributed to growth in revenues and operating income for Sprint/North Supply in 1994.

One of the nation's largest distributors of communications equipment, Sprint/North Supply is further diversifying its customer base with a solutions-oriented strategic marketing approach, focusing on such high-growth areas as data, video and cable TV. Sprint/North Supply has developed value-added services designed to help customers realize the full benefit of voice, video and data products distributed by the company.

SPRINT/NORTH SUPPLY'S SOLUTIONS-ORIENTED MARKETING HELPS CUSTOMERS REALIZE THE FULL BENEFITS OF VOICE, VIDEO AND DATA PRODUCTS DISTRIBUTED BY THE COMPANY.

A market-driven, customer segmentation program is further differentiating Sprint/North Supply's customer service, while helping the company target high-margin market opportunities. Added revenues also have been generated through cross-marketing relationships with other Sprint business units.

OUTLOOK

A comprehensive systems modernization and business process improvement program is strengthening Sprint/North Supply's position in existing and emerging distribution markets.

Sprint/North Supply will continue to expand its service to the cable television market as the Sprint/cable joint venture and other cable operators upgrade their systems for competitive local telephone service.

A growing outsourcing trend for materials management services also is providing expanded opportunities to manage distribution operations for manufacturers and retailers.

PRODUCT DISTRIBUTION 1994 YEAR IN REVIEW



◀ Exceptional customer satisfaction is the daily goal of *Ken Oliveira*, manager for Sprint/North Supply's distribution center in Ontario, California. Sprint/North Supply has received **Pacific Bell's prestigious Excellence in Quality Award** for three consecutive years.



◀ Atlanta-based **Cox Communications** uses Sprint/North Supply products in cable systems in the Southeast U.S. Sprint/North Supply's *LaMont Eanes* meets with *Gary Cassard* of Cox in Ocala, Florida.



▲ When Sprint/North Supply developed a phone with the Sprint logo, Sprint/Mid-Atlantic marketed the product in North Carolina, Virginia, South Carolina and Tennessee. *Bob Culler* led **a campaign that sold or leased 65,000 Sprint Flair™ phones.**

▲ *Cathy Boyd*, standing, spearheaded **a strategic business plan** that helped Sprint/North Supply diversify its customer base. The plan received input from all levels of employees, including, from left, *Robin Oberle*, *Bill Byers* and *Neal Brockschmidt*.



▲ Products marketed by Sprint/North Supply must meet **rigorous standards**. Here, *Mark Raney* and *Jennifer Stilgenbauer* test a new cordless telephone.

Paced by exceptional results in its Chicago and Sprint/Centel markets, Sprint's directory publishing company increased revenues in 1994.

Sprint Publishing & Advertising continued to build on its position as the nation's 10th largest Yellow Pages publisher. Following Sprint's merger with Centel in 1993, the company introduced the Sprint brand into local telephone markets served by Sprint/Centel. Through new contractual arrangements, Sprint Publishing is now leveraging its brand name in the growing central Florida market.

THROUGH NEW CONTRACTUAL AGREEMENTS IN 1994, SPRINT IS LEVERAGING ITS BRAND NAME IN THE GROWING CENTRAL FLORIDA MARKET.

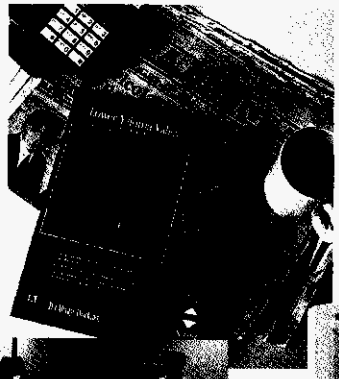
In 1994, Sprint Publishing achieved greater customer satisfaction through the consolidation of production facilities and the implementation of an advanced contract processing system.

In addition, value to Yellow Pages advertisers is being added through enhanced color and other new features.

OUTLOOK

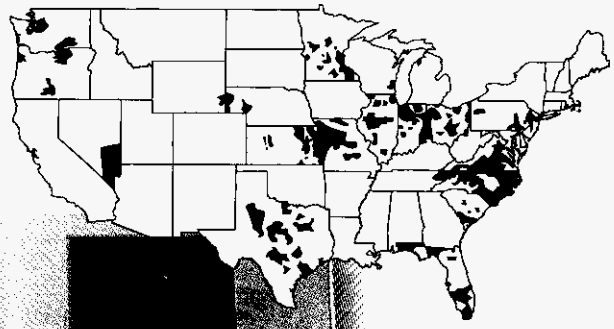
Sprint Publishing & Advertising's state-of-the-art information and production systems will enable the company to serve customers on a nationwide scale. As Sprint and its cable partners enter newly competitive local telephone markets, Sprint Publishing is prepared to serve businesses in those markets with high-quality advertising opportunities, provided through Sprint branded directories, as well as specialty publications. The company is also expanding its market research and telemarketing services.

DIRECTORY PUBLISHING 1994 YEAR IN REVIEW



◄ Sprint Publishing & Advertising completed its **first Spanish Yellow Pages section** in 1994 with the publication of the **Lower Yakima Valley** directory (circulation: 48,000) in Washington state.

▼ Sprint Publishing & Advertising and Sprint/Centel Directory Company collectively publish **335 telephone directories with a circulation of 16.1 million** in 20 states.





▲ In 1994, Sprint Publishing & Advertising began **consolidating its nationwide production facilities to Bristol, Tenn.** Reduced costs, more efficient production and improved turnaround time are being achieved in customer service, graphics, market preparation and order entry.



▲ Ten telephone directories produced by Sprint Publishing & Advertising in 1994 offered customers **enhanced color printing on Yellow Pages** to meet more sophisticated marketing goals and improve advertising revenues. The number of directories offering enhanced color is expected to triple in 1995.

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SELECTED FINANCIAL DATA

As of or for the Years Ended December 31, (in millions, except per share data)	1994	1993	1992	1991	1990
Results of Operations					
Net operating revenues	**$12,661.8**	$11,367.8	$10,420.3	$ 9,933.3	$ 9,469.8
Operating income[1]	**1,787.8**	1,250.6	1,213.4	1,185.6	1,045.3
Income from continuing operations[1],[2],[3],[4]	**883.7**	480.6	496.1	472.7	351.1
Earnings per common share from continuing operations[1],[2],[3],[4]	**2.53**	1.39	1.46	1.41	1.06
Dividends per common share	**1.00**	1.00	1.00	1.00	1.00
Financial Position					
Total assets	**$14,936.3**	$14,148.9	$13,599.6	$13,929.8	$14,080.6
Property, plant and equipment, net	**10,878.6**	10,314.8	10,219.9	10,310.5	10,295.2
Total debt (including short-term borrowings)	**4,937.2**	5,094.4	5,442.7	5,571.2	6,082.3
Redeemable preferred stock	**37.1**	38.6	40.2	56.6	60.0
Common stock and other shareholders' equity	**4,524.8**	3,918.3	3,971.6	3,671.9	3,353.5
Cash Flow Data					
Cash from operating activities	**$ 2,472.0**	$ 2,112.4	$ 2,250.6	$ 1,820.6	$ 1,324.5
Capital expenditures	**2,015.9**	1,594.7	1,466.2	1,523.2	1,868.9
Free cash flow[5]	**106.7**	170.6	184.3	1.6	(833.4)

[1] During 1993, nonrecurring charges of $293 million were recorded related to (a) transaction costs associated with the merger with Centel and the expenses of integrating and restructuring the operations of the two companies and (b) a realignment and restructuring within the long distance division. Such charges reduced consolidated 1993 income from continuing operations by $193 million ($0.56 per share).

During 1990, nonrecurring charges of $72 million were recorded related to the long distance division, which reduced consolidated 1990 income from continuing operations by $37 million ($0.11 per share).

[2] During 1992 and 1991, gains were recognized related to the sales of certain local telephone and cellular properties, which increased consolidated 1992 income from continuing operations by $44 million ($0.13 per share) and consolidated 1991 income from continuing operations by $78 million ($0.23 per share).

[3] During 1994, Sprint sold an investment in equity securities, realizing a gain of $35 million, which increased consolidated 1994 income from continuing operations by $22 million ($0.06 per share).

[4] During 1993, as a result of the enactment of the Revenue Reconciliation Act of 1993, Sprint was required to adjust its deferred income tax assets and liabilities to reflect the increased tax rate. Such adjustment reduced consolidated 1993 income from continuing operations by $13 million ($0.04 per share).

[5] Free cash flow represents cash from operating activities less capital expenditures and dividends paid. Such amount for 1992 excludes the additional proceeds from the sale of accounts receivable of $300 million.

Strategic Developments

On October 25, 1994, Sprint Corporation (Sprint), along with Tele-Communications Inc. (TCI), Comcast Corporation (Comcast) and Cox Communications (Cox), announced the formation of a venture that will provide wireless communications services and local telephone services on a broad geographic basis within the United States. The joint venture will be owned 40 percent by Sprint, 30 percent by TCI and 15 percent each by Comcast and Cox. The parties have signed definitive agreements and created partnerships which are bidding for Personal Communications Services (PCS) licenses being auctioned by the Federal Communications Commission (FCC). The parties have also entered into a joint venture formation agreement, which provides the basis upon which they are developing definitive agreements for their local telephone activities.

On June 14, 1994, Sprint announced that it had entered into a Memorandum of Understanding (the MOU) with Deutsche Telekom and France Telecom to form a global partnership which would offer telecommunications services to business, consumer and carrier markets worldwide. The MOU provided that Deutsche Telekom and France Telecom together would purchase approximately 42.9 million shares of a new class of Sprint common stock at a price of $47.225 per share. The MOU further provided that Deutsche Telekom and France Telecom would also purchase approximately 42.9 million shares of the new class of Sprint common stock at a price of $51.00 per share two years after the initial acquisition. As part of the transaction, Deutsche Telekom and France Telecom would be entitled to representation on Sprint's board. This representation would be based on their actual percentage ownership interest, with a minimum of two directors serving on Sprint's board so long as the two companies own at least 10 percent of the outstanding common stock of Sprint, subject to the approval of the New York Stock Exchange. The formation of the partnership and the acquisition of Sprint stock are subject to conditions, including the negotiation and execution of definitive agreements. The terms in these definitive agreements, including terms relating to the financial investment by Deutsche Telekom and France Telecom, could differ in material respects from those in the MOU. Also, there can be no assurance that definitive agreements will be reached. Other contingencies to the transaction include the approval by Sprint's board of directors and its shareholders, approval by the governing bodies of Deutsche Telekom and France Telecom, and governmental and regulatory approvals.

Sprint/Centel Merger

Effective March 9, 1993, Sprint consummated its merger with Centel Corporation (Centel), creating a diversified telecommunications enterprise with operations in long distance, local exchange, and cellular and wireless communications services. The merger was accounted for in 1993 as a pooling of interests.

Results of Operations

Consolidated

Each of Sprint's primary divisions – long distance, local exchange, and cellular and wireless communications services – generated record levels of net operating revenues and improved operating results in 1994. The long distance division generated a solid 11 percent growth in traffic volumes in 1994, the number of access lines served by the local division grew 4.8 percent, and the cellular and wireless division benefited from a strong 59 percent growth in cellular subscribers.

Total net operating revenues for the year ended December 31, 1994 were $12.66 billion, an 11 percent increase over net operating revenues of $11.37 billion for 1993. Total net operating revenues for the year ended December 31, 1992 were $10.42 billion. For the year ended December 31, 1994, income from continuing operations was $884 million, or $2.53 per share, compared with $481 million, or $1.39 per share, for 1993 and $496 million, or $1.46 per share, for 1992. Income from continuing operations for the year ended December 31, 1994 included a gain related to the sale of an investment in equity securities ($0.06 per share). Income from continuing operations for the year ended December 31, 1993 included charges related to the merger and integration costs associated with the Centel merger and the realignment and restructuring of Sprint's long distance division ($0.56 per share) and a charge associated with the enactment of the Revenue Reconciliation Act of 1993 ($0.04 per share). Income from continuing operations for the year ended December 31, 1992 included a gain related to the sale of certain telephone properties ($0.13 per share).

Non-operating Items

Interest Expense

Interest expense totaled $398 million in 1994 compared to $452 million in 1993 and $511 million in 1992. These decreases generally reflect reductions in the average levels of debt outstanding as well as lower interest rates due to debt refinancings during 1993 and 1992. Sprint's average debt outstanding decreased $334 million and $596 million in 1994 and 1993, respectively, and the effective interest rate decreased 52 and 15 basis points, respectively.

Other Expense, Net

The components of other income (expense), are as follows:

For the Years Ended December 31, (in millions)	1994	1993	1992
Gain on sale of investment in equity securities	**$ 34.7**	$ —	$ —
Equity in earnings from cellular minority partnership interests	**21.6**	20.0	12.8
Loss on sales of accounts receivable	**(28.7)**	(22.0)	(17.7)
Minority interests	**(22.1)**	(9.4)	(6.1)
Other, net	**(13.2)**	(10.9)	6.0
Total other expense, net	**$ (7.7)**	$(22.3)	$ (5.0)

Income Tax Provision

Sprint's income tax provisions for 1994, 1993, and 1992 resulted in effective tax rates of 36 percent, 38 percent and 36 percent, respectively. During 1993, the Revenue Reconciliation Act of 1993 was enacted which, among other changes, raised the federal income tax rate to 35 percent from 34 percent. As a result, Sprint adjusted its deferred income tax assets and liabilities to reflect the revised rate. See Note 3 of Notes to Consolidated Financial Statements for additional information regarding the differences which cause the effective income tax rates to vary from the statutory federal income tax rates.

As of December 31, 1994, Sprint had recorded deferred income tax assets of $301 million related to postretirement benefits and other benefits, $93 million related to alternative minimum tax credit carryforwards, and $39 million (net of a $21 million valuation allowance) related to state operating loss carryforwards. Sprint's management has determined that it is more likely than not that these deferred income tax assets, net of the valuation allowance, will be realized based on current income tax laws and expectations of future taxable income stemming from the reversal of existing deferred tax liabilities or ordinary operations. Uncertainties surrounding income tax law changes, shifts in operations between state taxing jurisdictions, and future operating income levels may, however, affect the ultimate realization of all or some portion of these deferred income tax assets.

Discontinued Operations and Extraordinary Losses

For the year ended December 31, 1994, Sprint recognized $7 million of income associated with the settlement of matters related to a discontinued operation. During 1993, Sprint incurred a loss from discontinued operations of $12 million, net of income tax benefits. In 1993 and 1992, Sprint incurred extraordinary losses related to the early extinguishments of debt of $29 million and $16 million, respectively, net of related income tax benefits.

Accounting Changes

Effective January 1, 1993, Sprint changed its method of accounting for postretirement and postemployment benefits by adopting Statements of Financial Accounting Standards (SFAS) No. 106 and No.112 and effected another accounting change. The cumulative effect of these changes in accounting principles reduced 1993 net income by $384 million. Effective January 1, 1992, Sprint also changed its method of accounting for income taxes by adopting SFAS No. 109. The cumulative effect of this change in accounting principle increased 1992 net income by $23 million.

Inflation

The effects of inflation on Sprint's operations were not significant during 1994, 1993 or 1992.

CONSOLIDATED STATEMENTS OF INCOME

For the Years Ended December 31, (in millions, except per share data)	1994	1993	1992
Net Operating Revenues	**$12,661.8**	$11,367.8	$10,420.3
Operating Expenses			
Costs of services and products	**6,361.0**	5,736.1	5,325.5
Selling, general and administrative	**3,034.6**	2,729.9	2,489.9
Depreciation and amortization	**1,478.4**	1,358.7	1,391.5
Merger, integration and restructuring costs	**—**	292.5	—
Total operating expenses	**10,874.0**	10,117.2	9,206.9
Operating Income	**1,787.8**	1,250.6	1,213.4
Gain on divestiture of telephone properties	**—**	—	81.1
Interest expense	**(398.0)**	(452.4)	(511.1)
Other expense, net	**(7.7)**	(22.3)	(5.0)
Income from continuing operations before income taxes	**1,382.1**	775.9	778.4
Income tax provision	**(498.4)**	(295.3)	(282.3)
Income from Continuing Operations	**883.7**	480.6	496.1
Discontinued operations, net	**7.0**	(12.3)	—
Extraordinary losses on early extinguishments of debt, net	**—**	(29.2)	(16.0)
Cumulative effect of changes in accounting principles, net	**—**	(384.2)	22.7
Net income	**890.7**	54.9	502.8
Preferred stock dividends	**(2.7)**	(2.8)	(3.5)
Earnings applicable to common stock	**$ 888.0**	$ 52.1	$ 499.3
Earnings per Common Share			
Continuing operations	**$ 2.53**	$ 1.39	$ 1.46
Discontinued operations	**0.02**	(0.04)	—
Extraordinary item	**—**	(0.08)	(0.05)
Cumulative effect of changes in accounting principles	**—**	(1.12)	0.07
Total	**$ 2.55**	$ 0.15	$ 1.48
Weighted average number of common shares	**348.7**	343.7	337.2

See accompanying Notes to Consolidated Financial Statements.

Segmental Results of Operations

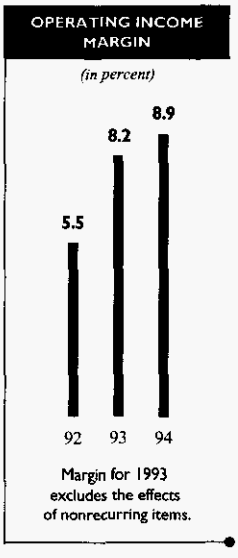
Long Distance Communications Services

For the Years Ended December 31, (in millions)	1994	1993	1992
Net operating revenues	**$6,805.1**	$6,139.2	$5,658.2
Operating expenses			
Interconnection	**2,994.5**	2,710.7	2,574.9
Operations	**925.4**	857.7	759.8
Selling, general and administrative	**1,729.9**	1,546.4	1,426.3
Depreciation and amortization	**550.5**	523.5	586.6
Merger, integration and restructuring costs	—	45.9	—
Total operating expenses	**6,200.3**	5,684.2	5,347.6
Operating income	**$ 604.8**	$ 455.0[1]	$ 310.6
Operating margin	**8.9%**	7.4%[1]	5.5%
Capital expenditures	**$ 774.1**	$ 529.4	$ 468.1
Identifiable assets as of December 31	**$4,538.7**	$4,193.1	$4,232.0

[1] *Excluding the merger, integration and restructuring costs of $45.9 million, operating income and margin for 1993 would have been $500.9 million and 8.2 percent, respectively.*

Sprint's long distance division provides domestic and international voice, video, and data communications services. Rates charged by the division for its services are subject to different levels of state and federal regulation, but are generally not rate-base regulated.

Net operating revenues increased 11 percent in 1994, following a 9 percent increase in 1993. Such increases were generally due to traffic volume growth of 11 percent and 8 percent, respectively. As a result of changes in product mix, average revenue per minute received from customers was relatively constant during 1994, 1993 and 1992. The increases in net operating revenues and traffic volumes in both 1994 and 1993 reflect ongoing growth in the international, business and residential markets. Growth in the international market during these periods reflects the division's continuing efforts to target new geographic markets. The business market continued to experience growth in the "800" services market. This growth was sparked by the May 1993 arrival of "800 portability," which enables customers to keep their advertised "800" numbers when changing long distance carriers. In 1994, revenue growth was also enhanced by solid performance in the data services market, which includes sales to consumer on-line services.



Interconnection costs consist of amounts paid to local exchange carriers, other domestic service providers, and foreign telephone companies for the completion of calls made by the division's customers. Interconnection costs increased in 1994 and 1993 primarily as a result of traffic volume growth; however, as a percentage of net operating revenues, interconnection costs decreased from 45.5 percent in 1992 to 44.2 percent and 44.0 percent in 1993 and 1994, respectively. These decreased percentages were primarily due to reductions in interconnection charges paid to local exchange companies, partially offset by increased costs related to settlements on international revenues.

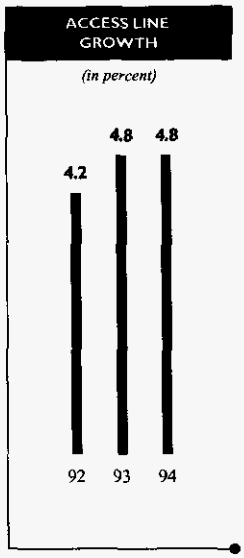
Operations expense consists of costs related to operating and maintaining the long distance network; costs of providing various services such as operator services, public payphones, telecommunications services for the hearing impaired, and video teleconferencing; and costs of data systems sales. Operations expense increased $68 million in 1994 and $98 million in 1993, primarily due to expanded service offerings as well as providing services to new customers. The 1993 increase was also impacted by a change in accounting method whereby circuit activity costs are now being expensed when incurred (see Note 1 of Notes to Consolidated Financial Statements for additional information). Exclusive of the effect of this accounting change, 1993 operations expense increased $63 million.

Selling, general and administrative (SG&A) expense increased $184 million and $120 million in 1994 and 1993, respectively, generally reflecting the overall growth in the division's operating activities. As a percentage of net operating revenues, these expenses have remained at relatively stable levels, increasing slightly to 25.4 percent in 1994 from 25.2 percent in 1993 and 1992. In 1994, this increase was generally due to increased advertising expenses resulting from the ongoing sales and marketing efforts which are critical in the intensely competitive long distance marketplace.

Depreciation and amortization in 1994 increased $27 million compared to 1993, generally due to an increase in the asset base. Depreciation and

amortization in 1993 decreased $63 million from 1992, primarily due to the change in accounting for circuit activity costs, as described above.

In the 1994 fourth quarter, the division broke its string of nine consecutive quarters of increased operating income. Fourth quarter 1994 operating income decreased $27 million from the 1994 third quarter. This decline in operating income was primarily driven by lower revenue yields and seasonally lower volumes in the business market. Fourth quarter net operating revenues also reflect intensified competition in the residential marketplace. The reduction in net operating revenues was partially offset by lower expense levels, which included revised estimates related to employee benefit and operating tax expenses. The division has implemented various actions to address this decline, including selective pricing actions, product introductions, marketing initiatives, and process and productivity improvements. The division's return to previous operating levels will depend upon the success of marketing efforts and the ability to maintain pricing strategies and gain market share in the intensely competitive long distance marketplace. A continued focus on cost containment and technology improvements should also contribute to improved results.



Local Communications Services

For the Years Ended December 31, (in millions)	1994	1993	1992
Net operating revenues			
Local service	**$1,752.3**	$1,624.3	$1,507.4
Network access	**1,598.4**	1,530.4	1,425.8
Toll service	**529.3**	505.3	487.5
Other	**532.8**	466.0	441.5
Total net operating revenues	**4,412.8**	4,126.0	3,862.2
Operating expenses			
Plant operations	**1,298.3**	1,206.7	1,165.6
Depreciation and amortization	**794.6**	733.0	720.0
Customer operations	**549.3**	532.4	473.7
Other	**748.7**	700.1	663.3
Merger and integration costs	—	190.1	—
Total operating expenses	**3,390.9**	3,362.3	3,022.6
Operating income	**$1,021.9**	$ 763.7[1]	$ 839.6
Operating margin	**23.2%**	18.5%[1]	21.7%
Capital expenditures	**$ 914.2**	$ 845.3	$ 839.4
Identifiable assets as of December 31	**$7,821.3**	$7,604.0	$7,242.2

[1] *Excluding the merger and integration costs of $190.1 million, operating income and margin for 1993 would have been $953.8 million and 23.1 percent, respectively.*

The local division consists principally of Sprint's rate-regulated, local exchange telephone operations.

Net operating revenues increased 7 percent in both 1994 and 1993. Increased local service revenues reflect continued increases in the number of access lines served and growth in add-on services, such as custom calling features. The division experienced a 4.8 percent growth in access lines during both 1994 and 1993. Network access revenues, derived from interexchange long distance carriers' use of the local network to complete calls, increased during 1994 and 1993 as a result of increased traffic volumes, partially offset by periodic reductions in network access rates charged. Also affecting the 1993 increase were additional revenues resulting from the recognition of a portion of the merger, integration and restructuring costs for regulatory purposes in certain jurisdictions. Toll service revenues, related to the provision of long distance services within specified geographical areas and the reselling of interexchange long distance services, increased 5 percent and 4 percent in 1994 and 1993, respectively. Other revenues, including revenues from directory publishing fees, billing and collection services, and sales of telecommunications equipment, increased in 1994 and 1993 generally due to growth in equipment sales.

Plant operations expense includes network operations costs; repair and maintenance costs of property, plant and equipment; and other costs associated with the provision of local exchange services. The 8 percent and 4 percent increases in such costs in 1994 and 1993, respectively, were primarily related to increases in the costs of providing services resulting from access line growth. Additionally, certain states have implemented revised toll plans requiring payment of access charges for calls terminating in the service areas of other local exchange carriers, resulting in increased plant operations expense. Increased expenditures related to switching system software associated with advanced calling features also contributed to the higher level of plant operations expense in 1994.

Depreciation and amortization expense increased $62 million in 1994, following a $13 million increase in 1993. These increases include the effects of depreciation rate changes, special short-term amortizations and nonrecurring charges approved by state regulatory commissions of $26 million and $7 million in

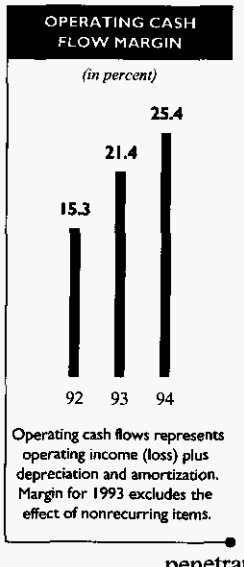
1994 and 1993, respectively. The remaining increases generally reflect plant additions.

Customer operations expense includes costs associated with business office operations and billing services, marketing costs, and expenses related to providing operator and directory assistance and other customer services. These costs increased 3 percent and 12 percent in 1994 and 1993, respectively. The 1993 increase was primarily due to increased marketing costs and increased systems development costs incurred to enhance the division's billing processes.

Other operating expense increased $49 million and $37 million in 1994 and 1993, respectively, primarily due to costs associated with the growth in equipment sales.

The 1993 increases in plant operations, customer operations and other operating expenses also reflect the impact of the increased postretirement benefits cost of approximately $38 million recognized as a result of the adoption of SFAS No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions." The amounts of such benefits were generally consistent between 1993 and 1994.

Consistent with most local exchange carriers (LECs), the division accounts for the economic effects of regulation pursuant to SFAS No. 71, "Accounting for the Effects of Certain Types of Regulation." The application of SFAS No. 71 requires the accounting recognition of the rate actions of regulators where appropriate, including the recognition of depreciation and amortization based on estimated useful lives prescribed by regulatory commissions rather than those that might be utilized by non-regulated enterprises. Sprint currently believes the division's rate-regulated operations meet the criteria for the continued application of the provisions of SFAS No. 71. However, the division operates in an evolving environment in which the regulatory framework is changing and the level and types of competition are increasing. Accordingly, Sprint constantly monitors and evaluates the ongoing applicability of SFAS No. 71 by assessing the likelihood that prices which provide for the recovery of specific costs can continue to be charged to customers. In the event Sprint determines that the division's rate-regulated operations no longer qualify for the application of the provisions of SFAS No. 71, Sprint would eliminate from its financial statements the effects of any actions of regulators that had been recognized as assets and liabilities. The resulting material noncash charge would be recorded as an extraordinary item. See Note 8 of Notes to Consolidated Financial Statements for information regarding the primary components and estimated amounts of regulatory assets and liabilities as of December 31, 1994.



Operating cash flows represents operating income (loss) plus depreciation and amortization. Margin for 1993 excludes the effect of nonrecurring items.

Cellular and Wireless Communications Services

For the Years Ended December 31, (in millions)	1994	1993	1992
Net operating revenues	**$ 701.8**	$ 464.0	$ 322.2
Operating expenses			
Cost of services and products	**233.2**	154.9	118.3
Selling, general and administrative	**290.6**	209.9	154.6
Depreciation and amortization	**92.4**	75.0	52.1
Merger and integration costs	—	3.2	—
Total operating expenses	**616.2**	443.0	325.0
Operating income (loss)	**$ 85.6**	$ 21.0[1]	$ (2.8)
Operating margin	**12.2%**	4.5%[1]	—
Capital expenditures	**$ 264.3**	$ 164.9	$ 123.8
Identifiable assets as of December 31	**$1,728.0**	$1,504.3	$1,489.4

[1] *Excluding the merger and integration costs of $3.2 million, operating income and margin for 1993 would have been $24.2 million and 5.2 percent, respectively.*

In addition to activities comprising the above operating results, Sprint's cellular and wireless division also owns minority interests in certain markets. Equity in the earnings and losses of these minority investments is included in "Other expense, net" in the Consolidated Statements of Income.

The increases in net operating revenues during 1994 and 1993 resulted principally from the growth in the number of cellular subscribers, which increased 59 percent in 1994 and 67 percent in 1993. The effect of this growth was partially offset by a decline in service revenue per subscriber, reflecting an industry-wide trend that has occurred as a result of increased general consumer market penetration. Future growth rates for net operating revenues and the number of cellular subscribers will be

dependent on price levels and the quality of service in the competitive cellular marketplace as well as the impacts of emerging competition such as PCS.

Excluding the costs and revenues related to equipment sales, costs of services and products declined to 24.2 percent of net operating revenues in 1994 from 26.3 percent in 1993 and 29.7 percent in 1992, generally reflecting economies of scale gained from serving additional subscribers. The increases in selling, general and administrative expense for 1994 and 1993 resulted principally from increased commissions and customer service expenses, as well as increased advertising costs related to the growth in the number of cellular subscribers. Despite the increases in the amount of SG&A expense, such costs as a percentage of net operating revenues (excluding revenues from equipment sales) declined to 45.0 percent in 1994 from 49.2 percent in 1993 and 52.3 percent in 1992. These improvements resulted primarily from additional economies realized from providing service and support to a larger customer base. These economies contributed to a 3 percent decline in the total per unit cost to acquire customers (including costs of equipment sales) from 1993 to 1994. Depreciation and amortization increased during both 1994 and 1993 as additional investments in property, plant and equipment were required to meet the growth in the number of cellular subscribers.

Product Distribution and Directory Publishing

For the Years Ended December 31, (in millions)	1994	1993	1992
Net operating revenues	**$1,108.7**	$945.2	$862.9
Operating expenses			
Cost of services and products	**938.2**	801.0	717.8
Selling, general and administrative	**88.1**	74.6	71.7
Depreciation and amortization	**6.9**	5.4	7.4
Merger and integration costs	—	2.5	—
Total operating expenses	**1,033.2**	883.5	796.9
Operating income	**$ 75.5**	$ 61.7[1]	$ 66.0
Operating margin	**6.8%**	6.5%[1]	7.6%
Capital expenditures	**$ 6.7**	$ 9.0	$ 5.8
Identifiable assets as of December 31	**$ 376.2**	$341.8	$306.7

[1] Excluding the merger and integration costs of $2.5 million, operating income and margin for 1993 would have been $64.2 million and 6.8 percent, respectively.

North Supply, a wholesale distributor of telecommunications products, had 1994 net operating revenues of $829 million, compared to $677 million in 1993 and $594 million in 1992. The increases primarily reflect additional nonaffiliated contracts and increased sales to the local division, partially as a result of sales to the merged Centel telephone operations. As a percentage of net operating revenues, operating expenses for 1994, 1993 and 1992 were 95.4 percent, 96.5 percent and 95.2 percent, respectively.

Sprint Publishing & Advertising, a publisher and marketer of telephone directories, had net operating revenues of $280 million in 1994 compared with 1993 and 1992 net operating revenues of $268 million and $257 million, respectively. As a percentage of net operating revenues, operating expenses for 1994, 1993 and 1992 were 86.6 percent, 84.9 percent and 82.6 percent, respectively.

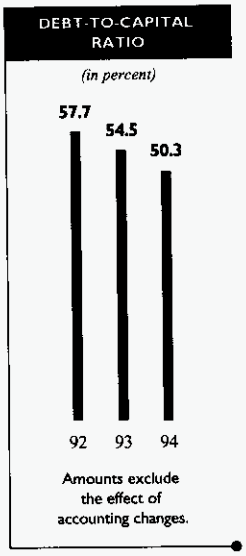
CONSOLIDATED BALANCE SHEETS

As of December 31, (in millions)	1994	1993
Assets		
Current assets		
Cash and equivalents	**$ 123.3**	$ 76.8
Accounts receivable, net of allowance for doubtful accounts of $128.9 million ($121.9 million in 1993)	**1,469.8**	1,230.6
Investment in equity securities	**—**	130.2
Inventories	**215.8**	182.3
Deferred income taxes	**54.2**	81.1
Prepaid expenses	**144.5**	120.7
Other	**180.9**	156.1
Total current assets	**2,188.5**	1,977.8
Investments in equity securities	**177.6**	173.1
Property, plant and equipment		
Long distance communications services	**6,056.3**	5,492.7
Local communications services	**11,827.4**	11,226.4
Cellular and wireless communications services	**818.5**	569.6
Other	**498.6**	433.7
	19,200.8	17,722.4
Less accumulated depreciation	**8,322.2**	7,407.6
	10,878.6	10,314.8
Cellular minority partnership interests	**301.7**	284.9
Excess of cost over net assets acquired	**706.7**	739.5
Other assets	**683.2**	658.8
	$14,936.3	$14,148.9
Liabilities and Shareholders' Equity		
Current liabilities		
Current maturities of long-term debt	**$ 332.4**	$ 523.4
Accounts payable	**1,072.2**	875.2
Accrued interconnection costs	**527.6**	537.7
Accrued taxes	**268.5**	307.2
Advance billings	**167.6**	150.6
Other	**686.3**	674.5
Total current liabilities	**3,054.6**	3,068.6
Long-term debt	**4,604.8**	4,571.0
Deferred credits and other liabilities		
Deferred income taxes and investment tax credits	**1,259.0**	1,229.9
Postretirement and other benefit obligations	**850.3**	793.1
Other	**605.7**	529.4
	2,715.0	2,552.4
Redeemable preferred stock	**37.1**	38.6
Common stock and other shareholders' equity		
Common stock, par value $2.50 per share, authorized 500.0 million shares, issued 348.6 million (343.4 million in 1993), and outstanding 348.3 million (343.4 million in 1993)	**871.4**	858.5
Capital in excess of par or stated value	**942.9**	827.4
Retained earnings	**2,730.9**	2,184.2
Other	**(20.4)**	48.2
	4,524.8	3,918.3
	$14,936.3	$14,148.9

See accompanying Notes to Consolidated Financial Statements.

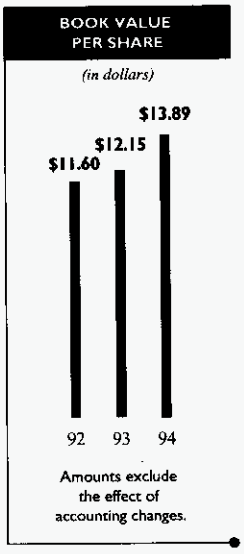
Financial Condition

Sprint's consolidated assets totaled $14.94 billion at December 31, 1994 compared to $14.15 billion at December 31, 1993. Accounts receivable increased $239 million as of December 31, 1994 compared to December 31, 1993 generally due to an 11 percent increase in consolidated net operating revenues and the timing of sales activities and cash collections. This increase did not have a significant impact on Sprint's aging of accounts receivable. Property, plant and equipment, net of accumulated depreciation, increased $564 million from 1993 to 1994. This increase was primarily a result of increased capital expenditures to enhance and upgrade Sprint's networks to expand service capabilities and increase productivity. The $130 million investment in equity securities classified as a current asset as of December 31, 1993 was sold during 1994. Current maturities of long-term debt as of December 31, 1994 decreased $191 million compared to December 31, 1993 due to scheduled debt payments. As of December 31, 1994, Sprint's total capitalization aggregated $9.50 billion, consisting of long-term debt (including current maturities), redeemable preferred stock, and common stock and other shareholders' equity. Long-term debt (including current maturities) comprised 52 percent of total capitalization as of December 31, 1994, compared to 56 percent at year-end 1993.



Liquidity and Capital Resources

Sprint anticipates cash flows from operating activities to be sufficient to fund dividends and capital expenditures during 1995. Sprint currently expects 1995 capital expenditures to be approximately $2.1 billion, excluding cash commitments associated with joint ventures. Sprint expects its external cash requirements for 1995 to be approximately $550 million to $650 million, which is generally required to repay scheduled long-term debt maturities and to refinance notes payable and commercial paper. Long-term debt outstanding as of December 31, 1994 includes $1.08 billion of notes payable and commercial paper. Such amounts which are not refinanced through the issuance of long-term debt will continue to be financed under existing credit facilities or may be reduced through free cash flows. External cash requirements will be financed primarily with debt, the source of which will depend upon prevailing market conditions during the year.

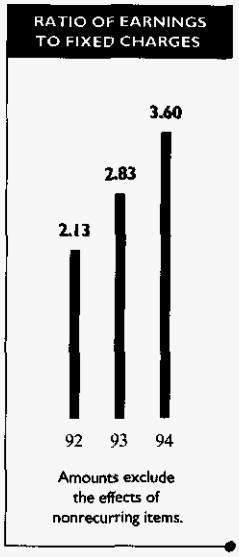


As discussed in "Strategic Developments," in October 1994 Sprint entered into a joint venture with certain cable companies to provide wireless communications services to consumers and businesses on a broad geographic basis within the United States. The joint venture is bidding on certain PCS licenses currently being auctioned by the FCC. The results of this auction, which is anticipated to conclude during the 1995 first quarter, will likely cause the joint venture, and ultimately its partners, to incur significant cash commitments. Additionally in 1995, Sprint will incur cash commitments associated with the continued development of the joint venture's infrastructure and presence in the communications marketplace, as well as cash commitments associated with the planned joint venture to provide local telephone service in competition with non-Sprint LECs. Aggregate cash commitments associated with these joint venture activities will be fully determined upon completion of the FCC's auction and negotiation of definitive agreements related to local telephone activities. Sprint is currently negotiating an interim credit facility to support anticipated cash commitments associated with these joint venture activities. A portion of the cash proceeds from the anticipated investment in Sprint by Deutsche Telekom and France Telecom would be used to ultimately fund commitments associated with joint venture activities.

At year-end 1994, Sprint had the ability to borrow $525 million under a revolving credit agreement with a syndicate of domestic and international banks and other bank commitments. Other available financing sources include a Medium-Term Note program, under which Sprint may offer for sale up to $175 million of unsecured senior debt securities. Additionally, pursuant to shelf registration statements filed with the Securities and Exchange Commission, up to $1.2 billion of debt securities could be offered for sale as of December 31, 1994. In January 1995, $70 million of such debt securities

under shelf registration statements were issued in order to reduce commercial paper outstanding.

The aggregate amount of additional borrowings which can be incurred is ultimately limited by certain covenants contained in existing debt agreements. As of December 31, 1994, Sprint had borrowing capacity of approximately $4.1 billion under the most restrictive of its debt covenants.



General Hedging Policies

Sprint, on a limited basis, utilizes certain derivative financial instruments in an effort to manage exposure to interest rate risk and foreign exchange risk. Sprint's utilization of such derivative financial instruments related to hedging activities is generally limited to interest rate swap agreements and forward contracts and options in foreign currencies. Sprint will in no circumstance take speculative positions and create an exposure to benefit from market fluctuations. All hedging activity is in accordance with board-approved policies. Any potential loss or exposure related to Sprint's use of derivative instruments is immaterial to its overall operations, financial condition and liquidity. See Note 10 of Notes to Consolidated Financial Statements for more information related to Sprint's portfolio of derivative instruments.

Interest Rate Risk Management

Sprint's interest rate risk management program focuses on minimizing vulnerability of net income to movements in interest rates, setting an optimal mixture of floating-rate and fixed-rate debt in the liability portfolio and preventing liquidity risk. Sprint primarily employs a gap methodology to measure interest rate exposure and utilizes simulation analysis to manage interest rate risk. Sprint takes an active stance in modifying hedge positions to benefit from the value of timing flexibility and fixed-rate/floating-rate adjustments.

Foreign Exchange Risk Management

Sprint's foreign exchange risk management program focuses on optimizing consolidated cash flows and stabilizing accounting results. Sprint does not hedge translation exposure because it believes that optimizing consolidated cash flows will, over time, maintain shareholder value. Sprint's primary transaction exposure in foreign currencies results from changes in foreign exchange rates between the dates Sprint incurs and settles liabilities (payable in a foreign currency) to overseas telephone companies for the costs of terminating international calls made by Sprint's domestic customers.

Impact of Recently Issued Accounting Pronouncements

The American Institute of Certified Public Accountants has issued a Statement of Position, "Reporting on Advertising Costs," which provides guidance on financial reporting of advertising costs in annual financial statements. The statement requires reporting the costs of all advertising as expenses in the periods in which the costs are incurred, or the first time the advertising takes place unless certain criteria for deferral are met. The statement is effective for financial statements for years beginning after June 15, 1994. Management believes that Sprint's current practice of expensing advertising costs as incurred meets the requirements of the statement.

CONSOLIDATED STATEMENTS OF CASH FLOWS

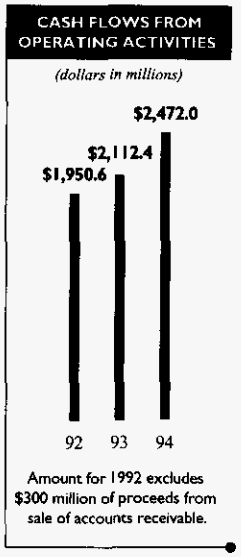
For the Years Ended December 31, (in millions)	1994	1993	1992
Operating Activities			
Net income	**$ 890.7**	$ 54.9	$ 502.8
Adjustments to reconcile net income to net cash provided by operating activities			
Depreciation and amortization	**1,478.4**	1,358.7	1,391.5
Deferred income taxes and investment tax credits	**74.6**	(34.5)	3.0
Gain on sale of investment in equity securities	**(34.7)**	—	—
Gain on divestiture of telephone properties	**—**	—	(81.1)
Extraordinary losses on early extinguishments of debt	**—**	20.4	14.2
Cumulative effect of changes in accounting principles	**—**	384.2	(22.7)
Changes in operating assets and liabilities			
Accounts receivable, net	**(239.2)**	(185.8)	257.8
Inventories and other current assets	**(84.5)**	(42.7)	(13.9)
Accounts payable, accrued expenses and other current liabilities	**197.8**	362.0	126.8
Noncurrent assets and liabilities, net	**134.3**	135.1	152.3
Other, net	**54.6**	60.1	(80.1)
Net cash provided by operating activities	**2,472.0**	2,112.4	2,250.6
Investing Activities			
Capital expenditures	**(2,015.9)**	(1,594.7)	(1,466.2)
Proceeds from sale of investment in equity securities	**117.7**	—	—
Equity investments	**(49.2)**	9.0	(1.7)
Acquisition of Limited Partnership minority interest	**—**	—	(250.0)
Proceeds from divestiture of telephone properties	**—**	—	114.0
Other, net	**(34.5)**	17.3	26.0
Net cash used by investing activities	**(1,981.9)**	(1,568.4)	(1,577.9)
Financing Activities			
Proceeds from long-term debt	**107.9**	840.4	951.2
Retirements of long-term debt	**(597.0)**	(1,589.0)	(1,257.4)
Net increase in notes payable and commercial paper	**321.5**	393.5	147.0
Payment of note payable to minority partner	**—**	—	(280.0)
Proceeds from common stock issued	**42.7**	70.8	51.6
Proceeds from employees stock purchase installments	**33.1**	28.3	13.2
Dividends paid	**(349.4)**	(347.1)	(300.1)
Other, net	**(2.4)**	7.1	4.7
Net cash used by financing activities	**(443.6)**	(596.0)	(669.8)
Increase (Decrease) in Cash and Equivalents	**46.5**	(52.0)	2.9
Cash and Equivalents at Beginning of Year	**76.8**	128.8	125.9
Cash and Equivalents at End of Year	**$ 123.3**	$ 76.8	$ 128.8
Supplemental Cash Flows Information			
Cash paid for interest	**$ 418.1**	$ 453.6	$ 507.5
Cash paid for income taxes	**$ 435.1**	$ 292.4	$ 269.0
Noncash Financing Activities			
Common stock contributed to employee savings plans, at market	**$ 31.0**	$ 39.0	$ 28.0

See accompanying Notes to Consolidated Financial Statements.

REVIEW OF CASH FLOWS

Cash Flows – Operating Activities

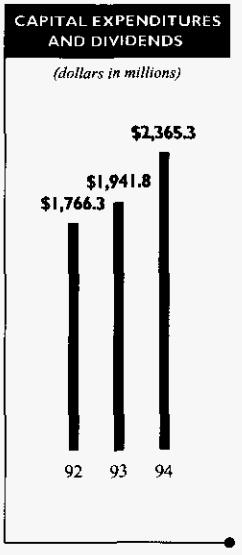
Cash flows from operating activities, which are Sprint's primary source of liquidity, were $2.47 billion, $2.11 billion and $2.25 billion in 1994, 1993 and 1992, respectively. Operating cash flows for 1994 and 1993 reflect improved operating results, partially offset by expenditures related to the 1993 merger, integration and restructuring actions of $86 million and $155 million for 1994 and 1993, respectively. The 1992 operating cash flows include proceeds of $300 million from the sale of accounts receivable within the long distance division.



Cash Flows – Investing Activities

Sprint's investing activities used cash of $1.98 billion, $1.57 billion and $1.58 billion in 1994, 1993 and 1992, respectively. Capital expenditures, which represent Sprint's most significant investing activity, were $2.02 billion, $1.59 billion and $1.47 billion in 1994, 1993 and 1992, respectively.

Long distance capital expenditures were incurred each year primarily to increase the network capacity and to enhance network reliability and capabilities for providing new products and services. Capital expenditures for the local division were made to accommodate access line growth, to continue the conversion to digital technologies, and to expand the division's capabilities for providing enhanced telecommunications services. The increases in 1994 and 1993 capital expenditures for the cellular and wireless division reflect the significant increases in the number of cellular subscribers served during such years.



Investing activities for 1994 also include $118 million received in connection with the sale of an investment in equity securities. Additionally, Sprint made investments of $49 million in connection with several joint ventures, which included initial funding requirements associated with a joint venture's participation in the PCS auction conducted by the FCC. Investing activities in 1992 included $250 million paid in connection with Sprint's $530 million acquisition of the remaining 19.9 percent interest in Sprint Communications Company L.P. (the Limited Partnership) and proceeds of $114 million from the sale of certain local telephone properties.

Cash Flows – Financing Activities

Sprint's financing activities used cash of $444 million, $596 million and $670 million in 1994, 1993 and 1992, respectively. Improved operating cash flows during each year, together with proceeds in 1992 from the sale of additional accounts receivable and from the divestiture of certain local telephone properties, allowed Sprint to fund capital expenditures and dividends internally and to reduce total debt outstanding during each year. In addition, the $280 million note issued to the seller in connection with the acquisition of the remaining interest in the Limited Partnership was paid in 1992.

During 1993 and 1992, a significant level of debt refinancing occurred in order to take advantage of lower interest rates. Accordingly, a majority of the proceeds from long-term borrowings in 1993 was used to finance the redemption prior to scheduled maturities of $1.24 billion of debt. During 1992, Sprint refinanced $720 million of long-term debt and borrowed $250 million to finance the payment related to the acquisition of the remaining 19.9 percent interest in the Limited Partnership.

Sprint paid dividends to common and preferred shareholders of $349 million, $347 million and $300 million in 1994, 1993 and 1992, respectively. Sprint's indicated annual dividend rate on common stock is currently $1.00 per share.

CONSOLIDATED STATEMENTS OF COMMON STOCK AND OTHER SHAREHOLDERS' EQUITY

For the Years Ended December 31, 1994, 1993 and 1992 (in millions)	Common Stock	Capital in Excess of Par or Stated Value	Retained Earnings	Other	Total
Balance as of January 1, 1992 (334.8 million shares issued and outstanding)	$836.9	$640.3	$2,248.1	$(53.4)	$3,671.9
Net income	—	—	502.8	—	502.8
Common stock dividends	—	—	(296.6)	—	(296.6)
Preferred stock dividends	—	—	(3.5)	—	(3.5)
Employee stock purchase and other installments received, net	—	—	—	15.5	15.5
Common stock issued	9.9	73.7	—	(6.5)	77.1
Other, net	0.3	3.5	0.9	(0.3)	4.4
Balance as of December 31, 1992 (338.9 million shares issued and outstanding)	847.1	717.5	2,451.7	(44.7)	3,971.6
Net income	—	—	54.9	—	54.9
Common stock dividends	—	—	(324.5)	—	(324.5)
Preferred stock dividends	—	—	(2.8)	—	(2.8)
Employee stock purchase and other installments received, net	—	—	—	30.8	30.8
Common stock issued	11.0	98.4	—	(2.4)	107.0
Change in unrealized holding gains on investments in equity securities, net	—	—	—	64.8	64.8
Other, net	0.4	11.5	4.9	(0.3)	16.5
Balance as of December 31, 1993 (343.4 million shares issued and outstanding)	858.5	827.4	2,184.2	48.2	3,918.3
Net income	—	—	890.7	—	890.7
Common stock dividends	—	—	(346.7)	—	(346.7)
Preferred stock dividends	—	—	(2.7)	—	(2.7)
Employee stock purchase and other installments received, net	—	—	—	15.0	15.0
Common stock issued	12.8	111.9	—	(53.4)	71.3
Change in unrealized holding gains on investments in equity securities, net	—	—	—	(20.5)	(20.5)
Other, net	0.1	3.6	5.4	(9.7)	(0.6)
Balance as of December 31, 1994 (348.6 million shares issued and 348.3 million shares outstanding)	**$871.4**	**$942.9**	**$2,730.9**	**$(20.4)**	**$4,524.8**

See accompanying Notes to Consolidated Financial Statements.

1. Summary of Significant Accounting Policies

This summary of significant accounting policies of Sprint Corporation is presented to assist in understanding the accompanying consolidated financial statements.

Basis of Consolidation and Presentation

The accompanying consolidated financial statements include the accounts of Sprint Corporation and its wholly-owned and majority-owned subsidiaries (Sprint). Investments in less than 50 percent-owned partnerships or joint ventures are accounted for using the equity method.

In accordance with industry practice, revenues and related net income of non-regulated operations attributable to transactions with Sprint's rate-regulated telephone companies have not been eliminated in the accompanying consolidated financial statements. Intercompany revenues of such entities amounted to $285 million, $225 million and $194 million in 1994, 1993 and 1992, respectively.

All other significant intercompany transactions have been eliminated.

Certain amounts previously reported for prior periods have been reclassified to conform to the current period presentation in the accompanying consolidated financial statements. Such reclassifications had no effect on the results of operations or shareholders' equity as previously reported.

Classification of Operations

The long distance communications services division provides domestic voice and data communications services across certain specified geographical boundaries, as well as international long distance communications services. Rates charged for such services sold to the public are subject to different levels of state and federal regulation, but are generally not subject to rate-base regulation.

The local communications services division consists principally of the operations of Sprint's rate-regulated telephone companies. These operations provide local exchange services, access by telephone customers and other carriers to local exchange facilities and long distance services within specified geographical areas.

The cellular and wireless communications services division consists of wholly-owned and majority-owned interests in partnerships and corporations operating cellular and wireless communications properties in various metropolitan and rural service area markets.

The product distribution and directory publishing businesses include the wholesale distribution of telecommunications products and the publishing and marketing of white and yellow page telephone directories.

Revenue Recognition

Operating revenues for the long distance, local and cellular and wireless communications services divisions are recognized as communications services are rendered. Operating revenues for the long distance communications services division are recorded net of an estimate for uncollectible accounts. Operating revenues for Sprint's product distribution business are recognized upon delivery of products to customers.

Regulated Operations

Sprint's rate-regulated telephone companies account for the economic effects of regulation pursuant to Statement of Financial Accounting Standards (SFAS) No. 71, "Accounting for the Effects of Certain Types of Regulation," which requires the accounting recognition of the rate actions of regulators where appropriate. Such actions can provide reasonable assurance of the existence of an asset, reduce or eliminate the value of an asset, or impose a liability on a regulated enterprise.

Cash and Equivalents

Cash equivalents generally include highly liquid investments with original maturities of three months or less and are stated at cost, which approximates market value.

As part of its cash management program, Sprint utilizes controlled disbursement banking arrangements. As of December 31, 1994 and 1993, outstanding checks in excess of cash balances of $174 million and $166 million, respectively, are included in accounts payable. Sprint had sufficient funds available to fund these outstanding checks when they were presented for payment.

Investments in Equity Securities

Investments in equity securities are classified as available for sale and are reported at fair value (estimated based on quoted market prices) as of December 31, 1994 and 1993. As of December 31, 1994 and 1993, the cost of such investments was $109 million and $202 million, respectively, with the gross unrealized holding gains of $69 million and $101 million, respectively, reflected as an addition to other shareholders' equity, net of related income taxes.

During 1994, Sprint sold an investment in equity securities, realizing a gain of $35 million.

Inventories

Inventories, consisting principally of those related to Sprint's product distribution business, are stated at the lower of cost (principally first-in, first-out method) or market.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Generally, ordinary asset retirements and disposals are charged against accumulated depreciation with no gain or loss recognized. Repairs and maintenance costs are expensed as incurred.

Effective January 1, 1993, Sprint's long distance communications services division changed its method of accounting for certain costs related to connecting new customers to its network. The change was made to conform Sprint's accounting to the predominant industry practice for such costs. Under the new method, such costs (which were previously capitalized) are being expensed when incurred. The resulting nonrecurring, noncash charge of $32 million ($0.09 per share), net of related income tax benefits, is reflected in the 1993 consolidated statement of income as a cumulative effect of change in accounting principle. The proforma impact of retroactive application of the change would not have been material to net income or earnings per share for 1992, and the impact of the change on Sprint's 1993 operating expenses was not significant.

Depreciation

The cost of property, plant and equipment is depreciated generally on a straight-line basis over the estimated useful lives (such lives related to regulated property, plant and equipment are those prescribed by regulatory commissions). Depreciation rate changes, special short-term amortizations and nonrecurring charges approved by regulatory commissions for the rate-regulated telephone companies resulted in additional depreciation totaling $26 million, $7 million and $46 million in 1994, 1993 and 1992, respectively. After the related effects on revenues and income taxes, these items reduced income from continuing operations for 1994, 1993 and 1992 by approximately $14 million, $4 million and $24 million, respectively.

Cellular Minority Partnership Investments

Cellular minority partnership investments include the excess of the purchase price over the underlying book value of cellular communications partnerships of $195 million and $201 million as of December 31, 1994 and 1993, respectively. Such excess is being amortized on a straight-line basis over 40 years; accumulated amortization aggregated $35 million and $29 million as of December 31, 1994 and 1993, respectively.

Excess of Cost over Net Assets Acquired

The excess of the purchase price over the fair value of net assets acquired, principally related to cellular communications services properties, is being amortized on a straight-line basis over 40 years. Accumulated amortization aggregated $132 million and $112 million as of December 31, 1994 and 1993, respectively.

Income Taxes

Deferred income taxes are provided for certain temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for tax purposes.

Investment tax credits related to regulated telephone property, plant and equipment have been deferred and are being amortized over the estimated useful lives of the related assets.

Interest Charged to Construction

Regulatory commissions allow the rate-regulated telephone companies to capitalize an allowance for funds expended during construction. Amounts capitalized will be recovered over the service lives of the respective assets constructed as the resulting higher depreciation is recovered through increased revenues. Interest costs associated with the construction of capital assets for Sprint's other operations are capitalized in accordance with SFAS No. 34, "Capitalization of Interest Costs." Total amounts capitalized during 1994, 1993 and 1992 were $9 million, $8 million and $11 million, respectively.

Earnings Per Share

Earnings per common share amounts are based on the weighted average number of shares both outstanding and issuable assuming exercise of all dilutive options, as applicable.

2. Employee Benefit Plans

Defined Benefit Pension Plan

Substantially all Sprint employees are covered by a noncontributory defined benefit pension plan. For participants of the plan represented by collective bargaining units, benefits are based upon schedules of defined amounts as negotiated by the respective parties. For participants not covered by collective bargaining agreements, the plan provides pension benefits based upon years of service and participants' compensation.

Sprint's policy is to make contributions to the plan each year equal to an actuarially determined amount consistent with applicable federal tax regulations. The funding objective is to accumulate funds at a relatively stable rate over the participants' working lives so that benefits are fully funded at retirement. As of December 31, 1994, the plan's assets consisted principally of investments in corporate equity securities and U.S. government and corporate debt securities.

The components of the net pension costs (credits) and related weighted average assumptions are as follows:

(in millions)	1994	1993	1992
Service cost – benefits earned during the period	**$ 61.6**	$ 58.2	$ 50.8
Interest cost on projected benefit obligation	**121.6**	103.9	96.1
Actual return on plan assets	**(1.1)**	(241.2)	(89.5)
Net amortization and deferral	**(176.6)**	62.5	(64.7)
Net pension cost (credit)	**$ 5.5**	$ (16.6)	$ (7.3)
Discount rate	**7.5%**	8.0%	8.4%
Expected long-term rate of return on plan assets	**9.5%**	9.5%	8.5%
Anticipated composite rate of future increases in compensation	**4.5%**	5.5%	6.2%

In addition, Sprint recognized pension curtailment losses of $3 million in 1993 as a result of integration and restructuring actions (see Notes 9 and 10).

The funded status and amounts recognized in the consolidated balance sheets for the plan, as of December 31, are as follows:

(in millions)	1994	1993
Actuarial present value of benefit obligations		
Vested benefit obligation	**$(1,338.1)**	$(1,277.0)
Accumulated benefit obligation	**$(1,459.5)**	$(1,462.7)
Projected benefit obligation	**$(1,547.3)**	$(1,582.9)
Plan assets at fair value	**1,950.2**	2,029.0
Plan assets in excess of the projected benefit obligation	**402.9**	446.1
Unrecognized net gains	**(203.8)**	(197.3)
Unrecognized prior service cost	**107.4**	88.1
Unamortized portion of transition asset	**(197.0)**	(221.9)
Prepaid pension cost	**$ 109.5**	$ 115.0

The projected benefit obligations as of December 31, 1994 and 1993 were determined using discount rates of 8.5 percent and 7.5 percent, respectively, and anticipated composite rates of future increases in compensation of 5.0 percent and 4.5 percent, respectively.

Defined Contribution Plans

Sprint sponsors defined contribution employee savings plans covering substantially all employees. Participants may contribute portions of their compensation to the plans. Contributions of participants represented by collective bargaining units are matched by Sprint based upon defined amounts as negotiated by the respective parties. Contributions of participants not covered by collective bargaining agreements are also matched by Sprint. For these participants, Sprint provides matching contributions in common stock equal to 50 percent of participants' contributions up to 6 percent of their compensation and may, at the discretion of the Board of Directors, provide additional matching contributions based upon the performance of Sprint's common stock in comparison to other telecommunications companies. Sprint's matching contributions (including cash contributions under the former Centel Corporation [Centel] savings plans) aggregated $49 million, $49 million and $40 million in 1994, 1993 and 1992, respectively.

Postretirement Benefits

Sprint sponsors postretirement benefits (principally health care benefits) arrangements covering substantially

all employees. Employees who retired before specified dates are eligible for these benefits at no cost or a reduced cost. Employees retiring after specified dates are eligible for these benefits on a shared cost basis. Sprint funds the accrued costs as benefits are paid.

Effective January 1, 1993, Sprint changed or modified its method of accounting for postretirement benefits by adopting SFAS No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions." The resulting nonrecurring, noncash charge of $341 million ($1.00 per share), net of related income tax benefits, is reflected in the 1993 consolidated statement of income as a cumulative effect of change in accounting principle. During 1992, the cost of providing postretirement benefits to Sprint's retirees was expensed as such costs were paid, while for Centel's employees and retirees, an accrual basis approach was utilized to recognize such costs.

Upon adoption of the new standard, Sprint elected to immediately recognize its previously unrecorded obligation for postretirement benefits already earned by current retirees and employees (the transition obligation), a substantial portion of which related to its rate-regulated telephone companies. Pursuant to SFAS No. 71, regulatory assets associated with the recognition of the transition obligation were recorded in jurisdictions where the regulators have issued orders specific to Sprint permitting recognition of net postretirement benefits costs for ratemaking purposes, and providing for recovery of the transition obligation over a period of no longer than 20 years. As of December 31, 1994, such regulatory assets aggregated $78 million. In all other jurisdictions, regulatory assets associated with the recognition of the transition obligation were not recorded due to the uncertainties as to the timing and extent of recovery.

The components of the net postretirement benefits cost are as follows:

(in millions)	1994	1993
Service cost – benefits earned during the period	**$23.5**	$22.1
Interest on accumulated benefit obligation	**53.4**	56.5
Net amortization and deferral	**(1.9)**	—
Net postretirement benefits cost	**$75.0**	$78.6

For measurement purposes, a weighted average annual health care cost trend rate of 12 percent was assumed for 1994, gradually decreasing to 6 percent by 2001 and remaining constant thereafter. The effect of a 1 percent increase in the assumed trend rates would have increased the 1994 net postretirement benefits cost by approximately $25 million. The discount rates for 1994 and 1993 were 7.5 percent and 8.0 percent, respectively.

In addition, Sprint recognized postretirement benefits curtailment losses of $11 million in 1993 as a result of integration and restructuring actions (see Notes 9 and 10).

The cost of providing postretirement benefits was $28 million in 1992.

The amounts recognized in the consolidated balance sheets as of December 31, are as follows:

(in millions)	1994	1993
Accumulated postretirement benefits obligation		
Retirees	**$299.2**	$322.8
Active plan participants – fully eligible	**130.7**	158.0
Active plan participants – other	**246.2**	254.4
	676.1	735.2
Unrecognized prior service benefit	**6.4**	6.8
Unrecognized net gains	**155.3**	38.9
Accrued postretirement benefits cost	**$837.8**	$780.9

The accumulated benefits obligations as of December 31, 1994 and 1993 were determined using discount rates of 8.5 percent and 7.5 percent, respectively. An annual health care trend rate of 12 percent was assumed for 1995, gradually decreasing to 6 percent by 2001 and remaining constant thereafter. The effect of a 1 percent annual increase in the assumed health care cost trend rates would have increased the accumulated benefits obligation as of December 31, 1994 by approximately $86 million.

Postemployment Benefits

Effective January 1, 1993, Sprint adopted SFAS No. 112, "Employers' Accounting for Postemployment Benefits." Upon adoption, Sprint recognized certain previously unrecorded obligations for benefits being provided to former or inactive employees and their dependents, after employment but before retirement. The resulting nonrecurring, noncash charge of $11 million ($0.03 per share), net of related income tax benefits, is reflected in the 1993 consolidated statement of income as a cumulative effect of change in accounting principle. Such postemployment benefits offered by Sprint include severance, disability and workers compensation benefits, including the continuation of other benefits such as health care and life insurance coverage.

3. Income Taxes

The components of the income tax provisions allocated to continuing operations are as follows:

(in millions)	1994	1993	1992
Current income tax provision			
Federal	**$343.4**	$275.6	$242.1
State	**80.4**	54.2	37.2
	423.8	329.8	279.3
Deferred income tax provision (benefit)			
Federal	**100.2**	16.4	9.5
State	**(3.6)**	(26.2)	24.8
Amortization of deferred investment tax credits	**(22.0)**	(24.7)	(31.3)
	74.6	(34.5)	3.0
Total income tax provision	**$498.4**	$295.3	$282.3

On August 10, 1993, the Revenue Reconciliation Act of 1993 was enacted which, among other changes, raised the federal income tax rate for corporations to 35 percent from 34 percent, retroactive to January 1, 1993. Accordingly, Sprint adjusted its deferred income tax assets and liabilities to reflect the revised rate. The resulting adjustment related to Sprint's nonregulated subsidiaries increased the 1993 deferred income tax provision by $13 million ($0.04 per share). Adjustments to the net deferred income tax liabilities associated with the rate-regulated telephone companies were generally recorded as reductions to regulatory liabilities.

The differences which cause the effective income tax rate to vary from the statutory federal income tax rate of 35 percent in 1994 and 1993 and 34 percent in 1992 are as follows:

(in millions)	1994	1993	1992
Income tax provision at the statutory rate	**$483.7**	$271.6	$264.7
Less investment tax credits included in income	**22.0**	24.7	31.3
Expected federal income tax provision after investment tax credits	**461.7**	246.9	233.4
Effect of			
State income taxes, net of federal income tax effect	**49.9**	18.2	40.9
Differences required to be flowed through by regulatory commissions	**4.8**	6.0	5.6
Reversal of rate differentials	**(9.7)**	(13.0)	(16.3)
Amortization of intangibles	**8.8**	8.8	8.6
Merger related costs	**—**	18.0	—
Other, net	**(17.1)**	10.4	10.1
Income tax provision, including investment tax credits	**$498.4**	$295.3	$282.3
Effective income tax rate	**36%**	38%	36%

The income tax provisions (benefits) allocated to other items are as follows:

(in millions)	1994	1993	1992
Discontinued operations	**$ (9.0)**	$ (6.6)	$ —
Extraordinary losses on early extinguishments of debt	**—**	(20.3)	(9.1)
Cumulative effect of changes in accounting principles			
Postretirement benefits	**—**	(216.7)	—
Postemployment benefits	**—**	(6.7)	—
Circuit activity costs	**—**	(21.5)	—
Unrealized holding gains on investments in equity securities (recorded directly to shareholders' equity)	**(11.6)**	36.5	—
Stock ownership, purchase and options arrangements (recorded directly to shareholders' equity)	**(8.1)**	(10.6)	(6.0)

Deferred income taxes are provided for the temporary differences between the carrying amounts of Sprint's assets and liabilities for financial statement purposes and their tax bases. The sources of the differences that give rise to the deferred income tax assets and liabilities as of December 31, 1994 and 1993, along with the income tax effect of each, are as follows:

	1994 Deferred Income Tax		1993 Deferred Income Tax	
(in millions)	Assets	Liabilities	Assets	Liabilities
Property, plant and equipment	**$ —**	**$1,592.3**	$ —	$1,611.1
Postretirement and other benefits	**301.3**	**—**	281.1	—
Alternative minimum tax credit carryforwards	**93.0**	**—**	259.7	—
Operating loss carryforwards	**59.9**	**—**	64.7	—
Integration and restructuring costs	**12.2**	**—**	35.0	—
Regulatory revenue reserves	**33.4**	**—**	10.2	—
Other, net	**—**	**2.9**	—	20.1
	499.8	**1,595.2**	650.7	1,631.2
Less valuation allowance	**21.1**	**—**	24.5	—
Total	**$478.7**	**$1,595.2**	$626.2	$1,631.2

During 1994 and 1993, the valuation allowance related to deferred income tax assets decreased $3 million and $6 million, respectively.

As of December 31, 1994, Sprint has available, for income tax purposes, $93 million of alternative minimum tax credit carryforwards to offset regular income tax payable in future years, and tax benefits

of $60 million associated with state operating loss carryforwards. The loss carryforwards expire in varying amounts annually from 1995 through 2009.

Effective January 1, 1992, Sprint changed its method of accounting for income taxes by adopting SFAS No. 109. The cumulative effect of this change in accounting principle increased 1992 net income by $23 million ($0.07 per share).

4. Debt

Long-term debt, as of December 31, is as follows:

(in millions)	Maturing	1994	1993
Corporate			
Senior notes			
8.60% to 9.71%	1994	$ —	$ 225.0
9.45%	1995	**50.0**	50.0
10.45%	1996	**200.0**	200.0
9.88%	1997	**80.0**	120.0
9.19% to 9.60%	1998	**43.0**	43.0
8.13% to 9.80%	2000 to 2003	**632.3**	632.3
Debentures			
9.25%	2022	**200.0**	200.0
Notes payable and commercial paper, classified as long-term debt	1996	**934.0**	634.4
Other			
11.88%	1999	—	4.5
Long Distance Communications Services			
Vendor financing agreements			
6.99% to 15.00%	1995 to 2001	**223.1**	423.4
Local Communications Services			
First mortgage bonds			
2.00% to 9.37%	1995 to 1999	**156.6**	197.8
5.88% to 9.29%	2000 to 2004	**593.0**	595.7
4.00% to 8.75%	2005 to 2009	**249.2**	268.0
6.88% to 9.79%	2010 to 2014	**110.0**	80.0
8.77% to 9.28%	2015 to 2019	**254.6**	275.0
7.13% to 9.89%	2020 to 2024	**147.9**	148.6
Debentures and notes			
4.50% to 9.61%	1995 to 2020	**424.0**	424.4
Notes payable and commercial paper, classified as long-term debt	1996	**143.4**	121.4
Other			
2.00% to 19.45%	1995 to 2017	**20.0**	17.3
Other			
Senior notes			
9.88%	1998	**250.0**	277.1
Debentures			
9.00%	2019	**150.0**	150.0
Other			
5.39% to 13.00%	1995 to 1999	**76.1**	6.5
		4,937.2	5,094.4
Less current maturities		**332.4**	523.4
Long-term debt		**$4,604.8**	$4,571.0

Long-term debt maturities during each of the next five years are as follows:

(in millions)	
1995	$ 332.4
1996	1,337.4
1997	110.9
1998	410.6
1999	52.9

Property, plant and equipment with an aggregate cost of approximately $10.89 billion is either pledged as security for first mortgage bonds and certain notes or is restricted for use as mortgaged property.

Notes payable and commercial paper outstanding and related weighted average interest rates, as of December 31, are as follows:

(in millions)	1994	1993
Bank notes, 5.85% (3.55% in 1993)	**$ 263.0**	$397.5
Master Trust notes, 6.33% (3.71% in 1993)	**248.7**	250.0
Commercial paper, 5.08% (3.29% in 1993)	**565.7**	108.3
Total notes payable and commercial paper	**$1,077.4**	$755.8

Notes payable and commercial paper outstanding as of December 31, 1994 and 1993 are classified as long-term debt due to Sprint's intent to refinance such borrowings on a long-term basis and due to its demonstrated ability to do so pursuant to the $1.1 billion revolving credit agreement described below.

The bank notes are renewable at various dates throughout the year. Sprint pays a fee to certain commercial banks to support current and future credit requirements based upon loan commitments. Lines of credit may be withdrawn by the banks if there is a material adverse change in Sprint's financial condition.

Sprint has a Master Trust Note Agreement with the trust division of a bank to borrow funds on demand. Interest on such borrowings is at a rate that yields interest equivalent to the most favorable discount rate paid on 30-day commercial paper.

As of December 31, 1994, Sprint had a total of $1.3 billion of credit arrangements, consisting of various bank commitments and a $1.1 billion revolving credit agreement with a syndicate of domestic and international banks. At that date, Sprint had availability totaling $525 million under such arrangements. The revolving credit agreement expires in July 1996 and, subject to the approval of the lenders, may be extended for an additional year.

Sprint is in compliance with all restrictive or financial covenants relating to its debt arrangements at December 31, 1994.

During 1993 and 1992, Sprint redeemed or called for redemption prior to scheduled maturities $1.34 billion and $720 million, respectively, of first mortgage bonds, senior notes and debentures. Excluding amounts deferred by the rate-regulated telephone companies as required by certain regulatory commissions, the prepayment penalties incurred in connection with early extinguishments of debt and the write-off of related debt issuance costs aggregated $29 million in 1993 and $16 million in 1992, net of related income tax benefits, and are reflected as extraordinary losses in the consolidated statements of income.

5. Redeemable Preferred Stock

Sprint has 20 million authorized shares and subsidiaries have approximately 6 million authorized shares of preferred stock, including non-redeemable preferred stock. The redeemable preferred stock outstanding, as of December 31, is as follows:

(in millions)	1994	1993
Third series – stated value $100 per share, shares – 196,000 in 1994 and 208,000 in 1993, non-participating, non-voting, cumulative 7.75% annual dividend rate	**$19.6**	$20.8
Fifth series – stated value $100,000 per share, shares – 95 in 1994 and 1993, voting, cumulative 6% annual dividend rate	**9.5**	9.5
Subsidiaries – stated value ranging from $10 to $100 per share, shares – 364,345 in 1994 and 380,055 in 1993, annual dividend rates ranging from 4.7% to 5.4%	**8.0**	8.3
Total redeemable preferred stock	**$37.1**	$38.6

Sprint's third series preferred stock is redeemed through a sinking fund at the rate of 12,000 shares, or $1.2 million per year, until 2008, at which time all remaining shares are to be redeemed. Sprint may redeem additional third series preferred shares at $102.29 per share during 1995, and at declining amounts in succeeding years. In the event of default, the holders of Sprint's third series redeemable preferred stock are entitled to elect a certain number of directors until all arrears in dividend and sinking fund payments have been paid.

Sprint's fifth series preferred stock must be redeemed in full in 2003. If less than full dividends have been paid for four consecutive dividend periods or if the total amount of dividends in arrears exceeds an amount equal to the dividend payment for six dividend periods, the holders of the fifth series preferred stock are entitled to elect a majority of directors standing for election until all arrears in dividend payments have been paid.

6. Common Stock

Common stock activity during 1994 and shares reserved for future grants under stock option plans or future issuances under various arrangements are as follows:

	Number of Shares	
(in millions)	1994 Activity	Reserved as of December 31, 1994
Employees Stock Purchase Plan	2.7	—
Employee savings plans	1.3	3.4
Automatic Dividend Reinvestment Plan	0.2	1.2
Officer and key employees' and directors' stock options	0.9	4.7
Conversion of preferred stock and other	0.1	1.5
Total	5.2	10.8

As of December 31, 1994, elections to purchase 2.9 million of Sprint's common shares were outstanding under the 1994 offering of the Employees Stock Purchase Plan. The purchase price under the offering cannot exceed $32.35 per share, such price representing 85 percent of the average market price on the offering date, or fall below $12.00 per share. The 1994 offering terminates on June 30, 1996.

Under various stock option plans, shares of common stock are reserved for issuance to officers, other key employees and outside directors. All options are granted at 100 percent of the market price at date of grant. Approximately 2 percent of all options outstanding as of December 31, 1994 provide for the granting of stock appreciation rights as an alternate

method of settlement upon exercise. A summary of stock option activity under the plans is as follows:

(in millions, except per share data)	Number of Shares	Per Share Exercise Price		Aggregate Exercise Amount
		Low	High	
Shares under option as of January 1, 1992 (5.1 million shares exercisable)	9.3	$ 9.44	$39.31	$200.2
Granted	0.4	21.56	25.88	9.9
Exercised				
Options without stock appreciation rights.	(1.3)	9.44	29.68	(22.6)
Options with stock appreciation rights.	(0.5)	9.44	29.68	(7.1)
Terminated and expired	(0.4)	14.03	33.75	(10.2)
Shares under option as of December 31, 1992 (5.5 million shares exercisable)	7.5	9.44	39.31	170.2
Granted	1.6	27.50	38.44	50.3
Exercised				
Options without stock appreciation rights.	(2.1)	9.44	33.75	(41.0)
Options with stock appreciation rights.	(0.3)	11.09	29.68	(5.5)
Terminated and expired	(0.1)	18.16	33.75	(3.2)
Shares under option as of December 31, 1993 (4.5 million shares exercisable)	6.6	9.44	39.31	170.8
Granted	2.8	30.81	39.50	100.3
Exercised				
Options without stock appreciation rights.	(0.8)	9.44	33.75	(17.4)
Options with stock appreciation rights.	(0.2)	11.09	29.68	(3.8)
Terminated and expired	(0.6)	22.13	36.69	(16.7)
Shares under option as of December 31, 1994 (3.7 million shares exercisable)	**7.8**	**$11.09**	**$39.50**	**$233.2**

During 1990, the Savings Plan Trust, an employee savings plan, acquired shares of common stock from Sprint in exchange for a $75 million promissory note payable to Sprint. The note bears an interest rate of 9 percent and is to be repaid from the common stock dividends received by the plan and the contributions made to the plan by Sprint in accordance with plan provisions. The remaining balance of the note receivable of $58 million as of December 31, 1994 is reflected as a reduction to other shareholders' equity.

Under a Shareholder Rights plan, one-half of a Preferred Stock Purchase Right is attached to each share of common stock. Each Right, which is exercisable and detachable only upon the occurrence of certain takeover events, entitles shareholders to buy units consisting of one one-hundredth of a newly issued share of Preferred Stock-Fourth Series, Junior Participating at a price of $235 per unit or, in certain circumstances, common stock. Under certain circumstances, Rights beneficially owned by an acquiring person become null and void. Sprint's Preferred Stock-Fourth Series is without par value. It is voting, cumulative and accrues dividends equal generally to the greater of $10 per share or one hundred times the aggregate per share amount of all common stock dividends. No shares of Preferred Stock-Fourth Series were issued or outstanding at December 31, 1994. The Rights may be redeemed by Sprint at a price of one cent per Right and will expire on September 8, 1999.

During 1994, 1993 and 1992, Sprint declared and paid annual dividends on common stock of $1.00 per share, and Centel declared pre-merger (see Note 9) common stock dividends of $0.15 and $0.90 per share during 1993 and 1992, respectively. The most restrictive covenant applicable to dividends on common stock results from the $1.1 billion revolving credit agreement. Among other restrictions, this agreement requires Sprint to maintain specified levels of consolidated net worth, as defined. As a result of this requirement, $1.67 billion of Sprint's $2.73 billion consolidated retained earnings were effectively restricted from the payment of dividends as of December 31, 1994. The indentures and financing agreements of certain of Sprint's subsidiaries contain various provisions restricting the payment of cash dividends on subsidiary common stock held by Sprint. In connection with these restrictions, $792 million of the related subsidiaries' $1.78 billion total retained earnings is restricted as of December 31, 1994. The flow of cash in the form of advances from the subsidiaries to Sprint is generally not restricted.

7. Commitments and Contingencies

Litigation, Claims and Assessments

Following announcement of Sprint's merger with Centel (see Note 9), class action suits were filed against Centel and certain of its officers and directors in federal and state courts. The state suits have been dismissed, while the federal suits have been consolidated

into a single action and seek damages for alleged violations of securities laws. In January 1995, a purported class action suit was filed against Centel's financial advisors in state court in New York in connection with the Sprint/Centel merger. Sprint may have indemnification obligations to the financial advisors in connection with this suit. Various other suits arising in the ordinary course of business are pending against Sprint. Management cannot predict the ultimate outcome of these actions but believes they will not result in a material effect on Sprint's consolidated financial statements.

Accounts Receivable Sold with Recourse

Under an agreement available through December 1995, Sprint may sell on a continuous basis, with recourse, up to $600 million of undivided interests in a designated pool of its accounts receivable. Subsequent collections of receivables sold to investors are typically reinvested in the pool. Sprint is required to repurchase the designated pool of accounts receivable only upon the occurrence of specified events involving non-collectibility of accounts. As of December 31, 1994, Sprint had not been required to repurchase receivables under this recourse provision. Because Sprint retains credit losses associated with its accounts receivable, any exposure related to this retention is estimated in conjunction with Sprint's calculation of its reserve for uncollectible accounts. On a quarterly basis, subject to the approval of the investors, Sprint may extend the agreement for an additional 90 days. Receivables sold that remained uncollected as of December 31, 1994 and 1993 aggregated $600 million.

Commitments

See "Liquidity and Capital Resources" in "Review of Financial Position, Liquidity and Capital Resources" for a discussion of cash commitments associated with joint ventures.

Operating Leases

Minimum rental commitments as of December 31, 1994 for all non-cancelable operating leases, consisting principally of leases for data processing equipment and real estate, are as follows:

(in millions)	
1995	$316.7
1996	218.3
1997	141.0
1998	106.5
1999	85.6
Thereafter	260.9

Gross rental expense aggregated $387 million, $387 million and $385 million in 1994, 1993 and 1992, respectively. The amount of rental commitments applicable to subleases, contingent rentals and executory costs is not significant.

8. Regulatory Accounting

Consistent with most local exchange carriers, the local communications services division accounts for the economic effects of regulation pursuant to SFAS No.71. The application of SFAS No. 71 requires the accounting recognition of the rate actions of regulators where appropriate, including the recognition of depreciation and amortization based on estimated useful lives prescribed by regulatory commissions rather than those that might be utilized by non-regulated enterprises. Sprint currently believes the local communications services division's rate-regulated operations meet the criteria for the continued application of the provisions of SFAS No. 71. However, the local communications services division operates in an evolving environment in which the regulatory framework is changing and the level of competition is increasing. Accordingly, Sprint constantly monitors and evaluates the ongoing applicability of SFAS No. 71 by assessing the likelihood that prices which provide for the recovery of specific costs can continue to be charged to customers.

The approximate amount of Sprint's net regulatory assets at December 31, 1994 was between $450 million and $800 million, consisting primarily of property, plant and equipment and deferred postretirement benefit obligations, partially offset by deferred tax liabilities. The estimate for property, plant and equipment was calculated based upon a projection of useful remaining lives which are affected by the development of competition, changes in regulation, and the expansion of broadband services to be offered to customers.

9. Sprint/Centel Merger

Effective March 9, 1993, Sprint consummated its merger with Centel, a telecommunications company with local exchange and cellular and wireless communications services operations. Pursuant to the Agreement and Plan of Merger dated May 27, 1992, Sprint issued 1.37 shares of its common stock in exchange for each outstanding share of Centel common stock, or approximately 119 million shares. The transaction costs associated with the merger (consisting primarily of investment banking and legal fees) and the expenses of integrating and restructuring the operations of the two companies (consisting primarily of employee severance and relocation expenses and costs of eliminating duplicative facilities) resulted in nonrecurring charges of $259 million, which reduced 1993 income from continuing operations by $172 million ($0.50 per share).

The merger was accounted for as a pooling of interests. Accordingly, the accompanying consolidated financial statements were retroactively restated in 1993 for the year ended December 31, 1992 to include the results of operations, financial position and cash flows of Centel. In addition, the accompanying consolidated financial statements reflect the elimination of significant, recurring intercompany transactions and certain adjustments to conform the accounting policies of the two companies.

10. Additional Financial Information

Segment Information

Information related to Sprint's operating business segments is included in the tables in "Review of Segmental Results of Operations." The net operating revenues and operating expenses shown in such tables include revenues and expenses eliminated in consolidation totaling $367 million, $307 million and $285 million for the years ended December 31, 1994, 1993 and 1992, respectively. Sprint incurred capital expenditures of $57 million, $46 million and $29 million for the years ended December 31, 1994, 1993 and 1992, respectively, and had identifiable assets of $472 million, $506 million and $329 million at December 31, 1994, 1993 and 1992, respectively, not attributable to segmental operations. Additionally, Sprint incurred $51 million of merger, integration and restructuring costs not attributable to its segmental operations for the year ended December 31, 1993.

Realignment and Restructuring Charge

During 1993, Sprint initiated a realignment and restructuring of its long distance communications services division, including the elimination of approximately 1,000 positions and the closure of two facilities. These actions resulted in a nonrecurring charge of $34 million, which reduced income from continuing operations by $21 million ($0.06 per share).

Divestiture of Telephone Properties

In April 1992, the sale of Centel's local telephone operations in Ohio was completed, pursuant to a definitive agreement reached in November 1991. Proceeds from the sale aggregated $129 million, including $114 million of cash and $15 million of assumed debt; a gain of $44 million ($0.13 per share), net of related income taxes, was realized on the sale.

Concentrations of Credit Risk

Sprint's accounts receivable are not subject to any concentration of credit risk. Interest rate swap agreements and foreign currency contracts involve the risk of dealing with counterparties and their ability to meet the terms of the contracts. Notional principal amounts often are used to express the volume of these transactions, but the amounts subject to credit risk are significantly smaller. In the event of non-performance by the counterparties, Sprint's accounting loss would be limited to the net amount that it would be entitled to receive under the terms of the applicable interest rate swap agreement or foreign currency contract. However, Sprint does not anticipate non-performance by any of the counterparties with which it has such agreements. Sprint controls the amount of credit risk as well as the concentration of credit risk of its interest rate swap agreements and foreign currency contracts through credit approvals, dollar exposure limits, and internal monitoring procedures.

Financial Instruments

Sprint estimates the fair value of its financial instruments using available market information and appropriate valuation methodologies. Accordingly, the estimates presented herein are not necessarily indicative of the values Sprint could realize in a current market exchange. Although management is not aware of any factors that would affect the estimated fair value amounts presented as of December 31, 1994, such amounts have not been comprehensively revalued for purposes of these financial statements since that

date, and therefore, estimates of fair value subsequent to that date may differ significantly from the amounts presented herein. The carrying amounts and estimated fair values of Sprint's financial instruments, as of December 31, are as follows:

	1994		1993	
(in millions)	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
Financial assets				
Cash and cash equivalents	**$ 123.3**	**$ 123.3**	$ 76.8	$ 76.8
Investments in equity securities	**177.6**	**177.6**	303.3	303.3
Financial liabilities				
Long-term debt				
Corporate	**2,139.3**	**2,170.5**	2,109.2	2,377.2
Long distance communications services	**223.1**	**222.1**	423.4	447.8
Local communications services	**2,098.7**	**1,966.4**	2,128.2	2,342.5
Other	**476.1**	**488.2**	433.6	534.6
Off-balance sheet instruments				
Interest rate swap agreements	—	**2.6**	—	(1.7)
Foreign currency contracts	—	**(0.4)**	—	(0.3)

The carrying values of Sprint's cash equivalents approximate fair value as of December 31, 1994 and 1993. The fair value of Sprint's investments in equity securities are estimated by reference to quoted market prices. The fair values of Sprint's long-term debt are estimated based on quoted market prices for publicly-traded issues, and based on the present value of estimated future cash flows using a discount rate commensurate with the risks involved for all other issues. The fair value of interest rate swap agreements is estimated as the cost that Sprint would receive (pay) to terminate the swap agreements at December 31, 1994 and 1993, taking into account the then-current interest rates. The fair value of foreign currency contracts is estimated as the replacement cost of the contracts at December 31, 1994 and 1993, taking into account the then-current foreign currency exchange rates.

Interest Rate Swap Agreements

Interest rate swap agreements are utilized by Sprint as part of its interest rate risk management program. Net interest paid or received related to such agreements is recorded using the accrual method and is recorded as an adjustment to interest expense. At December 31, 1994 and 1993, Sprint had outstanding $125 million notional amount of interest rate swap agreements. Net interest expense (income) related to interest rate swap agreements was $1 million, $2 million, and ($400,000) for the years ended December 31, 1994, 1993 and 1992, respectively. There were no deferred gains or losses relating to any terminated interest rate swap agreements recorded at December 31, 1994, 1993 and 1992.

Foreign Currency Contracts

As part of its foreign currency exchange risk management program, Sprint purchases and sells over-the-counter forward contracts and options in various foreign currencies. Sprint had outstanding approximately $13 million and $4 million of open forward contracts to buy various foreign currencies at December 31, 1994 and 1993, respectively. Sprint also had outstanding approximately $1 million and $6 million of open forward contracts to sell various foreign currencies at December 31, 1994 and 1993, respectively. There were no foreign currency option contracts outstanding at December 31, 1994 or 1993. The forward contracts open at December 31, 1994 all had an original maturity of six months or less. The net gain or loss recorded to reflect the cash paid or received upon settlement of such contracts is recorded in the period incurred. Total net losses of $2 million and $1 million were recorded related to foreign currency transactions and contracts for the years ended December 31, 1994 and 1993, respectively.

At December 31, 1994 and 1993, Sprint had foreign currency translation gains of $1 million and $2 million, respectively, included in "Other, net" in the Consolidated Statements of Common Stock and Other Shareholders' Equity.

Management Report

The management of Sprint Corporation has the responsibility for the integrity and objectivity of the information contained in this Annual Report. Management is responsible for the consistency of reporting such information and for ensuring that generally accepted accounting principles are used.

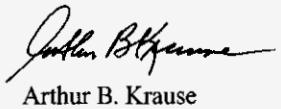
In discharging this responsibility, management maintains a comprehensive system of internal controls and supports an extensive program of internal audits, has made organizational arrangements providing appropriate divisions of responsibility and has established communication programs aimed at assuring that its policies, procedures and codes of conduct are understood and practiced by its employees.

The consolidated financial statements included in this Annual Report have been audited by Ernst & Young LLP, independent auditors. Their audit was conducted in accordance with generally accepted auditing standards and their report is included herein.

The responsibility of the Board of Directors for these financial statements is pursued primarily through its Audit Committee. The Audit Committee, composed entirely of directors who are not officers or employees of Sprint, meets periodically with the internal auditors and independent auditors, both with and without management present, to assure that their respective responsibilities are being fulfilled. The internal and independent auditors have full access to the Audit Committee to discuss auditing and financial reporting matters.



William T. Esrey
Chairman, President and Chief Executive Officer



Arthur B. Krause
Executive Vice President and
Chief Financial Officer

Report of Independent Auditors

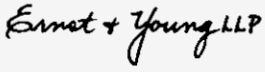
The Board of Directors and Shareholders
Sprint Corporation

We have audited the accompanying consolidated balance sheets of Sprint Corporation (Sprint) as of December 31, 1994 and 1993, and the related consolidated statements of income, cash flows, and common stock and other shareholders' equity for each of the three years in the period ended December 31, 1994, appearing on pages 29, 34, 37, and 39 through 50. These financial statements are the responsibility of the management of Sprint. Our responsibility is to express an opinion on these financial statements based on our audits. We did not audit the financial statements of Centel Corporation, a wholly-owned subsidiary, for the year ended December 31, 1992, which statements reflect net income constituting approximately 9 percent of consolidated net income for the year ended December 31, 1992. Those statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to data included for Centel Corporation, is based solely on the report of the other auditors.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits and the report of other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audits and the report of other auditors, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Sprint at December 31, 1994 and 1993, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 1994, in conformity with generally accepted accounting principles.

As discussed in Notes 1, 2 and 3 to the consolidated financial statements, Sprint changed its method of accounting for postretirement benefits, postemployment benefits and circuit activity costs in 1993 and income taxes in 1992.



Kansas City, Missouri
January 31, 1995

QUARTERLY FINANCIAL DATA

(unaudited)

(in millions, except per share data)	First Quarter 1994	First Quarter 1993
Net operating revenues	**$3,033.2**	$2,718.0
Operating expenses		
Costs of services and products	**1,528.4**	1,381.9
Selling, general and administrative	**724.2**	641.8
Depreciation and amortization	**352.3**	337.2
Merger, integration and restructuring costs[1],[2]	**—**	248.0
Total operating expenses	**2,604.9**	2,608.9
Operating income	**428.3**	109.1
Interest expense	**(101.1)**	(117.9)
Other income (expense), net[3]	**29.2**	(0.7)
Income (loss) from continuing operations before income taxes	**356.4**	(9.5)
Income tax provision[4]	**(129.0)**	(1.8)
Income (loss) from continuing operations	**227.4**	(11.3)
Discontinued operations, net	**—**	(12.3)
Extraordinary losses on early extinguishments of debt, net	**—**	(5.2)
Cumulative effect of changes in accounting principles, net[5]	**—**	(384.2)
Net income (loss)	**227.4**	(413.0)
Preferred stock dividends	**(0.7)**	(0.6)
Earnings (loss) applicable to common stock	**$ 226.7**	$ (413.6)
Earnings (loss) per common share		
Continuing operations	**$ 0.65**	$ (0.03)
Discontinued operations	**—**	(0.04)
Extraordinary item	**—**	(0.02)
Cumulative effect of changes in accounting principles	**—**	(1.12)
Total	**$ 0.65**	$ (1.21)

[1] During 1993, Sprint consummated its merger with Centel. The transaction costs associated with the merger and the expenses of integrating and restructuring the operations of the two companies resulted in nonrecurring charges in the first and third quarters of 1993. Such charges reduced net income by $165 million ($0.48 per share) and $7 million ($0.02 per share), respectively. See Note 9 of Notes to Consolidated Financial Statements for additional information.

[2] During third quarter 1993, Sprint realigned and restructured its long distance communications services division, resulting in a nonrecurring charge which reduced net income by $21 million ($0.06 per share). See Note 10 of Notes to Consolidated Financial Statements for additional information.

[3] During first quarter 1994, Sprint sold an investment in equity securities, realizing a gain of $35 million, which increased net income by $22 million ($0.06 per share).

[4] During third quarter 1993, the Revenue Reconciliation Act of 1993 was enacted which, among other changes, raised the federal income tax rate to 35 percent from 34 percent. As a result, Sprint adjusted its deferred income tax assets and liabilities to reflect the revised rate, resulting in a nonrecurring charge which reduced net income by $13 million ($0.04 per share). See Note 3 of Notes to Consolidated Financial Statements for additional information.

[5] Effective January 1, 1993, Sprint changed its method of accounting for postretirement and postemployment benefits by adopting SFAS No. 106 and No. 112 and effected another accounting change. See Notes 1 and 2 of Notes to Consolidated Financial Statements for additional information.

Second Quarter		Third Quarter		Fourth Quarter		Total Year	
1994	1993	1994	1993	1994	1993	1994	1993
$3,150.4	$2,800.9	**$3,233.8**	$2,867.6	**$3,244.4**	$2,981.3	**$12,661.8**	$11,367.8
1,574.4	1,408.9	**1,615.0**	1,435.1	**1,643.2**	1,510.2	**6,361.0**	5,736.1
752.8	675.9	**781.7**	690.8	**775.9**	721.4	**3,034.6**	2,729.9
366.4	338.0	**366.8**	338.5	**392.9**	345.0	**1,478.4**	1,358.7
—	—	—	44.5	—	—	—	292.5
2,693.6	2,422.8	**2,763.5**	2,508.9	**2,812.0**	2,576.6	**10,874.0**	10,117.2
456.8	378.1	**470.3**	358.7	**432.4**	404.7	**1,787.8**	1,250.6
(100.0)	(113.0)	**(98.6)**	(114.2)	**(98.3)**	(107.3)	**(398.0)**	(452.4)
(9.3)	(8.1)	**(9.3)**	(11.4)	**(18.3)**	(2.1)	**(7.7)**	(22.3)
347.5	257.0	**362.4**	233.1	**315.8**	295.3	**1,382.1**	775.9
(127.9)	(91.9)	**(132.3)**	(96.4)	**(109.2)**	(105.2)	**(498.4)**	(295.3)
219.6	165.1	**230.1**	136.7	**206.6**	190.1	**883.7**	480.6
—	—	—	—	**7.0**	—	**7.0**	(12.3)
—	(8.5)	—	(14.5)	—	(1.0)	—	(29.2)
—	—	—	—	—	—	—	(384.2)
219.6	156.6	**230.1**	122.2	**213.6**	189.1	**890.7**	54.9
(0.7)	(0.9)	**(0.6)**	(0.6)	**(0.7)**	(0.7)	**(2.7)**	(2.8)
$ 218.9	$ 155.7	**$ 229.5**	$ 121.6	**$ 212.9**	$ 188.4	**$ 888.0**	$ 52.1
$ 0.63	$ 0.48	**$ 0.66**	$ 0.39	**$ 0.59**	$ 0.55	**$ 2.53**	$ 1.39
—	—	—	—	**0.02**	—	**0.02**	(0.04)
—	(0.02)	—	(0.04)	—	—	—	(0.08)
—	—	—	—	—	—	—	(1.12)
$ 0.63	$ 0.46	**$ 0.66**	$ 0.35	**$ 0.61**	$ 0.55	**$ 2.55**	$ 0.15

BOARD OF DIRECTORS

DuBose Ausley is chairman of Macfarlane, Ausley, Ferguson & McMullen, a law firm in Tallahassee, Florida. He is also chairman of the Capital City Bank Group, Inc. Prior to becoming a Sprint director in 1993, Ausley had been a director of Centel Corporation since 1982. He is a member of the nominating and corporate responsibility and the pension and savings trusts committees.

Warren L. Batts is chairman and chief executive officer of Premark International, Inc., in Deerfield, Illinois. He has been a Sprint director since 1982. Batts is chairman of the finance committee and a member of the executive and the organization and compensation committees.

Ruth M. Davis is president and chief executive officer of The Pymatuning Group, Inc., in Alexandria, Virginia. She has been a Sprint director since 1981. Davis is a member of the audit and the pension and savings trusts committees.

William T. Esrey is chairman and chief executive officer of Sprint. He joined Sprint in 1980 as executive vice president-corporate planning, was named president and chief executive officer in 1985 and became chairman and chief executive officer in 1990. He has been a Sprint director since 1985. Esrey is chairman of the board's executive committee.

Donald J. Hall is chairman of Hallmark Cards, Inc., in Kansas City, Missouri. He has been a Sprint director since 1986. Hall is a member of the audit and the organization and compensation committees.

Harold S. Hook is chairman and chief executive officer of American General Corporation, in Houston, Texas. He has been a Sprint director since 1982. Hook is a member of the finance and the pension and savings trusts committees.

Robert E. R. Huntley is counsel to Hunton & Williams, a law firm in Richmond, Virginia. Prior to becoming a Sprint director in 1993, he had been a director of Centel Corporation since 1975. Huntley is chairman of the audit committee and a member of the executive and the organization and compensation committees.

Ronald T. LeMay is president and chief operating officer of the long distance division of Sprint. Prior to that, he was executive vice president-corporate affairs of Sprint from 1987 to 1989. LeMay has been a Sprint director since 1993.

Linda Koch Lorimer is secretary of the university, Yale University, in New Haven, Connecticut. Prior to becoming a Sprint director in 1993, she had been a director of Centel Corporation since 1988. She is chairman of the pension and savings trusts committee and a member of the executive and the organization and compensation committees.

Charles H. Price II is chairman of the board of Mercantile Bank of Kansas City, in Kansas City, Missouri. He was the United States Ambassador to the United Kingdom of Great Britain and Northern Ireland from 1983 to 1989. Price has been a Sprint director since 1989. He is a member of the finance and the nominating and corporate responsibility committees.

Frank E. Reed is president and chief executive officer of Philadelphia National Bank, in Philadelphia, Pennsylvania. Prior to becoming a Sprint director in 1993, he had been a director of Centel Corporation since 1978. He is a member of the audit and finance committees.

Charles E. Rice is chairman and chief executive officer of Barnett Banks, Inc., in Jacksonville, Florida. He has been a Sprint director since 1975. Rice is chairman of the nominating and corporate responsibility committee and a member of the audit and executive committees.

Stewart Turley is chairman and chief executive officer of Eckerd Corporation, in Clearwater, Florida. He has been a Sprint director since 1980. Turley is chairman of the organization and compensation committee and a member of the executive and the nominating and corporate responsibility committees.

PRINCIPAL CORPORATE OFFICERS

William T. Esrey
Chairman and Chief Executive Officer

Ronald T. LeMay
President and Chief Operating Officer
Long Distance Division

D. Wayne Peterson
President and Chief Operating Officer
Local Telecommunications Division

Dennis E. Foster
President and Chief Operating Officer
Cellular and Wireless Division

J. Richard Devlin
Executive Vice President
Law and External Affairs

Arthur B. Krause
Executive Vice President
Chief Financial Officer

Gene M. Betts
Senior Vice President
Corporate Finance

John P. Meyer
Senior Vice President
Controller

Theodore H. Schell
Senior Vice President
Strategic Planning & Corporate Development

Richard C. Smith, Jr.
Senior Vice President
Quality Development & Public Relations

M. Jeannine Strandjord
Senior Vice President
Treasurer

I. Benjamin Watson
Senior Vice President
Human Resources

Don A. Jensen
Vice President
Secretary

OPERATING COMPANY OFFICERS

Long Distance Division

Robba L. Benjamin
President
Multimedia and Strategic Services

Kevin E. Brauer
President
Business Services Group

George N. Fuciu
Senior Vice President
Network and Information Systems

William J. Gunter
Senior Vice President
Finance

John R. Hoffman
Senior Vice President
External Affairs

Christopher J. Rooney
President
Sprint International

David R. Schmieg
Senior Vice President
Staff Operations

Thomas E. Weigman
President
Consumer Services Group

Local Telecommunications Division

Dale L. Cross
President and Chief Executive Officer
Sprint/United Telephone-Eastern

Michael B. Fuller
President and Chief Executive Officer
Sprint/United Telephone-Midwest

J. Darrell Kelley
President
Sprint/United Telephone-Florida
Sprint/Centel-Florida

A. Allan Kurtze
Senior Vice President-Operations

Steven L. McMahon
President
Sprint/United Telephone-Northwest

Randy W. Osler
President
Sprint/United Telephone-North Central
Sprint/Centel-Illinois

Dianne M. Ursick
President
Sprint/Central Telephone-Nevada

Cellular & Wireless

George N. Hutton IV
Executive Vice President-Operations

Product Distribution/ Directory Publishing

William G. Obermayer
President
Sprint/North Supply

Robert J. Walsh
President
Sprint Publishing & Advertising

Sprint/Cable Venture
(with Tele-Communications, Inc., Comcast Corporation, Cox Communications, Inc.)

Gary D. Forsee
Interim Chief Executive Officer

SHAREHOLDER INFORMATION

Annual Meeting: The Annual Meeting will be held Tuesday, April 18, 1995 at the world headquarters. Formal notice of the Sprint annual meeting, proxy statement and proxy will be mailed to shareholders on or about March 9, 1995.

Common Stock Dividends: Dividends on Sprint common stock, declared by the Board of Directors, are usually paid quarterly at the end of March, June, September and December. The exact record dates and payment dates are set by the Board of Directors. The last quarterly dividend payment in the Fourth Quarter 1994 was 25 cents per share, or an indicated annual dividend of $1.00 per common share.

Automatic Dividend Reinvestment Plan: Sprint offers a dividend reinvestment and stock purchase plan to registered shareholders at no commission or handling charge for purchases made with reinvested dividends and/or optional cash payments. Upon request, shareholders may obtain information about the plan from Shareholder Relations at the corporate headquarters.

Form 10-K: Copies of Sprint's Annual Report on Form 10-K to the Securities and Exchange Commission may be obtained by shareholders without charge from the Investor Relations Department at the corporate headquarters.

Investor Inquiries: Security analysts, shareholders and investment professionals should direct inquiries regarding Sprint and its business to Investor Relations at the corporate headquarters. Copies of the investor supplement to the Annual Report are available upon request through Investor Relations.

Shareholder Inquiries: Inquiries regarding stock transfers, lost certificates, direct deposit of dividends or address changes should be directed to the stock transfer agent, UMB Bank, n.a. at their address.

COMMON STOCK DATA

	Market Price Per Share					
	1994			1993		
	High	Low	End of Period	High	Low	End of Period
1st Quarter	38⅛	32½	34¼	31¾	25½	30½
2nd Quarter	40⅛	33¼	34⅞	35⅜	29½	35⅛
3rd Quarter	40⅛	34⅛	38⅛	37½	33½	36¾
4th Quarter	38⅞	26⅛	27⅝	40¼	31⅜	34¾

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(800) 829-0965

Quarterly Financial Information
As a cost-saving measure, Sprint will not publish quarterly financial reports in 1995. Shareholders, however, can receive a faxed or mailed copy of the quarterly financial results upon request through Sprint's toll-free Shareholder Information Line. Shareholders can dial **1-800-284-6977** to hear a recorded report on Sprint's financial performance and request a copy of printed quarterly results.

Investor Relations (913) 624-3344

Shareholder Relations (913) 624-2541

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Kansas City, Missouri

Stock Exchange Listings
Common Stock
New York Stock Exchange
Chicago Stock Exchange
Pacific Stock Exchange
Convertible Preferred Stock
New York Stock Exchange

Stock Symbol FON

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To order long distance business service, call 1-800-877-2000.
To order long distance service for the deaf and hard of hearing, call 1-800-773-4327.

SPRINT WORLDWIDE HEADQUARTERS

Post Office Box 11315
Kansas City, MO 64112 U.S.A.
(913) 624-3000

SPRINT'S LONG DISTANCE DIVISION

Business Services Group
(Business, government and hospitality customers)

Business Sales
3100 Cumberland Circle
Atlanta, GA 30339
(404) 859-5000

Business Marketing
8140 Ward Parkway
Kansas City, MO 64114
(913) 624-6000

Business Operations and Government Systems Division
13221 Woodland Park Road
Herndon, VA 22071
(703) 904-2000

Hospitality Group
925 Dillingham Boulevard
Honolulu, HI 96817-4506
(808) 847-2121

Consumer Services Group
(Residential customers)
8140 Ward Parkway
Kansas City, MO 64114
(913) 624-6000

Multimedia
(Telemedia, Video and Messaging)
8140 Ward Parkway
Kansas City, MO 64114
(913) 624-6000

Sprint International
(International customers)
12490 Sunrise Valley Road
Reston, VA 22096
(703) 689-6000

SPRINT'S LOCAL TELECOMMUNICATIONS DIVISION

Sprint/United Telephone-Eastern
1201 Walnut Bottom Road
Carlisle, PA 17013
(717) 245-6312

Sprint/United Telephone-Florida
Sprint/Centel-Florida
555 Lake Border Drive
Apopka, FL 32703
(407) 889-6000

Sprint/Mid-Atlantic Telecom
14111 Capital Boulevard
Wake Forest, NC 27587
(919) 554-7900

Sprint/United Telephone-Midwest
5454 West 110th Street
Overland Park, KS 66211
(913) 345-7600

Sprint/Central Telephone-Nevada
330 South Valley View Boulevard
Las Vegas, NV 89152
(702) 877-7171

Sprint/United Telephone-North Central
Sprint/Centel-Illinois
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Post Office Box 3555
Mansfield, OH 44907
(419) 755-8011

Sprint/United Telephone-Northwest
902 Wasco Street
Hood River, OR 97031
(503) 386-2211

SPRINT'S CELLULAR AND WIRELESS DIVISION

Sprint Cellular
8725 W. Higgins Road
Chicago, IL 60631
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PRODUCT DISTRIBUTION AND PUBLISHING SUBSIDIARIES

Sprint/North Supply
600 Industrial Parkway
Industrial Airport, KS 66031
(913) 791-7000

Sprint Publishing & Advertising
7015 College Boulevard
Suite 400
Overland Park, KS 66211
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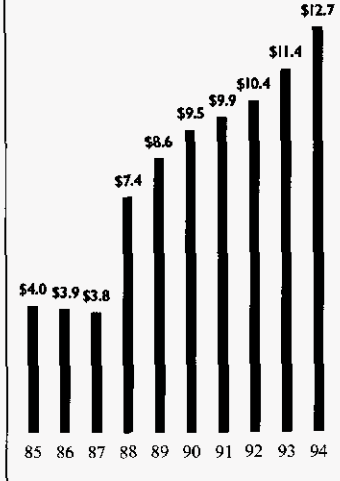
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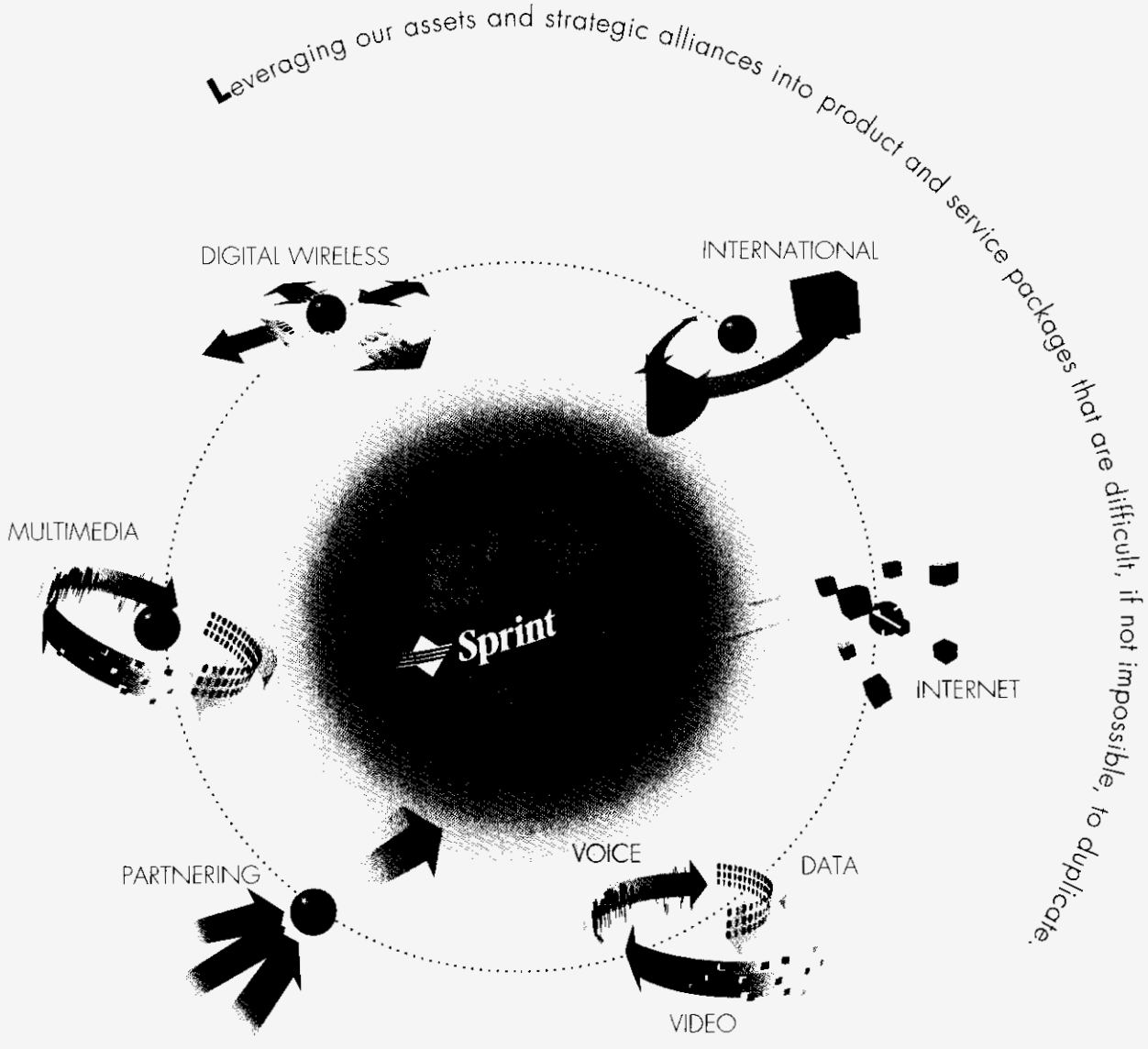
NET OPERATING REVENUES
1985-1994

(in billions)



Sprint's revenues have tripled since 1985, as the company expanded in local markets and diversified into long distance and wireless communications.

BEYONDTALK



Sprint®

1995 Annual Report to Shareholders

Sprint is an action-oriented company of *realized promises* . . . a company successfully managing the critical issues facing our industry today—branding, strategic alliances, deregulation, globalization and financial strength.



Page 6

Branding

Sprint's brand is a powerful asset. With a reputation for responsiveness and quality, Sprint offers a well-known and trusted choice in newly competitive markets.

Long Distance Division President Gary Forsee and Local Communications Division President Wayne Peterson discuss the company's strategy for building on the Sprint brand.



Page 8

Strategic Alliances

Emerging demand for integrated packages of telecom services calls for providers to join as partners. Sprint's new domestic and international alliances form a unique complement of assets on a national and global scale.

Sprint President and Chief Operating Officer Ron LeMay and Strategic Planning Senior Vice President Ted Schell discuss the strategy behind Sprint's domestic and international alliances.



Page 10

Deregulation

Legal and regulatory changes will soon erase traditional telecom boundaries. Sprint is working for a fair and orderly transition to the new competitive universe.

Sprint General Counsel Rich Devlin discusses the course and impact of deregulation.



BEYOND TALK: Sprint is the world's largest carrier of Internet traffic.

We had the vision of the first nationwide all-digital, fiber-optic network, and we built it. We have the vision of the product and service packages consumers and businesses will demand, and our employees are building the company that will deliver what others are just talking about.





Page 12

Globalization

Telecom markets are deregulating worldwide. From multinationals to individual consumers, more and more customers need a global reach. Sprint is positioned to seize opportunities.

Former Sprint International President and now Global One (World) President Chris Rooney describes Sprint's globalization strategy.



Page 14

Financial Strength

Competitive telecom providers must rapidly expand across traditional market segments and into new growth markets, such as digital wireless and multimedia.

Chief Financial Officer Art Krause discusses how Sprint is funding substantial new investments, while it also strengthens the balance sheet and maintains strong operating performance.



Also in this report

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1995 Year in Review and Operational Highlights

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Sprint at a Glance

Page 26
Financial Section and Corporate Information

We have pursued

A Clear, Aggressive Vision

and our focus now must be on executing the business plan.



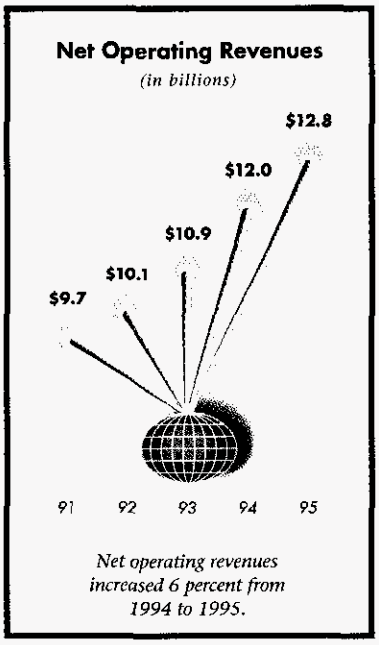
WILLIAM ESREY
Sprint Chairman and Chief Executive Officer

Dear Shareholder: Sprint is positioned vastly better for the future than we have ever been in our history.

Early in 1996, a historic telecommunications bill became law. This bill redefines the ground rules and sets a new direction for the future of our industry. We are now in a new era that changes how companies will behave, what they are allowed to do, and how they interact with one another.

I am pleased to note that in 1995, Sprint completed the alliances and the positioning necessary for our company to succeed in the telecommunications industry of the future. We completed the agreements and obtained the approvals necessary to launch what promises to be one of the most successful national wireless companies, to establish a comprehensive North American strategy that will include Canada and Mexico, and to begin the most far-reaching global alliance in the history of our industry.

I feel very good about where we are and where we are headed. As the telecommunications revolution continues to sweep the world, I believe we are in the best position of anyone in the industry. However, our company cannot afford to be muddled in its thinking or sluggish in its actions. I assure you that we will be neither.



Net operating revenues increased 6 percent from 1994 to 1995.

Not long ago, a security analyst came up to me at a meeting and said, "Bill, people don't fully grasp what Sprint has done and how well it has positioned itself for the future." Well, he is right. We have pursued a clear, aggressive vision. We have an outstanding group of employees and we have assembled a team of major strategic partners that are second to none. Our challenge is now clear. We must leverage our unique position as the only company with successful operations in local, long distance, wireless, and an outstanding global partnership to create the telecommunications company that will be a worldwide leader in the next century. Our focus must now be on executing the vision and the business plan that we have in place.

My confidence for what we can achieve is rooted in our recent history. During the period 1985 to 1995, Sprint has been transformed from a rural, local telephone company with aspirations to build a long distance network, into an internationally known and respected telecommunications company. During those 10 years, compounded annual returns to shareholders averaged 17.7 percent. This was superior to our long distance competitors as well as to the industry average for local exchange companies. In 1995, Sprint's income from continuing operations (excluding nonrecurring items) increased 14 percent to $1 billion, or $2.85 per share. Further, the investment by Deutsche Telekom and France Telecom in 1996 is dramatically reducing Sprint's debt, providing an extremely healthy balance sheet for the challenges and opportunities that lie ahead.

BEYOND TALK: SprintNet, enhanced through our Global One alliance, is the world's largest integrated global data network with over 2,350 access points worldwide.

Highlights

(in millions, except per share data and employee data) As of or for the years ended December 31,	1995	1994	% Change
Net operating revenues			
Long distance communications services	$ 7,277.4	$ 6,805.1	7%
Local communications services	4,719.4	4,412.8	7%
Product distribution and directory publishing	1,148.0	1,108.7	4%
Intercompany revenues	(379.7)	(340.0)	12%
Total	$12,765.1	$11,986.6	6%
Income from continuing operations[1]	$ 1,001.5	$ 877.1	14%
Earnings per common share from continuing operations[1]	$ 2.85	$ 2.51	14%
Dividends per common share	$ 1.00	$ 1.00	—
Average common shares outstanding	350.1	348.7	—
Total assets	$15,195.9	$14,547.5	4%
Return on equity (ROE)[2]	20.6%	20.9%	(1)%
Employees	48,265	48,826	(1)%

[1]Income from continuing operations and related earnings per share amounts for 1995 and 1994 exclude the effects of nonrecurring items. During 1995, a nonrecurring charge was recorded related to a restructuring within the local communications division. During 1994, a nonrecurring gain was recorded related to the sale of an investment in equity securities. Including such nonrecurring items, 1995 income from continuing operations was $946.1 million ($2.69 per share) as compared to $899.2 million ($2.57 per share) in 1994.

[2]ROE is based upon recurring results from continuing operations. Accordingly, ROE excludes the nonrecurring items discussed above.

Here are some brief specifics on our operating divisions:

- The long distance division staged a substantial improvement in 1995, with strong gains in profitability; but, quite frankly, this performance is not yet up to our objectives. Operating income for the year rose 18 percent. Revenues grew 7 percent to $7.3 billion from $6.8 billion in 1994. Data communications is our fastest growing market segment. In nearly every data service area, Sprint is the market leader, and we expect continued strong gains in the data, multimedia and Internet businesses.

- Sprint's local communications division had another outstanding year. It continues to be one of the industry's strongest performers, and also the biggest contributor to Sprint's bottom line. Excluding a one-time restructuring charge, operating income in the local communications business was $1.1 billion, up 11 percent. Revenues increased 7 percent in 1995 to $4.7 billion. The total number of customer access lines grew 4.7 percent to more than 6.7 million.

- Sprint Cellular, which has been spun off to shareholders, increased its 1995 operating income nearly 70 percent, to $145 million. Revenues increased 33 percent to $834 million.

- Sprint's product distribution and directory publishing businesses increased operating income by 16 percent to $87 million. Revenues increased 4 percent to $1.1 billion.

In the past few months, we joined forces with a wonderful group of partners who have very similar views of the challenges and opportunities ahead. Our reasons for forming these partnerships are based on the premise that we

Continued on page 4

"As the telecommunications revolution continues to sweep the world, I believe we are in the best position of anyone in the industry."

"The customer knows the Sprint name and, more important, trusts it. This comfort level can give Sprint a big boost as customers grapple with the range of confusing services that increasingly will be thrown at them."

Continued from page 3

have discussed with you for the past few years—namely, that no single company can hope to provide the capital, the infrastructure, the global reach and the technological knowledge to meet all of the communications needs of our customers. We believe that strategic alliances are crucial to Sprint's future prosperity. We have now achieved these basic alliances, and we are well positioned globally and domestically. As a company, we are on the threshold of exciting changes in the way we operate. We believe there will be three main beneficiaries of our vision: our customers, our employees and our shareholders.

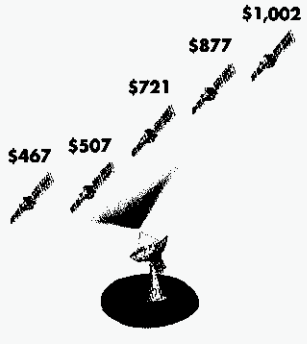
Global One In January 1996, we announced the launch of Global One, our venture with Deutsche Telekom and France Telecom, the second and fourth largest telecommunications service providers in the world. They will invest between $3.5 billion and $3.7 billion and acquire a 20 percent stake in Sprint.

Why? Because they see an innovative, entrepreneurial company capable of penetrating new markets. We make good partners.

Global One is not simply a convenient marketing structure, such as some of our competition has created. Instead, each of the three partners has handed over most of its global services and facilities to Global One—an entirely new company with its own people, its own network and its own products. This is a company dedicated to responding to the customer, the technology, the marketplace and the future.

Income from Continuing Operations—Excluding Nonrecurring Items

(in millions)



Income from continuing operations, excluding nonrecurring items, increased 14 percent from 1994 to 1995.

Global One will provide single-source global communications to business, consumer and carrier markets worldwide. While we constantly hear that we are becoming one world—I might have said something like that on occasion myself—the actual logistics of global telecommunications are complex, with differing technical protocols, regulations, cultures, economics and so forth. Global One will make this morass seamless and simple to the customer. Global One adds value to customers large and small, all over the world.

Although we are covering Asia, at some point we may also add an Asian partner or partners to our Global One partnership.

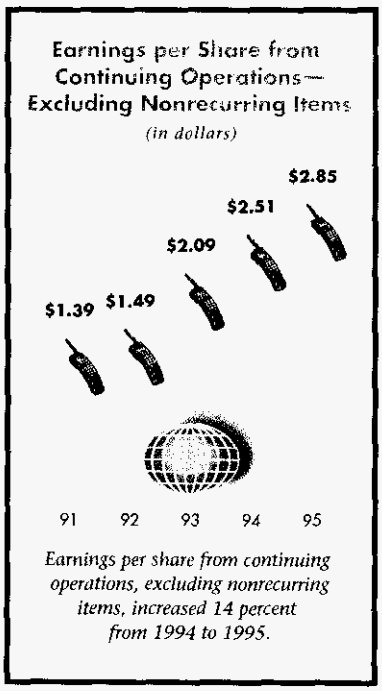
Additionally, our alliances with Telefonos de Mexico (Telmex) and Call-Net in Canada (Sprint Canada) provide us with a comprehensive presence across North America.

With our global partnerships and alliances, we are ready to take on the world.

Sprint Spectrum The other major strategic partnership is Sprint Spectrum LP, our partnership with Tele-Communications Inc. (TCI), Comcast Corporation and Cox Communications, Inc.—three of the largest cable television operators in the United States. The interesting thing about technology is that it doesn't respect anything except its own relentless progress. It is rapidly erasing the boundaries between long distance, local, wireless and cable communications. Again, one company can't do it all. Again, we have sought out well-matched partners.

BEYOND TALK: Sprint was the first carrier to offer nationwide commercial Asynchronous Transfer Mode, or ATM, service.

Sprint Spectrum (previously known as the Sprint Telecommunications Venture) will create and market a higher quality and more reliable digital wireless service than is known in today's marketplace. Using the most modern technology on a consistent, national basis to achieve a distinct competitive advantage may well be a rerun of how Sprint redefined the long distance market by building the nation's first, and still only, all-digital, fiber-optic network. Sprint Spectrum has already acquired licenses to provide the next generation of wireless service known as Personal Communications Service (PCS). We will package this new PCS wireless service with our long distance and local service to create a comprehensive offering that will meet all the needs of our customers from a single, well-respected source. Sprint Spectrum's reach will cover more than 182 million people, nearly three-quarters of the U.S. population, giving us the greatest coverage of any wireless provider in the United States. We will offer better clarity, more privacy and greater value than existing wireless service.



Earnings per share from continuing operations, excluding nonrecurring items, increased 14 percent from 1994 to 1995.

Due in part to federal rules that limit cross-ownership of PCS and cellular operations, Sprint undertook a tax-free spin-off of its fast-growing cellular operations. In early 1996, Sprint shareholders became direct investors in an independent cellular company. Sprint Spectrum is now free to pursue its own growth strategy, based on a single wireless technology.

The Power of the Sprint Brand Now, while we are teaming up technologically and globally, we are also consolidating our brand into a *One Sprint* relationship with customers. We are moving to a common Sprint identity for all our products and services, including local telephone service.

The customer knows the Sprint name and, more important, trusts it. This comfort level can give Sprint a big boost as customers grapple with the range of confusing services that increasingly will be thrown at them. They will seek to rely on those companies in which they have personal knowledge and confidence. Sprint will be there.

Another reason for presenting *One Sprint* to the customer is this: we are so much more than the third largest long distance company. We are leading in new areas, such as Virtual Private Networks, videoconferencing and the immensely popular, rapidly growing Internet. What we intend to do is associate the Sprint name with cutting-edge technology and service to the benefit of all our customers.

The election of Ron LeMay to president and chief operating officer of Sprint in February 1996 is another exciting development for all of us. Ron is an extremely talented business executive and we team well together. Ron's election strengthens our already excellent management team, and he will be a source of great leadership to all of us in the years ahead.

In summary, our focus will be to build a full-service, state-of-the-art international telecommunications company. Although we have received intellectual credit for our vision of recent years, it has not yet fully translated into financial credit in the price of our stock. I believe this will come.

In my letter to you last year, I said that our intent is to emerge as one of the handful of truly significant communications companies in the world. We are on target.

We have closed the book on 1995. We look forward to you being our financial partners, and our customers, in 1996 and beyond.



William T. Esrey
Chairman and Chief Executive Officer
March 7, 1996

"With our global partnerships and alliances, we are ready to take on the world."

Capturing and growing share in an exploding marketplace, with

Branding

as our linchpin.

An interview with
Gary Forsee
President, Long Distance Division, and
Wayne Peterson
President, Local Communications Division

Q) *How strong is Sprint's brand compared to your principal competitors?*

GF) Sprint has very high brand awareness among both residential and business customers. We are firmly established as one of only three nationally recognized telecom brands. We will build on that position, with a continued emphasis on reinforcing the brand.

WP) A critical issue is our ability to enter new markets now dominated by the regional Bell companies. The brand gives us a set of national and international communications credentials. We'll have instant recognition against entrenched competitors whose identities are regional.

Q) *What factors differentiate the Sprint brand in the marketplace?*

GF) Our market research indicates customers associate the Sprint brand with such attributes as simplicity, reliability, responsiveness, innovation and global scope. Our branding strategy is to expand on this perception and differentiate Sprint as the first truly integrated provider of packaged services.



GARY FORSEE

Customers will soon be bombarded from all sides with new offerings that few even heard of just a year or two ago: PCS, Internet access, all kinds of other new products and capabilities, with who knows how many companies offering this or that mix of services.

In the face of this, we believe customers will turn to brands they know and trust, and seek the convenience of packaged services. Sprint is exceptionally well positioned to answer that call and to do it first.



WAYNE PETERSON

WP) Sprint's experience in local, long distance and wireless is unparalleled. Our capacity to unify and package this expertise forms the basis for presenting a face to the customer of "One Sprint."

As a first step, our local and long distance divisions already have joint marketing teams in several cities.

Q) *How will the Sprint brand be leveraged in newly competitive local markets?*

WP) During 1996 we will accelerate the move to the Sprint name in many of our United and Centel telephone territories. We want all of our United and Centel telephone customers to see us as "One Sprint" providing total communications services. This will begin to give all our products and services a common identity, and make it easier to market across traditional geographic boundaries.

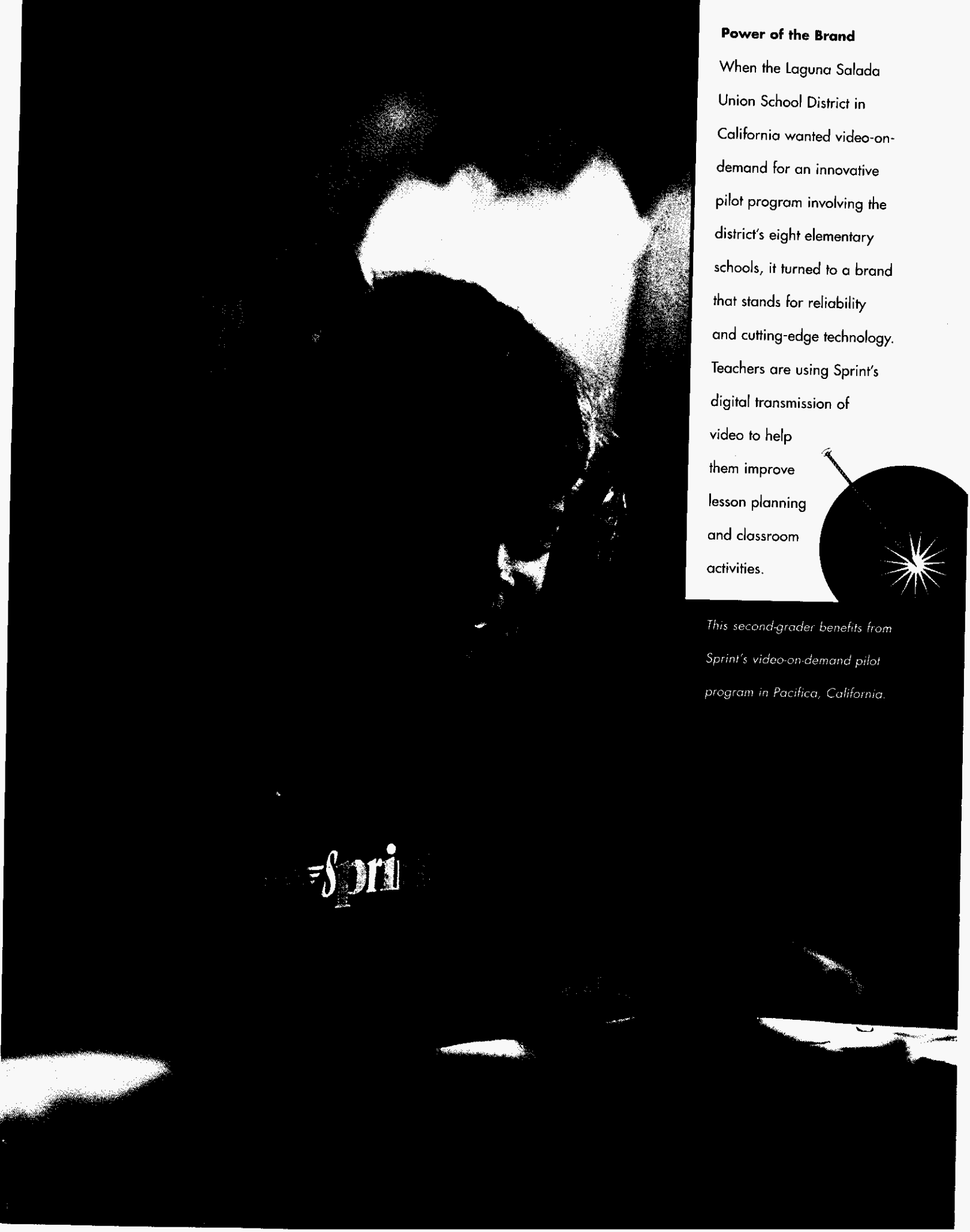
GF) We'll have similar advantages through Sprint Spectrum. The national scope of the Sprint brand combines with the local and regional recognition of our cable partners' brands to give us exceptional cross-marketing opportunities. The joint venture is providing new sales channels for Sprint's long distance products right now.

Q) *What is Sprint's global branding strategy?*

GF) Our joint venture with Deutsche Telekom and France Telecom brings a new brand to the global marketplace, called Global One. By combining the reputations of three high-powered players, Global One will dramatically increase our company's ability to participate in rapidly growing offshore markets.

Global One will prominently feature the Sprint logo. This linkage adds to our ability to market Sprint to domestic customers with growing international needs.

BEYOND TALK: A pioneer in the videoconferencing industry, Sprint has been delivering videoconferencing products and services longer than any other long distance carrier.



Power of the Brand

When the Laguna Salada Union School District in California wanted video-on-demand for an innovative pilot program involving the district's eight elementary schools, it turned to a brand that stands for reliability and cutting-edge technology. Teachers are using Sprint's digital transmission of video to help them improve lesson planning and classroom activities.

This second-grader benefits from Sprint's video-on-demand pilot program in Pacifica, California.

Building a wide range of capabilities through

Strategic Alliances

and delivering integrated services to the customer.

An interview with
Ron LeMay
President and Chief Operating Officer, and
Ted Schell
Senior Vice President, Strategic Planning and Corporate Development

Q) *What's the most important benefit strategic alliances can achieve for Sprint?*
RL) The right strategic partners can give a company the combination of resources needed to compete on a significantly more expansive scale. This increased scale is essential if Sprint is to capture share and compete effectively in large deregulating markets.

Q) *What do you look for in a partner?*
RL) A successful alliance requires a shared vision, as well as the right personal chemistry among the partners. The best alliances are those that allow all the partners to manage capital demands and extend their market reach in a cost-effective manner. To achieve this, you want to avoid pairing assets that duplicate one another, and you want compatible technologies.

Q) *How has this approach played out for Sprint?*
RL) Consider our joint venture with Deutsche Telekom and France Telecom. We've brought together international network infrastructures and relationships that were largely not in direct competition going into the alliance. And we've been able to create a joint venture that allows each partner to continue serving its own national markets exclusively. At the same time, the partners can leverage their combined strengths to serve international markets together under a new global brand.


RON LEMAY


TED SCHELL

In the case of the Telmex alliance, the agreement is focused on interconnecting two advanced networks and marketing a common platform of services under the Sprint brand. Sprint Canada involves yet another set of terms, where we have a 25 percent equity position.
TS) Domestically, Sprint has a unique relationship with three of the nation's top cable companies that allows us to share an investment in next-generation PCS wireless technology on a national scale. Sprint will also negotiate agreements with cable partners to provide wireline residential service.

All of Sprint's relationships fit like pieces in a jigsaw puzzle. The picture that emerges is one of a company that can leverage its partnerships to offer a well-balanced package of voice, video and data services on a global scale. We're also a company with opportunities to cultivate share in markets beyond Sprint's traditional markets.

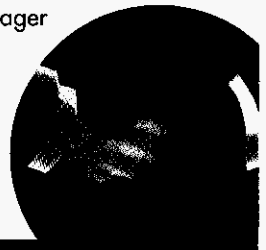
Q) *Why cable companies?*
TS) Our cable partners and affiliates are established in the nation's top 50 markets, with all that implies in terms of market intelligence, customer relationships, sales channels and product lines. Their broadband infrastructure gives the venture superior delivery capacity into homes. In combination with Sprint's national market presence and wireless experience, our partners represent natural allies.

Q) *What will Sprint and its cable partners offer customers?*
TS) The partners are committed to the vision of a single integrated offering of wireless service, local telephone service and long distance service in a package with cable television service. The venture's PCS licenses will enable us to cover more major U.S. cities than any other provider. With the licenses held by our partners, we will have wireless services covering more than 182 million people.

BEYOND TALK: Sprint paging is the first in a series of wireless products that will be offered through Sprint Spectrum.

Revolutionary Service

American Personal Communications (APC) is the first affiliate of Sprint Spectrum, the nation's first broadband Personal Communications Service system—a service that will revolutionize the way Americans communicate. The system incorporates 100 percent digital technology in palm-sized handsets that combine a portable telephone, text pager and answering machine in a single device.



Sprint Spectrum affiliate APC is pioneering wireless service in the Washington, D.C.-Baltimore area.

Encouraging federal and state

Deregulation

and competing aggressively as markets break open and expand.

An interview with
Rich Devlin
General Counsel

Q) *How will the new federal telecommunications law impact Sprint?*

RD)Sprint welcomes the new federal telecommunications law, which was passed by Congress and signed into law by the President in February 1996.

It opens doors for Sprint. The law pre-empts state and local legal barriers that prevented local telephone competition and requires existing telephone companies to interconnect with new entrants. Local competition will allow Sprint to enter these local markets and offer unprecedented value-added packages of communications products and services.

The bill offers challenges as well. It will subject Sprint's local telephone companies to added competition, but Sprint is no stranger to the rigors of the competitive marketplace. Another way to look at it is that we are the local telephone company for about 4 percent of American homes. While that 4 percent will now be open to competition, so will the remaining 96 percent previously unavailable to Sprint. The bill will also allow the Bell companies into long distance, but not before meaningful facilities-based competition is implemented in their local markets.


RICH DEVLIN

Q) *At what pace do you expect competition will come in local markets?*

RD)Entry through resale of local service is likely to occur quickly. When facilities-based local telephone competition occurs will depend in large measure on the Bell companies. If they forthrightly comply with all the requirements to open local telephone markets to competition, facilities-based competition will likely occur in several years.

Q) *What are the primary benefits of deregulation?*

RD)Deregulation will give us an opportunity to offer the full range of Sprint-branded telecom services throughout the country. Through alliances with our cable partners, we will be able to package wireless, long distance and, potentially, local telephone services with entertainment services to some 40 million American homes in the service territories of our cable partners. We will also have the legal right to offer cable TV to our existing 6.7 million local telephone customer lines.

Q) *With deregulation, who will emerge as your strongest competitors?*

RD)There are a number of entities that have the potential to become strong competitors, but in each case there are significant issues they must address to actually realize their potential. Some will be successful, and some will fail. Fortunately, Sprint has already proven we can take on large, established providers. When the Bell System was broken-up 11 years ago, we plunged into the fiercely competitive long distance business and emerged a powerful player. We now have far greater resources, and are better prepared than ever for a new wave of deregulation.

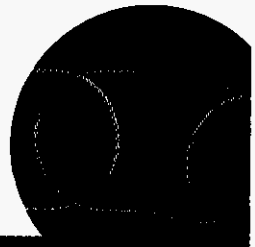
Q) *What is the impact of deregulation on Sprint's international business?*

RD)Around the world, governments are opening their telecom markets to competition. This is creating unprecedented opportunities. Indeed, Sprint's success and experience in deregulated markets is a key foundation block for Sprint's participation in the Global One venture with France Telecom and Deutsche Telekom. We are in a prime position to benefit from deregulation both at home and abroad. And of course, the ultimate winner will be the telecom customer, who will receive more technologically advanced services and lower prices.

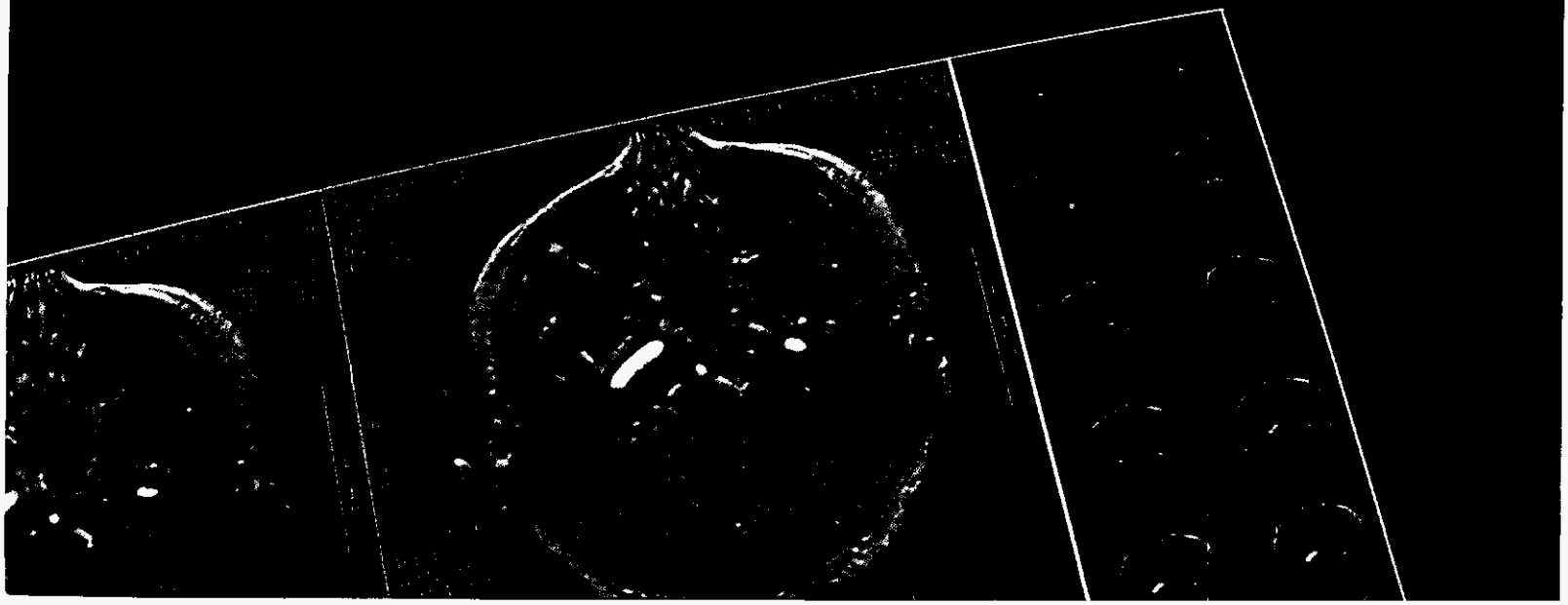
BEYOND TALK: In 1995, Sprint introduced the industry's first community health information network featuring the advantages of an advanced public-switched data network.

New Opportunities

Deregulation is intensifying competition, allowing Sprint to leverage its technological leadership in healthcare applications. Sprint's local communications division is working with Orlando's Florida Hospital, the state's second largest, in developing applications to support telemedicine, teleradiology and other integrated communications solutions throughout the metropolitan Orlando area.



Sprint's technology will allow this Florida Hospital radiologist in Orlando to transfer high-resolution images.



Advancing toward seamless

Globalization

so our customers will have unlimited reach.

An interview with
Chris Rooney
Chairman, Global Venture Office and President and CEO, Global One (World)

Q) *What are the principal components of Global One's strategy?*

CR) Our ultimate strategy is to serve customers with a seamless platform of products and services, available on a global basis.

The basic building blocks needed to implement that strategy are now in place. The Global One joint venture of Sprint, Deutsche Telekom and France Telecom is the world's most comprehensive telecom partnership. Global One also benefits from Sprint's North American strategy, which includes a separate alliance with Mexico's largest telecommunications provider (Telmex) and Sprint's equity participation in one of Canada's largest providers (Sprint Canada).

Altogether, Sprint and its partners have assembled a formidable array of mutually reinforcing relationships.

Q) *What distinguishes Global One from competing alliances?*

CR) Global One is unique in the way it is organized to serve the customer. It is the only partnership that has formed a separate joint venture. Instead of a loose association of firms, Global One is an entity unto itself. Our aim is to move rapidly toward truly seamless, single-source service: one point of contact for sales, order entry, trouble resolution, billing... everything.


CHRIS ROONEY

Global One is also the only partnership that targets beyond the business market to consumers and other telecom carriers as well.

Q) *Other global alliances were announced months before Global One. How large is their lead, and how will you close it?*

CR) If anyone has a lead, I'd argue it's Global One. Our venture begins with a solid base of multinational customers, and we expect strong revenues our first year. And we are very well positioned to expand that base, with more than 40 percent of the world's multinationals headquartered in France, Germany and the United States.

Global One enters the market with an enviable set of assets and exceptional market positioning. Our global network has 1,200 switching centers around the world. The venture also has 50 subsidiaries and offices on six continents. We bring all this together at a pivotal time. International opportunities will grow exponentially as deregulation leads to increased market penetration and price competition. And Global One is at the head of the line.

Q) *The alliance's greatest strength appears to be in Europe and the Americas. What are your plans in Asia?*

CR) Global One already has a strong foothold in Asia through SprintNet. The venture has subsidiaries and well-established relationships in 15 countries, including Australia, China, Hong Kong, South Korea, Japan and Vietnam. Global One will continue to actively cultivate relationships in Asia. That includes the possibility of adding new partners to the venture.

Q) *How do your North American alliances with Telmex and Sprint Canada relate to Global One?*

CR) They are separate alliances, which complement the service of Global One and Sprint's domestic operations.

Together, Sprint's relationships with Telmex and Sprint Canada serve the market with a seamless, integrated North American network. That network has emerged as the provider of choice for businesses operating in the area covered by the North American Free Trade Agreement (NAFTA).

BEYOND TALK: Sprint's Global One partners—Deutsche Telekom and France Telecom—are the world's second and fourth largest telecom companies.



Global Solutions

The world's largest pharmaceutical company selected Sprint in 1995 to provide its worldwide telecommunications services. United Kingdom-based Glaxo-Wellcome PLC will use Sprint's fully integrated voice and data network to streamline reporting and information systems. The Group International Network will connect Glaxo operations in more than 100 countries.

Sprint's data network helps Glaxo track sales and inventory at the oldest pharmacy in England (est. 1720).

Building and consolidating

Financial Strength

for our shareholders, both now and in the future.

An interview with
Art Krause
Chief Financial Officer

Q) *How would you assess Sprint's recent financial performance?*

AK) Delivering superior financial results is one of Sprint's three primary corporate goals. In support of this goal, we established these objectives—grow operating income and operating cash flows (EBITDA) at double-digit rates; earn a 13 percent return on capital; and strengthen our balance sheet. For recurring, core operations, we achieved all of these objectives.

These results reflect solid performance by our operating units. The local division continues to deliver near industry leading revenue, operating income and access line growth. The long distance division gained momentum with double-digit revenue and volume growth rates in the fourth quarter. Operating margins expanded to 9.7 percent for the year and 10.5 percent for the fourth quarter.

Q) *What is the financial impact of Sprint's strategic initiatives?*

AK) Sprint made substantial progress on our strategic initiatives.

First, completion of our global alliance with Deutsche Telekom (DT) and France Telecom (FT) will result in an equity investment in Sprint of between $3.5 billion and $3.7 billion. This investment allows us to substantially reduce debt and strengthen our balance sheet.



ART KRAUSE

Second, Sprint Spectrum will offer a new level of national wireless service. Our investment will approximate $1.7 billion through the end of 1997. Between the equity infusion from DT and FT and free cash flows from operations, we will have ample funding for this investment and other opportunities on the horizon.

Third, the spin-off of our cellular division creates shareholder wealth by unlocking value which was not reflected in our stock price. Additionally, Sprint will receive approximately $1.4 billion in cash from the cellular division to repay borrowings from Sprint.

In the near term, earnings per share (EPS) will be diluted, and revenue growth rates will decline from these transactions. However, our goal is to continue growing operating cash flows (EBITDA) and operating income at double-digit rates. Consequently, enhanced shareholder value will be achieved through current returns from our core operations and from these strategic investments.

Q) *How has EVA® impacted your investment decisions?*

AK) In 1994, Sprint adopted Economic Value Added (EVA) as a primary financial measure. EVA measures our effectiveness in earning returns on our investments that exceed investor expectations. By evaluating investment decisions using EVA, our ability to exceed investor expectations is enhanced. This is important because EVA correlates more closely with a company's share price than other traditional accounting measures such as EPS. We also have developed management incentive plans that are linked directly to our ability to increase EVA, thereby better aligning our employees' interests with our shareholders' interests.

Q) *How do Sprint's shareholder returns compare to its competitors?*

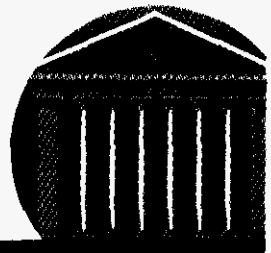
AK) Over a 10-year period through 1995, compounded annual returns averaged 17.7 percent. This return exceeds our two principal long distance competitors, the RBOC/GTE average and the S&P 500.

The comprehensive nature of our strategic alliances, and the strength of our core operations, should allow us to continue to deliver superior financial results and increased shareholder value.

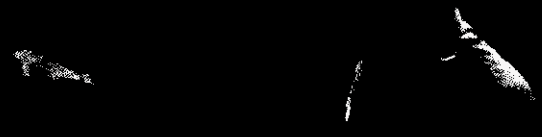
BEYOND TALK: Cash flows from operating activities of continuing operations have grown at a compounded annual rate of 13 percent since 1993.

Strategic Partners

UPS—a worldwide force in delivery to businesses and homes—benefited from a 1995 domestic data service agreement with Sprint. In 1996, Atlanta-based UPS became Global One's first corporate customer. By year end, Sprint expects to upgrade and expand the UPS communications network and to improve its global tracking system with high-speed frame relay data services.



This UPS air hub in Louisville, Kentucky, will be one of approximately 1,600 sites connected by Sprint.





One Card Does It All *Japanese business travelers can now use one card for their travel expenses and telephone calling charges—Sprint VisaPhone. By simply dialing a toll-free number, more than 2 million people—with Visa cards issued by Japan's Million Card Service Co., Ltd.—can make international calls from more than 30 countries.*

GlobalOne℠

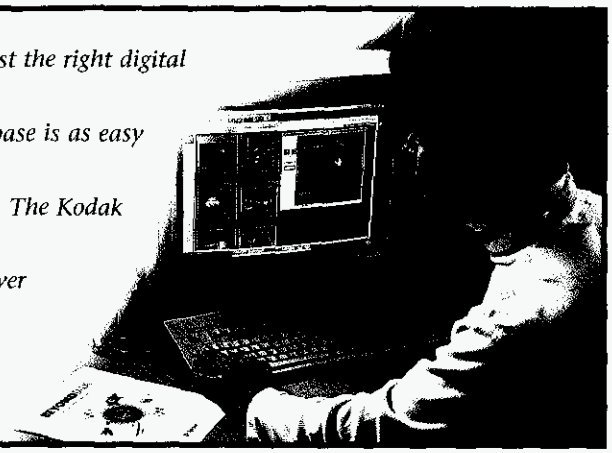
Deutsche Telekom · France Telecom · Sprint

A New Force *High-quality, seamless service and one-stop shopping. All it takes is a call to Global One, the new force in worldwide communications. The company, headquartered in Reston, Virginia, and Brussels, Belgium, opened on February 1, 1996, with more than 2,500 employees in over 1,200 cities and more than 60 countries around the world.*

Unique Service

Global One is organized to respond to the customer and the marketplace. It will make global communications simple for customers, offering access to the world through a single point of contact and a single point of support 24 hours a day, seven days a week.

A Kodak Moment *Finding just the right digital image from a centralized database is as easy as making a long distance call. The Kodak Picture Exchange is delivered over Sprint's all-digital network.*



BEYOND TALK: Sprint Sense℠ is the most successful consumer domestic acquisition plan in Sprint history.

It's Just That Simple *Sprint Sense℠, the dime-a-minute calling plan, made it simple to calculate long distance bills in 1995 with an easy-to-understand, flat-rate pricing structure.*





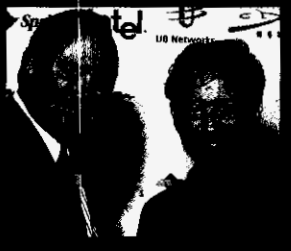
Cyberspace World *Seriously ill kids at childrens hospitals in New York City, Boston, Pittsburgh and Palo Alto, California, are connected to a playground in cyberspace. Sprint is a sponsor of the interactive Starbright network featured in the* Journal of the American Medical Association.



Photo/Hazel Hankin

Starbright Allies

Question: What does Sprint have in common with a movie mogul and a war hero? Answer: The multimillion-dollar Starbright World Network, a multimedia showcase conceived by movie director Steven Spielberg, lower right, supported by retired general Norman Schwartzkopf and carried over Sprint's all-digital network.





We're No. 1 *In the $250 million prepaid calling card market, Sprint is the industry leader. That's why General Mills teamed up with Sprint last summer for the biggest prepaid calling card promotion in history. Ten million Spree prepaid calling cards were placed in boxes of cereal. Later in the year, Sprint announced a 60 percent increase in the distribution of Spree cards through various retail outlets across the country.*

"It's the Dime Lady" *In humorous TV commercials, Sprint again relied on Emmy Award-winning spokesperson Candice Bergen to promote the highly successful Sprint Sense℠ calling plan for residential customers. In one commercial, a waitress serving Ms. Bergen in a diner turns to the cook and yells, "Hey Rocco, look! It's the Dime Lady."*



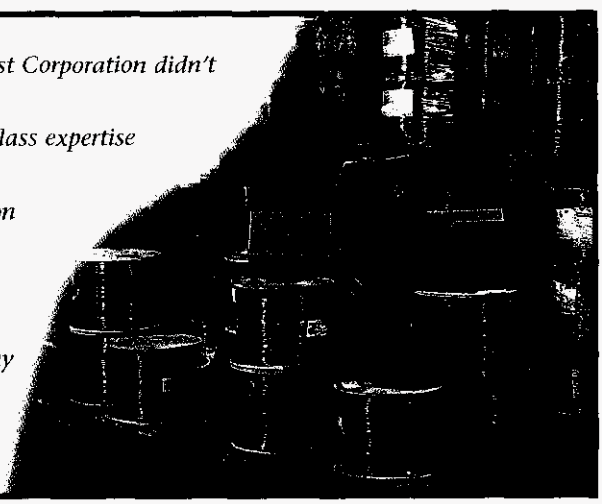
North Supply Adding Value

North Supply is considered a Sprint model for the use of EVA® (Economic Value-Added) analysis. EVA is a financial measure and management tool used by business to increase shareholder value. In 1995, North Supply reprioritized market segments and emphasized margin improvements to strengthen its balance sheet.



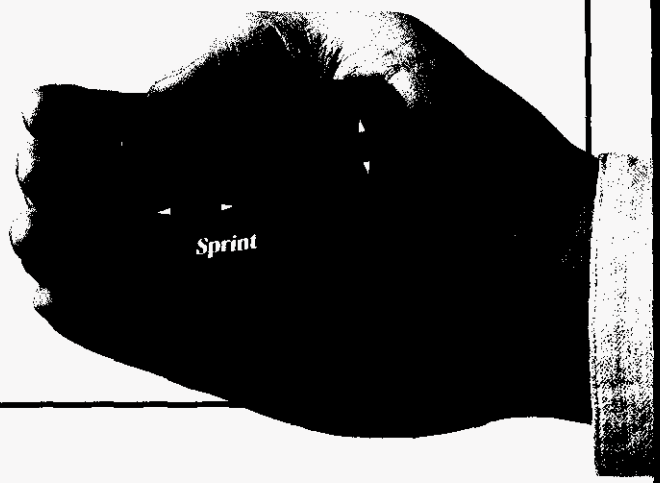
Alliance of Choice *The North American communications alliance of choice for NAFTA businesses is Sprint and its partners — Telefonos de Mexico (Telmex), Mexico's largest carrier, and Sprint Canada.*

World-class Expertise *Comcast Corporation didn't look far in 1995 for the world-class expertise needed to improve its distribution systems in Southern California. The Philadelphia-based company turned to Sprint North Supply.*

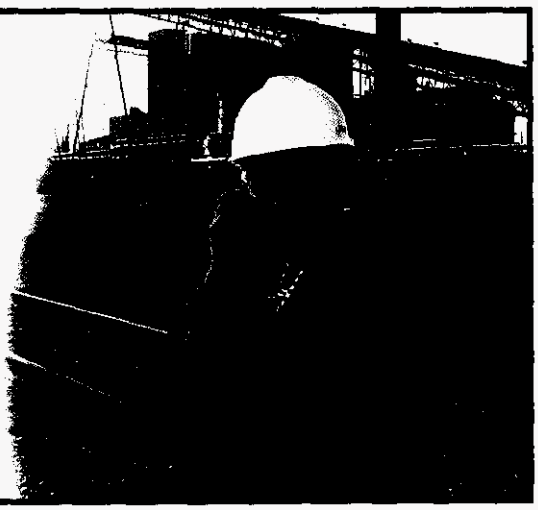


BEYOND TALK: The Sprint-Telmex alliance began service in 1996—about a year ahead of other U.S. and international carriers seeking to compete when the market opens in 1997.

Call 1-800-4-Pagers *Sprint Spectrum is selling PageNet's local, regional and nationwide digital and alpha-numeric paging services.*

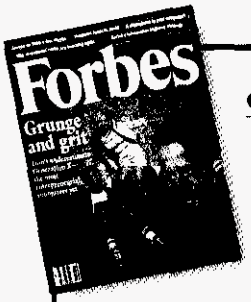


Seamless Solutions *International long distance. Videoconferencing. Local service. Cellular solutions. Wireless trials. Seamless Sprint is a reality for the Eastman Chemical Company in Kingsport, Tennessee.*



An Aggressive Build-out Plan

Sprint Spectrum, which includes three major cable television companies, has an aggressive plan to build a nationwide network to provide a new national wireless personal communications service (PCS) under the Sprint brand. The venture's objective is to begin offering PCS in 20 to 25 metropolitan areas by December 1996.



Quoting Forbes: *"These are the ingredients needed to provide an integrated system connecting local, long distance and cable, wired and wireless networks for high-speed transmission of voice, data, video and entertainment, nationally and eventually globally. Sprint alone has them all!"*

	Sprint	AT&T	MCI
Services Needed			
Local Telephone	Yes	No	No
Long Distance	Yes	Yes	Yes
International Long Distance	Yes	Yes	Yes
Cable Alliance	Yes	No	No
Global Alliance	Yes	No[1]	Yes
Cellular	Yes[2]	Yes	No
PCS	Yes	Yes	No
Pioneer Preference	Yes (LA & Wash/Balt)	No	No
Satellite Alliance	Yes (Iridium)	No	No
Technology Required			
Asychronous Transfer Mode	Yes	Yes	Yes
Sychronous Optical Network (Sonet)	Yes	No[3]	Yes
Survivable Sonet Ring	Yes	No[4]	No[4]

[1]AT&T has a loose confederation with others, with no investment. [2]Sprint's Cellular operation is fairly small, with about 1 million customers. That makes it easier to start PCS without integrating it with cellular. The others have large cellular operations, so they have to integrate. Also, the pioneer preferences allow Sprint to come to the PCS market about a year ahead of others. [3]AT&T does not use the Sonet transmission system. [4]AT&T and MCI use a slower, cross-connecting system for service restoration. MCI will use Sonet rings in its local bypass system, MCI Metro.

Table and text reprinted by permission of FORBES Magazine from an article published in the May 8, 1995, issue.

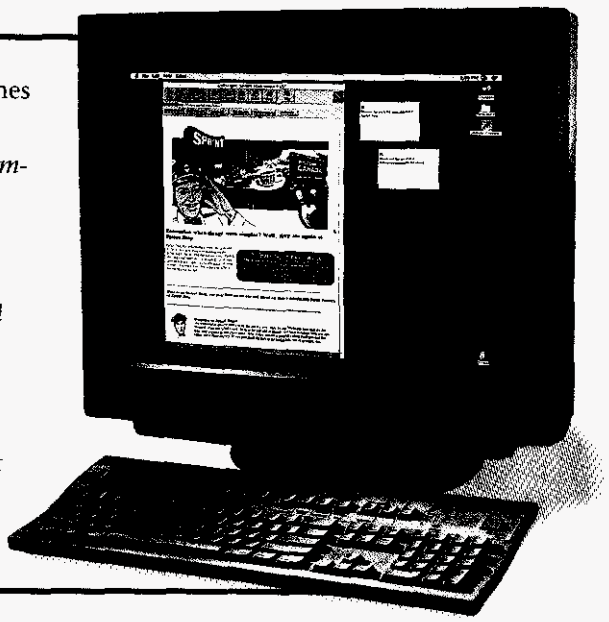
What's Important? Customer Service

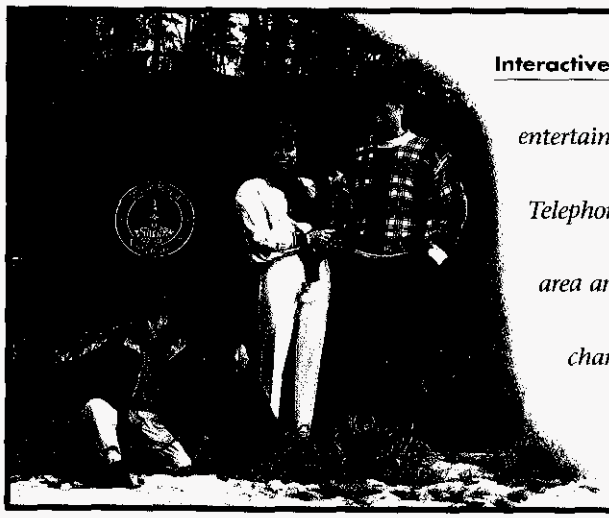
A report released last May by the Yankee Group of Boston, a leading telecommunications research firm, ranked customer service above price among the primary reasons why consumers choose a long distance carrier. In seven of eight key service quality categories, Sprint was rated as providing the best customer service among the top long distance carriers.



Successful Entrepreneur *He started selling flowers on a street corner in Los Angeles. Last year, Marty Shih, founder of Asian Business Connection, sold Asians $50 million in consumer goods by phone. His company's long distance choice? Sprint.*

That's Entertainment New York Times *advertising columnist Stuart Elliott commends Sprint for its World Wide Web site. "Sprint Stop is far better designed and more entertaining than many of the Internet offerings of entertainment companies," Elliott wrote.*

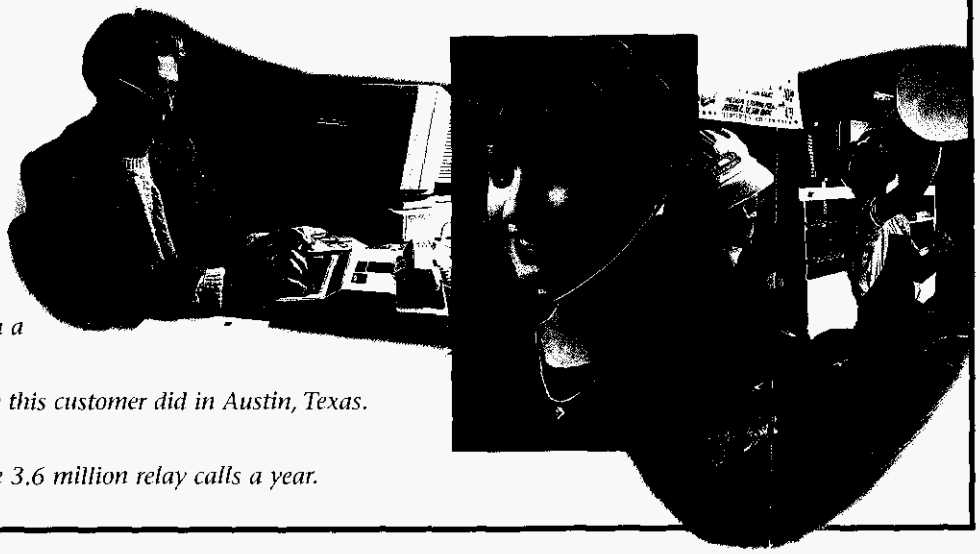




Interactive Network *Joey and Carol Love and their two children are enjoying entertainment programs and information services through Sprint Carolina Telephone. Approximately 600 families in the Wake Forest, North Carolina, area are participating in a broadband trial offering 48 cable television channels and games-on-demand. The trial is also considering such other services as movies on demand and high-speed Internet access.*

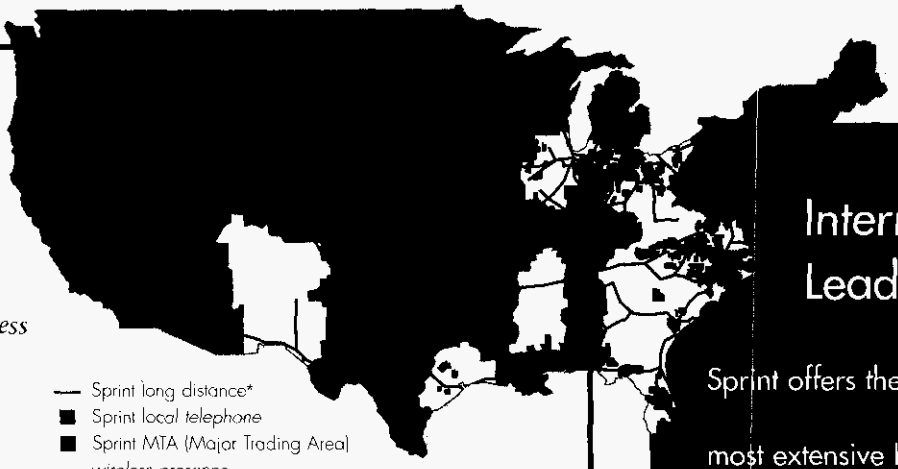
BEYOND TALK: Sprint is the nation's largest operator of Relay Service Centers, serving residents who are deaf, hard-of-hearing or speech-disabled.

Pizza To Go *Sprint-operated Relay Centers across the country make it easy for the deaf and hard-of-hearing to make an appointment, chat with a friend or order a pizza to go, like this customer did in Austin, Texas. Nationally, Sprint agents handle 3.6 million relay calls a year.*



Coast-to-Coast Coverage

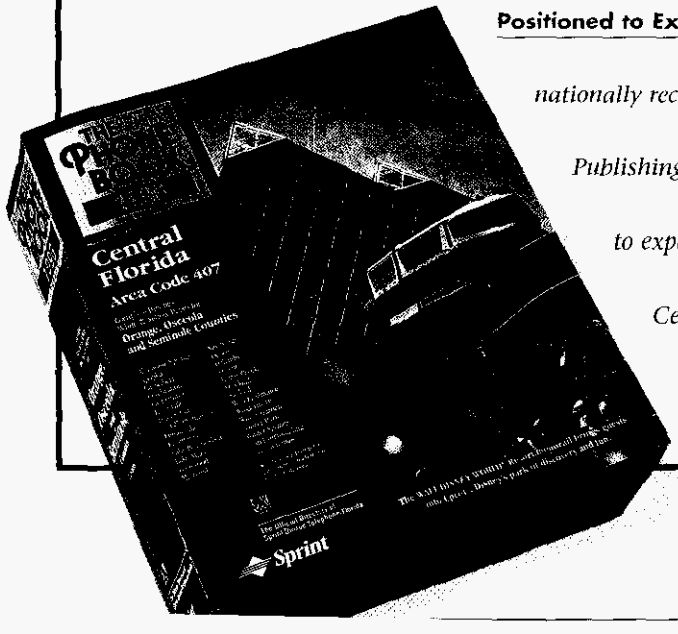
Sprint's cable partners and affiliates pass nearly 40 percent of U.S. homes, and Sprint's wireless venture has a footprint of more than 182 million people.

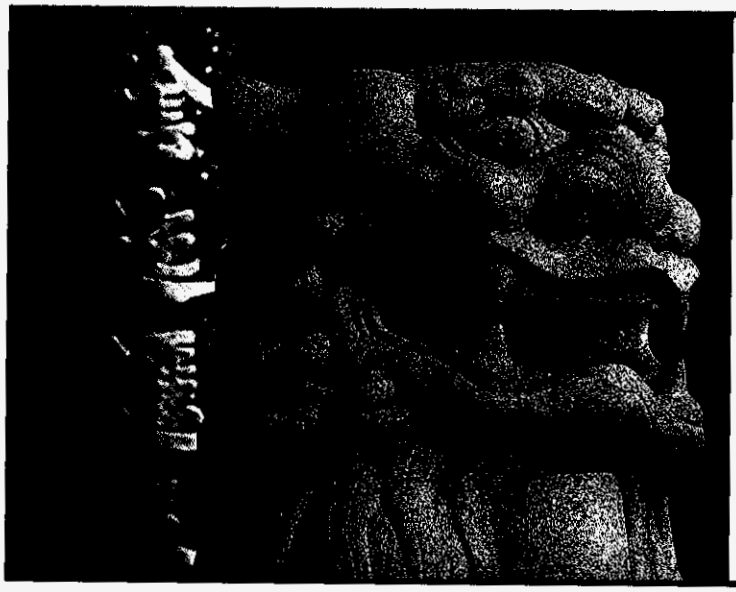


Internet Leader

Sprint offers the world's most extensive Internet interconnection service. In 1995, the SprintLink network carried approximately two-thirds of all international Internet traffic. Among Global One's Internet hubs: Tokyo, London, Paris, Sydney, Moscow, Hong Kong and Stockholm.

Positioned to Expand *By leveraging the nationally recognized Sprint brand, Sprint Publishing & Advertising is positioned to expand into new markets. This Central Florida Phone Book has a circulation of one million.*



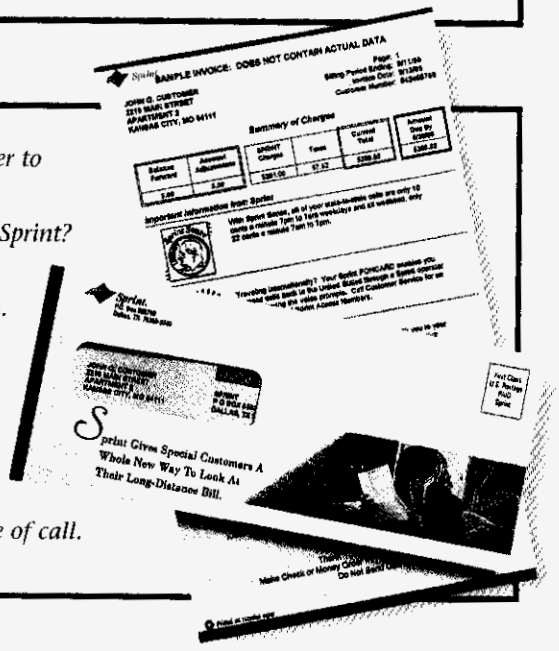


Sharing Expertise *When China Unicom was mandated to develop the second carrier network in China, it decided to work with Sprint. Sprint is sharing its full range of telecommunications experience so China Unicom can meet increasing customer demand by building local, wireless and long distance networks within China's vast borders.*

One Sprint

One face. One voice. *One Sprint.* As regulatory barriers continue to fall, Sprint will systematically integrate its internal resources and evolve into a more unified voice to the customer. A variety of cooperative marketing efforts are already underway between the company's local and long distance divisions. More will follow.

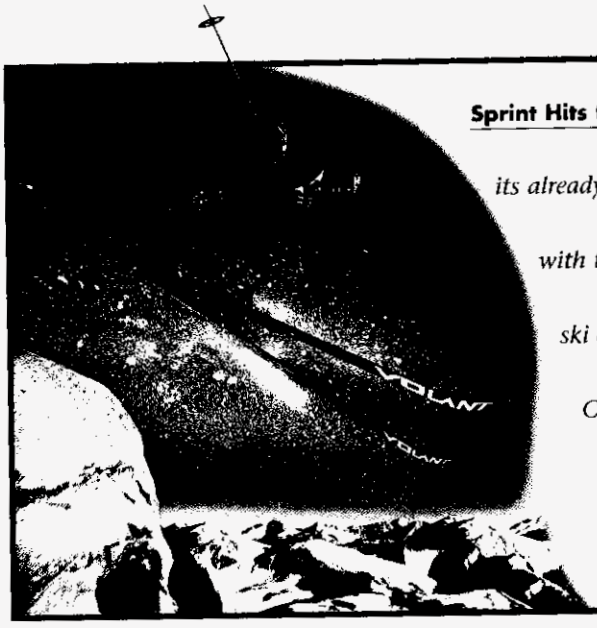
Eliminating Confusion *Why is it better to receive your long distance invoice from Sprint? Because we've eliminated the confusion. Sprint made bills easy to read by providing more detailed information and by giving a breakdown of each type of call.*





Totally Covered *"Before, no one could reach me. Now, everyone can," says Las Vegas cleaning service owner Brenda Anderson. Sprint's TOTAL NUMBER℠ allows her to receive calls, faxes and other services wherever she is through a single number.*

BEYOND TALK: Sprint's local communications division leads all major local phone companies in the percentage of customers served by digital switching technology.



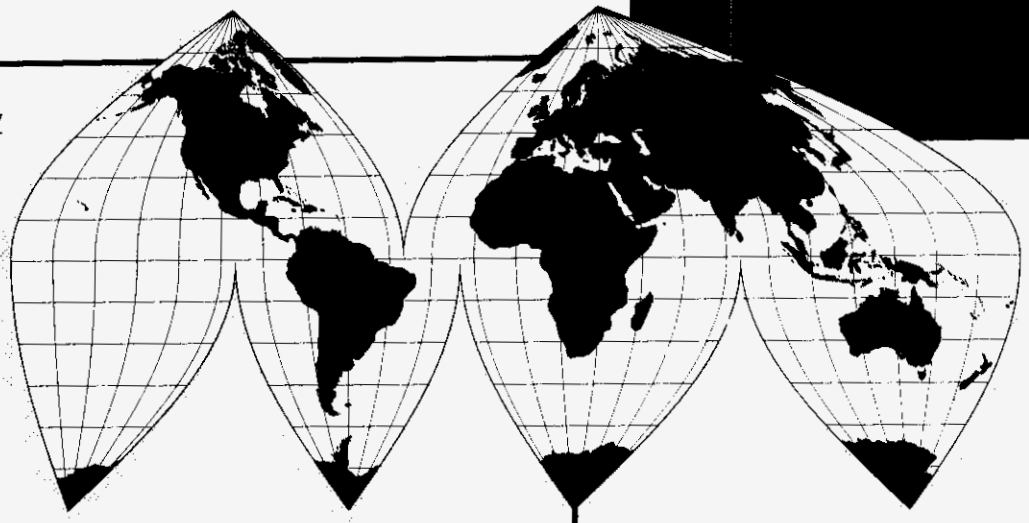
Sprint Hits the Slopes *Sprint has doubled its already substantial skiing sponsorships with the addition of two more titled ski events—the Sprint World Ski Challenge in Deer Valley, Utah, and the Sprint Spree Style Classic in Breckenridge, Colorado.*

Government Contracts

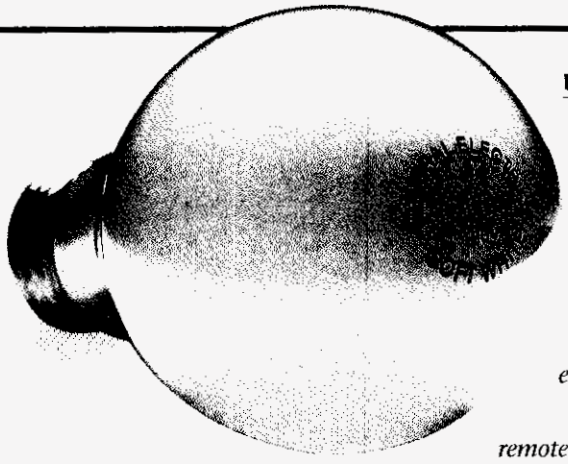
Sprint's government contract wins in 1995 included a $144 million agreement to provide service to U.S. military installations and a $100 million contract to provide advanced data services for the U.S. Postal Service.

Think Globally...Connect Locally

Global One customer relationships are managed and sustained by locally based employees or partners who understand local customs and requirements.



● Countries with Global One offices, joint ventures and national partners

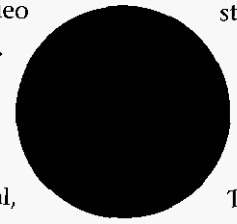


Bringing Good Things to GE's Life *At mid-year, Sprint announced one of its largest business services contracts ever—a multi-year agreement with General Electric Company valued at several hundred million dollars. Sprint's business solution provided GE employees more mobility with a variety of services, including laptop remote dial-in access compatible with the Internet.*

OPERATIONS

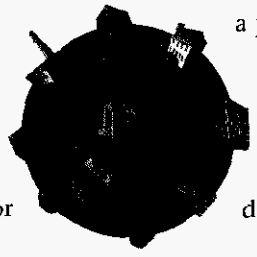
Long Distance

Sprint's long distance division provides voice, video and data services to nearly 8 million customers. The company operates the only nationwide 100% digital, fiber-optic network in the United States. Long distance markets include residential; small, medium and large businesses; and federal, state and local governments. Sprint offers an integrated platform of products and services across North America through its 25% equity ownership in Call-Net (Sprint Canada) and its alliance with Mexico's largest communications provider, Telefonos de Mexico (Telmex).



Local Communications

Sprint provides local telephone service through more than 6.7 million customer lines in 19 states. More than 98% of local customers are served by digital switching technology. Additionally, more than 20,000 sheath-miles of fiber-optic cable is deployed systemwide. This provides a platform for a portfolio of network-based voice, video and data services. Local markets include residential; small, medium and large businesses; and federal, state and local governments. The operating companies also provide access to local customers for long distance companies.



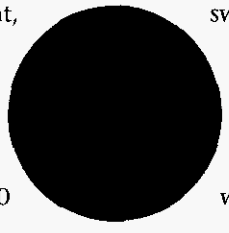
Product Distribution/Directory Publishing

Sprint North Supply is one of the nation's largest wholesale distributors of voice, data and teleconferencing equipment and security and alarm systems. Its markets include telecommunications companies, product resellers, cable television companies and security and alarm dealers. The combination of Sprint Publishing & Advertising and Centel Directory Company is the 10th largest Yellow Pages publisher in the United States. They publish 325 telephone directories with an annual circulation of more than 17 million across 20 states.



Global One

Global One is a worldwide joint venture of Sprint, Deutsche Telekom and France Telecom. The venture offers a comprehensive array of advanced voice and data services to businesses, carriers and consumers. Based in Brussels, Belgium, and Reston, Virginia, in the United States, Global One has 1,200 switching centers in more than 60 countries around the world. The global carrier's worldwide integrated organization provides customers a single point of contact and 24-hour customer service. Global One serves other telecommunications carriers with a full range of transport and transit services.



Sprint Spectrum

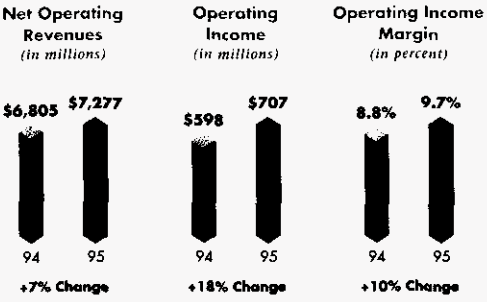
Sprint Spectrum is a partnership of Sprint and three of the nation's largest cable companies: Tele-Communications Inc., Comcast Corporation and Cox Communications, Inc. The venture is building a nationwide network to provide wireless personal communications service (PCS). PCS will be marketed under the Sprint brand to a population of more than 182 million. The four companies are committed to the vision of a single, integrated offering of wireless services, local telephone services and long distance service in a package with cable television service.



BEYOND TALK: Among frequent phone users, Sprint was rated No. 1 in the industry in 1995 by J.D. Power & Associates in overall customer satisfaction.

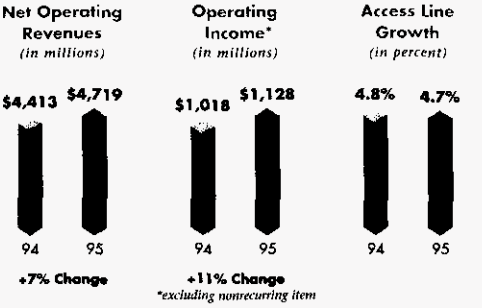
PERFORMANCE/OUTLOOK

Performance Long distance operating income increased by more than $100 million, rising 18% to $707 million. Operating margins grew to 10.5% in the fourth quarter. Data revenues increased more than 70% in the fourth quarter.



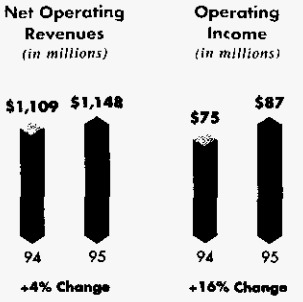
Outlook Aggressive marketing to Internet users, new multimedia products and initiatives designed to help customers migrate to high-speed data networks will strengthen Sprint's drive to grow share in rapidly expanding data markets.

Performance Local telephone operating income increased 11% to $1.1 billion* for the year. Growth was fueled by one of the industry's fastest access line growth rates and 65% growth in advanced intelligent network services.



Outlook Sprint will compete immediately in newly deregulated local markets, with an array of applications including telemedicine and distance learning. Other growth markets include Internet users and entertainment.

Performance Operating income in the product distribution and directory publishing businesses grew 16% to $87 million in 1995. Stronger sales in both units increased revenues 4% to $1.1 billion. Fourth quarter operating income grew by 16% to $22 million compared to a year ago.



Outlook North Supply will expand its position in materials management outsourcing services to its core markets, including interconnect companies. By leveraging the nationally recognized Sprint brand, Sprint Publishing & Advertising is well positioned to expand into new markets.

Outlook With its launch, Global One immediately rose to the top tier of international service providers. The company is combining several businesses of its parent companies. These operations include: Sprint International; Deutsche Telekom's and France Telecom's Atlas joint venture (including eunetcom); and the international VSAT, end-to-end and global VPN services of Deutsche Telekom and France Telecom. Deutsche Telekom's and France Telecom's data networks outside of their home countries were also contributed. The data networks within their countries will be integrated into Global One after January 1, 1998. Data, messaging and other services are already in the planning stages.

Outlook Sprint Spectrum is implementing an aggressive business plan to build out its nationwide wireless PCS network. The venture's objective is to begin offering PCS in as many as 20 to 25 major metropolitan areas by December 1996, covering over 100 million people. Construction of the remainder of the system should be substantially complete by December 1998. In addition, Sprint will negotiate individual joint ventures on a market-by-market basis with its cable partners to provide competitive local telephone services.

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BEYOND TALK: Sprint has more than 48,000 employees worldwide.

SELECTED FINANCIAL DATA

(In millions, except per share data) *As of or for the years ended December 31,*	1995	1994[1]	1993[1]	1992[1]	1991[1]
Results of Operations					
Net operating revenues	$12,765.1	$11,986.6	$10,914.7	$10,105.7	$ 9,697.2
Operating income[2]	1,834.3	1,690.7	1,214.1	1,199.8	1,186.1
Income from continuing operations[2,3]	946.1	899.2	517.1	550.6	530.8
Earnings per common share from continuing operations[2,3]	2.69	2.57	1.50	1.62	1.58
Dividends per common share	1.00	1.00	1.00	1.00	1.00
Financial Position					
Total assets	$15,195.9	$14,547.5	$13,898.1	$13,431.7	$13,785.9
Property, plant and equipment, net	9,715.8	10,258.8	9,883.1	9,895.6	10,072.7
Total debt (including short-term borrowings)	5,677.4	4,937.2	5,094.4	5,442.7	5,571.2
Redeemable preferred stock	32.5	37.1	38.6	40.2	56.6
Common stock and other shareholders' equity	4,642.6	4,524.8	3,918.3	3,971.6	3,671.9
Cash Flow Data					
Cash from operating activities—continuing operations	$ 2,566.4	$ 2,346.0	$ 2,007.8	$ 2,397.3	$ 1,808.1
Capital expenditures	1,857.3	1,751.6	1,429.8	1,342.4	1,431.4
Free cash flow[4]	357.6	245.0	230.9	454.8	80.9

[1]The accompanying Selected Financial Data have been restated to reflect the spin-off of Sprint's cellular and wireless division (Cellular) to Sprint shareholders. Accordingly, Cellular's operating results have been excluded from income from continuing operations and are reported as discontinued operations.

[2]During 1995, nonrecurring charges of $88 million were recorded related to a restructuring within the local division. Such charges reduced consolidated 1995 income from continuing operations by $55 million ($0.16 per share).

During 1993, nonrecurring charges of $293 million were recorded related to (a) transaction costs associated with the merger with Centel and the expenses of integrating and restructuring the operations of the two companies and (b) a realignment and restructuring within the long distance division. Such charges reduced consolidated 1993 income from continuing operations by $193 million ($0.56 per share).

[3]During 1994, Sprint sold an investment in equity securities, realizing a gain of $35 million, which increased consolidated 1994 income from continuing operations by $22 million ($0.06 per share).

During 1993, as a result of the enactment of the Revenue Reconciliation Act of 1993, Sprint was required to adjust its deferred income tax assets and liabilities to reflect the increased tax rate. Such adjustment reduced consolidated 1993 income from continuing operations by $11 million ($0.03 per share).

During 1992 and 1991, gains were recognized related to the sales of certain local telephone properties, which increased consolidated 1992 income from continuing operations by $44 million ($0.13 per share) and consolidated 1991 income from continuing operations by $64 million ($0.19 per share).

[4]Free cash flow is an internal measurement utilized by Sprint to assess the coverage of capital expenditures and dividends paid by cash provided from operating activities of continuing operations. This measurement is not an alternative to operating income determined in accordance with generally accepted accounting principles as an indicator of operating performance. Such amount for 1992 excludes the additional proceeds from the sale of accounts receivable of $300 million.

Strategic Developments

Telecommunications Law In February 1996, the Telecommunications Act of 1996 (the Act) was signed into law. The purpose of the Act is to promote competition in all aspects of telecommunications. The Act requires telecommunications carriers to interconnect with other carriers and to provide for resale, number portability, dialing parity, access to rights-of-way and compensation for reciprocal traffic. Additionally, incumbent local telephone companies are required to provide nondiscriminatory unbundled access, resale at wholesale rates and notice of changes that would affect interoperability of facilities and networks. The Federal Communications Commission (FCC) is to adopt mechanisms to ensure that essential telecommunications services are affordable.

The Act also provides that regional Bell Operating Companies (RBOCs) may provide long distance service upon enactment that is out-of-region or incidental to: (1) audio/video programming; (2) Internet for schools; (3) mobile services; (4) information or alarm services; and (5) telecommunications signaling. In order for an RBOC to provide in-region long distance service, the Act requires the RBOC to comply with a comprehensive competitive checklist and expands the role of the U.S. Department of Justice in the FCC's determination of whether the entry of an RBOC into the competitive long distance market is in the public interest. Additionally, there must be a real facilities-based competitor for residential and business local telephone service (or the failure of potential providers to request access) prior to an RBOC providing in-region long distance service. RBOCs must provide long distance services through a separate subsidiary for at least three years. Until the RBOCs are allowed into long distance or three years have passed, long distance carriers with more than 5 percent of the nation's access lines may not jointly market RBOC resold local telephone service, and states may not require RBOCs to provide intraLATA dialing parity.

Telecommunications companies may also provide video programming and cable operators may provide telephone service in the same service area. The Act prohibits telecommunications carriers and cable operators from acquiring more than 10 percent of each other, except in rural and other specified areas.

The impact of the Act on Sprint is unknown because a number of important implementation issues (such as the nature and extent of continued subsidies for local rates) still need to be decided by state or federal regulators. However, the Act offers opportunities as well as risks. Sprint should benefit from the opportunity to enter local telephone markets. The new competitive environment should lead to a reduction in local access fees, the largest single cost in providing long distance service today. The risk aspect of local competition is that historical prices and market shares of Sprint's local telephone companies (approximately 4 percent of the nation's local telephone access lines) are likely to decline.

The removal of the long distance restrictions on the RBOCs is not anticipated to have an immediate significant adverse impact on Sprint because of the substantial preconditions that must be met before RBOCs can provide most in-region long distance services. In addition, Sprint could potentially offset some losses of long distance customers at the retail level if it were successful in becoming the underlying carrier for resellers (including the RBOCs) entering the long distance market.

Global One On January 31, 1996, Sprint, along with Deutsche Telekom (DT) and France Telecom (FT), consummated their joint venture, operating as Global One, which will provide seamless global telecommunications services to business, consumer and carrier markets worldwide. The interests of DT and FT in the venture are held by their own joint venture, referred to as Atlas. The operating group serving Europe (excluding Germany and France) will be owned one-third by Sprint and two-thirds by Atlas. The operating group for the worldwide activities outside the United States and Europe will be owned 50 percent by Sprint and 50 percent by Atlas. Home country markets will be served by DT in Germany, FT in France and Sprint in the United States.

Upon closing of the agreement, DT and FT acquired shares of a new class of preference stock for a total of $3.0 billion, which resulted in DT and FT each holding approximately 7.5 percent of the Sprint voting power. DT and FT will make the remainder of their investment in Sprint following the spin-off of Sprint's Cellular and Wireless Division (Cellular) to shareholders of Sprint common stock. Following their full investment, DT and FT will each own shares of Class A common stock with approximately 10 percent of Sprint's voting power. Depending on the price of Cellular shares at the time of the spin-off, the total amount of the investment is expected to be between $3.5 billion and $3.7 billion.

DT and FT, as the holders of the Class A stock, will have the right in most circumstances to proportionate representation

BEYOND TALK: Sprint's FŌNCARD℠ is available with instructions in English, Spanish, Japanese, Chinese, Korean, Vietnamese and Braille.

on Sprint's board of directors and to purchase additional shares of Class A stock from Sprint to enable them to maintain their ownership level at 20 percent. In addition, the holders of Class A stock will have disapproval rights with respect to Sprint's undertaking certain types of transactions. DT and FT have also entered into a standstill agreement with Sprint that contains restrictions on their ability to acquire voting securities of Sprint other than as contemplated by the investment agreement and related agreements, as well as customary provisions restricting DT and FT from initiating or participating in any proposal with respect to the control of Sprint.

In connection with the closing of the Global One joint venture, the long distance division contributed certain assets and the related operations of its international business unit to Global One.

Sprint Spectrum Sprint, along with Tele-Communications Inc. (TCI), Comcast Corporation (Comcast) and Cox Communications, Inc. (Cox), have formed a joint venture, Sprint Spectrum LP (formerly known as Sprint Telecommunications Venture), to provide wireless communications services on a broad geographic basis within the United States. In March 1995, Sprint Spectrum took a critical first step to national wireless capabilities. In the first round of broadband Personal Communications Services (PCS) license auctions by the FCC, Sprint Spectrum and its affiliates won the rights to PCS licenses in 30 major trading areas (MTAs) at a cost of $2.2 billion. Sprint Spectrum's wireless presence, including Sprint Spectrum wireless affiliates, covers a population of more than 182 million in the United States.

In March 1995, Sprint, TCI, Comcast and Cox signed a definitive joint venture agreement to provide competitive local telecommunications services on a national basis using the facilities of the cable partners. In February 1996, the four partners announced a change in their approach to providing such services. The previous agreement called for the conversion of cable systems passing 10 million homes by the end of 1997 and had a fixed compensation formula between Sprint Spectrum and the cable companies. Under the revised agreements, competitive local telephone services will be the subject of individual joint ventures to be negotiated between Sprint and each cable partner, rather than through Sprint Spectrum. This approach will allow greater flexibility to decide specific terms and timing for entry into local telephone markets. However, there are no assurances that any such joint ventures will be formed.

In conjunction with the approval of a business plan for Sprint Spectrum to build out a national wireless network, the four partners have committed to make cash capital contributions to Sprint Spectrum of approximately $4.2 billion through the end of 1997, of which Sprint's portion is estimated to be approximately $1.7 billion. Approximately $960 million of this commitment has already been contributed by Sprint to Sprint Spectrum, primarily to fund amounts paid to the FCC in connection with licenses won in the PCS auction.

In November 1995, American Personal Communications (APC), an affiliate of Sprint Spectrum, launched APC, the nation's first broadband PCS system. APC will serve a large geographic area encompassing Washington, D.C., all of Maryland and more than half of Virginia. It is Sprint Spectrum's objective to begin offering personal communications service in as many as 20 to 25 major metropolitan areas by December 1996, covering over 100 million people, and to substantially complete construction of the remainder of its system by December 1998. Sprint Spectrum has executed contracts with two vendors of Code Division Multiple Access (CDMA) to deploy this new developing technology across the venture's nationwide wireless communications network.

Spin-off of Cellular Division Due in part to divestiture requirements imposed by the FCC with respect to PCS licenses awarded to Sprint Spectrum, the Sprint board of directors has approved the spin-off of Cellular to the holders of Sprint common stock. Sprint has received a favorable ruling from the Internal Revenue Service regarding the tax-free nature of the spin-off. After the spin-off, Cellular will market its wireless service under the 360° Communications Company brand name and will no longer be included under the umbrella of the Sprint brand name.

The spin-off will be effected by distributing to all holders of Sprint common stock all shares of Cellular common stock at a rate of 1 share of Cellular common stock for every 3 shares of Sprint common stock held. In connection with the closing, Cellular will repay approximately $1.4 billion of intercompany debt owed by Cellular to Sprint and its subsidiaries, and Sprint will contribute to the equity capital of Cellular any debt owed by Cellular in excess of the intercompany debt being repaid.

Prior years' consolidated financial statements have been restated to reflect the spin-off of Cellular. Accordingly, the operating results, net assets and cash flows of Cellular are separately classified as discontinued operations.

Results of Operations

Consolidated Sprint's two primary divisions—long distance and local exchange—generated record levels of net operating revenues and improved operating results in 1995. The long distance division generated a 7 percent growth in traffic volumes in 1995, and the number of access lines served by the local division grew 4.7 percent.

Total net operating revenues for the year ended December 31, 1995 were $12.8 billion, a 6 percent increase over net operating revenues of $12.0 billion for 1994. Total net operating revenues for the year ended December 31, 1993 were $10.9 billion. For the year ended December 31, 1995, income from continuing operations was $946 million, or $2.69 per share, compared with $899 million, or $2.57 per share, for 1994 and $517 million, or $1.50 per share, for 1993. Income from continuing operations for the year ended December 31, 1995 included a charge related to the restructuring of Sprint's local division ($0.16 per share). Income from continuing operations for the year ended December 31, 1994 included a gain related to the sale of an investment in equity securities ($0.06 per share). Income from continuing operations for the year ended December 31, 1993 included charges related to the merger and integration costs associated with the Centel merger and the realignment and restructuring of Sprint's long distance division ($0.56 per share) and a charge associated with the enactment of the Revenue Reconciliation Act of 1993 ($0.03 per share).

Nonoperating Items

Interest Expense Interest expense related to continuing operations totaled $261 million in 1995 compared to $301 million in 1994 and $367 million in 1993. Interest expense related to the operations of Cellular totaled $124 million, $97 million and $85 million in 1995, 1994 and 1993, respectively, and is included in discontinued operations in the Consolidated Statements of Income. Sprint's average debt outstanding, including the debt incurred to fund intercompany advances to Cellular, increased by $668 million in 1995 compared to the prior year. The increase in average debt outstanding during 1995 was primarily from short-term borrowings incurred to fund investments in Sprint Spectrum. Because the interest costs on the borrowings associated with Sprint's investment in this venture are being capitalized until Sprint Spectrum commences operations, interest expense did not increase proportionately to the increase in average debt outstanding. Sprint's effective interest rate decreased 44 basis points from 1994 to 1995 primarily due to the increase in short-term borrowings as a percent of total borrowings. Sprint's average debt outstanding decreased by $334 million and $596 million in 1994 and 1993, respectively, and the effective interest rate decreased 52 and 15 basis points, respectively, due to debt refinancings which occurred during 1993 and 1992.

Other Expense, Net The components of other income (expense) are as follows:

(in millions)

For the years ended December 31,	1995	1994	1993
Loss on sales of accounts receivable	$(38.6)	$(28.7)	$(22.0)
Equity in loss of Sprint Spectrum	(31.4)	(1.3)	—
Global One venture costs	(22.9)	(6.1)	—
Gain on sale of investment in equity securities	—	34.7	—
Other, net	(0.3)	(0.7)	(12.0)
Total other expense, net	$(93.2)	$ (2.1)	$(34.0)

Income Tax Provision Sprint's income tax provisions for 1995, 1994 and 1993 resulted in effective tax rates of 36.1 percent, 35.2 percent and 36.4 percent, respectively. During 1993, the Revenue Reconciliation Act of 1993 was enacted which, among other changes, raised the federal income tax rate to 35 percent from 34 percent. As a result, Sprint adjusted its deferred income tax assets and liabilities to reflect the revised rate. See Note 5 of Notes to Consolidated Financial Statements for information regarding the differences which cause the effective income tax rates to vary from the statutory federal income tax rate.

As of December 31, 1995, Sprint had recorded deferred income tax assets of $501 million, net of a $17 million valuation allowance. See Note 5 of Notes to Consolidated Financial Statements for information regarding the sources which gave rise to these assets. Sprint's management has determined that it is more likely than not that these deferred income tax assets, net of the valuation allowance, will be realized based on current income tax laws and expectations of future taxable income stemming from the

BEYOND TALK: Sprint's Voice FONCARD℠ was the first widely available voice-activated calling card.

reversal of existing deferred tax liabilities or ordinary operations. Uncertainties surrounding income tax law changes, shifts in operations between state taxing jurisdictions, and future operating income levels may, however, affect the ultimate realization of all or some portion of these deferred income tax assets.

Discontinued Operations—Cellular Division As a result of the tax-free spin-off of Cellular to shareholders of Sprint common stock, the operating results, net assets and cash flows of Cellular have been separately classified as discontinued operations and are excluded from amounts for the continuing operations of Sprint.

Cellular's operating results exclude its share of Sprint's corporate overhead expenses. These expenses have been reallocated to Sprint's continuing operations in the accompanying Consolidated Statements of Income as well as in the accompanying Segmental Results of Operations. Accordingly, Cellular's results of operations as reflected below may not be indicative of its future operating results once the spin-off is completed. Such expenses were $13 million, $12 million and $12 million for each of the years ended December 31, 1995, 1994 and 1993, respectively. See Note 3 of Notes to Consolidated Financial Statements for further discussion.

Cellular's results of operations are summarized as follows:

(in millions) *For the years ended December 31,*	1995	1994	1993
Net operating revenues	$834.4	$626.5	$410.5
Operating expenses	675.6	529.4	374.0
Operating income	158.8	97.1	36.5
Interest expense	(124.0)	(97.3)	(85.4)
Other income (expense), net	10.9	(5.6)	11.7
Income (Loss) before income taxes	45.7	(5.8)	(37.2)
Income tax provision (benefit)	31.2	9.7	(0.7)
Cumulative effect of change in accounting principle, net	—	—	(1.6)
Income (Loss) from cellular division	$ 14.5	$ (15.5)	$ (38.1)

Net operating revenues increased $208 million during 1995 and $216 million during 1994. These increases resulted principally from the growth in the number of cellular customers, which increased 44 percent in 1995 and 59 percent in 1994. The effect of this growth was partially offset by a decline in service revenue per customer.

Operating expenses increased $146 million for 1995 and $155 million for 1994. These increases resulted principally from the growth in the number of cellular customers and increased advertising costs.

Discontinued Operations—Other For the year ended December 31, 1994, Sprint recognized $7 million of income associated with the settlement of matters related to a discontinued operation. Also, during 1993, Sprint incurred a loss from discontinued operations of $12 million, net of income tax benefits.

Extraordinary Items As described in Note 2 of Notes to Consolidated Financial Statements, Sprint adopted accounting principles for a competitive marketplace and discontinued applying Statement of Financial Accounting Standards (SFAS) No. 71, "Accounting for the Effects of Certain Types of Regulation," to its local division effective December 31, 1995. The application of SFAS No. 71 required the accounting recognition of the rate actions of regulators where appropriate. Sprint determined that the local division no longer met the criteria for application of SFAS No. 71 due to changes in the regulatory framework, which continues to evolve from rate-base regulation to price regulation, as the latter does not provide for the recovery of specific costs. In addition, the division operates in an evolving competitive environment in which the level and types of competition are increasing such that they may no longer allow for service and product pricing that provides for the recovery of specific costs. As a result, Sprint recorded a noncash, extraordinary charge of $565 million ($1.61 per share), net of related income tax benefits.

In 1993, Sprint incurred extraordinary losses related to the early extinguishment of debt of $29 million, net of related income tax benefits.

Accounting Changes Effective January 1, 1993, Sprint changed its method of accounting for postretirement and postemployment benefits by adopting SFAS No. 106 and No. 112 and effected another accounting change. The cumulative effect of these changes in accounting principles reduced 1993 net income by $383 million ($1.12 per share).

CONSOLIDATED STATEMENTS OF INCOME

(in millions, except per share data)
For the years ended December 31,

	1995	1994	1993
Net Operating Revenues	$12,765.1	$11,986.6	$10,914.7
Operating Expenses			
Costs of services and products	6,504.9	6,154.5	5,591.9
Selling, general and administrative	2,871.9	2,755.4	2,532.5
Depreciation and amortization	1,466.4	1,386.0	1,283.7
Merger, integration and restructuring costs	87.6	—	292.5
Total operating expenses	10,930.8	10,295.9	9,700.6
Operating Income	1,834.3	1,690.7	1,214.1
Interest expense	(260.7)	(300.7)	(367.0)
Other expense, net	(93.2)	(2.1)	(34.0)
Income from continuing operations before income taxes	1,480.4	1,387.9	813.1
Income tax provision	(534.3)	(488.7)	(296.0)
Income from Continuing Operations	946.1	899.2	517.1
Discontinued operations, net			
Cellular division	14.5	(15.5)	(38.1)
Other	—	7.0	(12.3)
Extraordinary items, net	(565.3)	—	(29.2)
Cumulative effect of changes in accounting principles, net	—	—	(382.6)
Net income	395.3	890.7	54.9
Preferred stock dividends	(2.6)	(2.7)	(2.8)
Earnings applicable to common stock	$ 392.7	$ 888.0	$ 52.1
Earnings per Common Share			
Continuing operations	$ 2.69	$ 2.57	$ 1.50
Discontinued operations	0.04	(0.02)	(0.15)
Extraordinary items	(1.61)	—	(0.08)
Cumulative effect of changes in accounting principles	—	—	(1.12)
Total	$ 1.12	$ 2.55	$ 0.15
Weighted average number of common shares	350.1	348.7	343.7
Dividends per common share	$ 1.00	$ 1.00	$ 1.00

See accompanying Notes to Consolidated Financial Statements.

BEYOND TALK: Sprint serves business and residential customers in more than 19 million locations.

Segmental Results of Operations

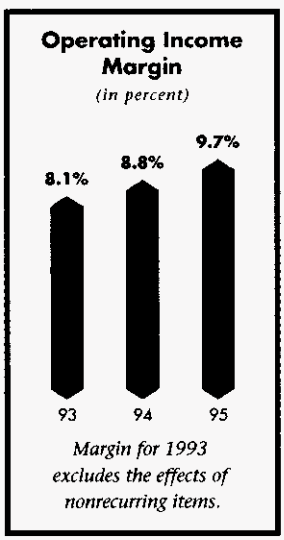
Long Distance Communications Services

(in millions) *As of or for the years ended December 31,*	1995	1994	1993
Net operating revenues	$7,277.4	$6,805.1	$6,139.2
Operating expenses			
Interconnection	3,102.7	2,994.5	2,710.7
Operations	1,046.6	925.4	857.7
Selling, general and administrative	1,839.7	1,737.0	1,548.1
Depreciation and amortization	581.6	550.5	523.5
Merger, integration and restructuring costs	—	—	45.9
Total operating expenses	6,570.6	6,207.4	5,685.9
Operating income	$ 706.8	$ 597.7	$ 453.3[1]
Operating margin	9.7%	8.8%	7.4%[1]
Capital expenditures	$ 861.7	$ 774.1	$ 529.4
Identifiable assets	$4,912.2	$4,546.0	$4,195.8

[1]Excluding the merger, integration and restructuring costs of $45.9 million, operating income and margin for 1993 would have been $499.2 million and 8.1 percent, respectively.

Sprint's long distance division provides domestic and international voice, video and data communications services. The terms under which the division offers its services to the public are subject to different levels of state and federal regulation, but rates are not subject to rate-base regulation except nominally in some states.

Net operating revenues increased 7 percent in 1995, following an 11 percent increase in 1994. Traffic volume increased 7 percent and 11 percent over the same periods. Revenue growth was primarily driven by strong performance in the data services market, which includes sales to consumer on-line services and Internet connectivity, transaction processing such as credit card authorizations and check guarantees, data communication for multinational corporations and data-intensive applications such as image transfer and client/server exchange. Also contributing to this growth was the business market which continued to experience growth in "800" services and private line services, the international market which reflects the division's continuing efforts to target new geographic markets, and the residential market which reflects the success of the Sprint Sense℠ calling plan.



Interconnection costs consist of amounts paid to local exchange carriers, other domestic service providers and foreign telephone companies for the completion of calls made by the division's customers. Interconnection costs increased in 1995 and 1994 primarily as a result of traffic volume growth. Also contributing to these increases were increases in access costs associated with the growth in data products and international interconnection costs. These increases were partially offset by reduced costs of connecting to networks domestically as a result of lower interstate access rates. As a percentage of net operating revenues, interconnection costs were 42.6 percent in 1995 compared to 44.0 percent and 44.2 percent in 1994 and 1993, respectively.

Operations expense consists of costs related to operating and maintaining the long distance network; costs of providing various services such as operator services, public payphones, telecommunications services for the hearing impaired, and video teleconferencing; and costs of data systems sales. Operations expense increased $121 million in 1995 and $68 million in 1994. The 1995 increase was primarily due to increased costs associated with growth within the data products market and increased international network operations costs reflecting growth in overseas products and foreign operations. The 1994 increase was primarily due to expanded product offerings as well as providing services to new customers.

Selling, general and administrative (SG&A) expense increased $103 million and $189 million in 1995 and 1994, respectively, generally reflecting the overall growth in the division's operating activities. These increases were generally due to increased advertising expenses resulting from the ongoing sales and marketing efforts which are important in the intensely competitive long distance marketplace. The division has continued to focus on cost containment of SG&A expenses in an effort to further enhance the division's profitability. As a result, SG&A expense as a percentage of net operating revenues decreased from 25.5 percent for 1994 to 25.3 percent for 1995.

Depreciation and amortization increased $31 million in 1995 and $27 million in 1994, generally due to an increase in the asset base. The increase in 1995 was generally due to an increase in the asset base in support of data revenue growth and synchronous optical network (SONET) deployment. SONET provides significantly improved transport capacity.

Local Communications Services

(in millions) *As of or for the years ended December 31,*	1995	1994	1993
Net operating revenues			
Local service	$1,875.7	$1,752.3	$1,624.3
Network access	1,705.8	1,598.4	1,530.4
Toll service	485.4	529.3	505.3
Other	652.5	532.8	466.0
Total net operating revenues	4,719.4	4,412.8	4,126.0
Operating expenses			
Plant operations	1,360.6	1,298.3	1,206.7
Depreciation and amortization	835.6	794.6	733.0
Customer operations	601.0	549.3	532.4
Other	793.8	752.4	710.6
Merger, integration and restructuring costs	87.6	—	190.1
Total operating expenses	3,678.6	3,394.6	3,372.8
Operating income	$1,040.8[1]	$1,018.2	$ 753.2[2]
Operating margin	22.1%[1]	23.1%	18.3%[2]
Capital expenditures	$ 950.8	$ 914.2	$ 845.3
Identifiable assets	$6,970.4	$7,821.3	$7,603.9

[1]Excluding the restructuring costs of $87.6 million, operating income and margin for 1995 would have been $1,128.4 million and 23.9 percent, respectively.

[2]Excluding the merger and integration costs of $190.1 million, operating income and margin for 1993 would have been $943.3 million and 22.9 percent, respectively.

The local division consists principally of Sprint's regulated telephone companies which provide local exchange services, access by telephone customers and other carriers to local exchange facilities, and long distance services within specified geographic areas.

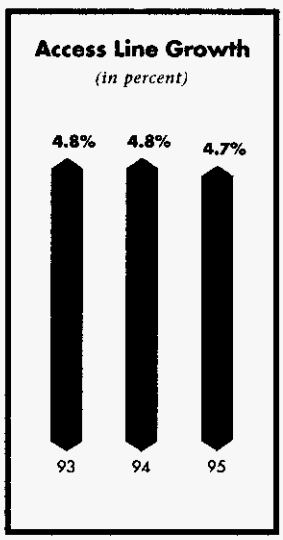
Net operating revenues increased 7 percent in both 1995 and 1994. Increased local service revenues reflect a 4.7 percent and 4.8 percent increase in the number of access lines served for 1995 and 1994, respectively, as well as growth in add-on services, such as custom calling features.

Network access revenues, derived from interexchange long distance carriers' use of the local network to complete calls, increased during 1995 and 1994 as a result of increased traffic volumes, a portion of which is due to a migration of traffic related to toll service revenues as described below. The increase was partially offset by periodic reductions in network access rates charged. The FCC announced a new interim interstate price caps plan during the first quarter of 1995. Under the new plan, which became effective August 1, 1995, the local division adopted a rate formula based on the maximum productivity factors that effectively removed the earnings cap on the division's interstate access revenues. Interstate access revenues comprise approximately 60 percent of the division's network access revenues.

Toll service revenues, related to the provision of long distance services within specified geographical areas and the reselling of interexchange long distance services, decreased 8 percent in 1995 following an increase of 5 percent in 1994. The 1995 decrease primarily reflects increased competition in the intrastate long distance markets as interexchange long distance carriers are now offering intraLATA long distance service in certain states. While toll service revenues have declined as a result of this increased competition, this reduction has been partially recovered through an increase in network access revenues resulting from additional use of the local network by interexchange long distance carriers.

Other revenues, including revenues from directory publishing fees, billing and collection services, and sales of telecommunications equipment, increased 22 percent in 1995 and 14 percent in 1994 generally due to growth in equipment sales and increases in nonregulated revenues.

Plant operations expense includes network operations costs; repair and maintenance costs of property, plant and equipment; and other costs associated with the provision of local exchange services. The 5 percent and 8 percent increases in such costs in 1995 and 1994, respectively, were primarily related to increases in the costs of providing services resulting from access line growth. Additionally, certain states have implemented revised toll plans requiring payment of access charges for calls terminating in the service areas of other local exchange carriers, resulting in increased plant operations expense. The 1995 increase also reflects increases in repair and maintenance costs in the division's Florida and Mid-Atlantic regions related to bad weather conditions, including the flooding rains and hurricanes which occurred in 1995. Increased expenditures related to switching system software associated with advanced calling features contributed to the higher level of plant operations expense in 1994.



 BEYOND TALK: Sprint built the first and only nationwide 100 percent digital, fiber-optic network.

Depreciation and amortization expense increased $41 million in 1995, following a $62 million increase in 1994. These increases generally reflect system-wide plant additions and also include the effects of depreciation rate changes, special short-term amortizations and nonrecurring charges approved by state regulatory commissions.

Customer operations expense includes costs associated with business office operations and billing services, marketing costs, and expenses related to providing operator and directory assistance and other customer services. These costs increased 9 percent and 3 percent in 1995 and 1994, respectively. The increases in 1995 and 1994 were related to increased costs associated with the overall growth in access lines. Expense levels in 1995 were also affected by marketing costs to promote new products and services, increased business office operations costs resulting from longer office hours for greater customer accessibility and customer costs related to increased nonregulated activities.

Other operating expenses increased $41 million and $42 million in 1995 and 1994, respectively, primarily due to costs associated with the growth in equipment sales.

In November 1995, Sprint initiated a realignment and restructuring of its local communications division, including the elimination of approximately 1,600 positions primarily in the network and finance functions. This restructuring is intended to streamline current processes in order to reduce costs in an increasingly competitive marketplace. These actions resulted in a nonrecurring charge of $88 million. The accrued liability associated with this charge specifically relates to the benefits that affected employees will receive upon termination.

Sprint adopted accounting principles for a competitive marketplace effective December 31, 1995 and discontinued applying SFAS No. 71 to its local division. The accounting impact to Sprint was a noncash, extraordinary charge of $565 million, net of related income tax benefits. See Note 2 of Notes to Consolidated Financial Statements for additional discussion.

Sprint does not expect the discontinued application of SFAS No. 71 to have a significant impact on 1996 depreciation expense. Additionally, future business transactions of the local division will be recorded following their economic substance, and regulatory assets and liabilities pursuant to SFAS No. 71 will no longer be recognized. Furthermore, revenues and related net income of nonregulated operations attributable to transactions with Sprint's regulated local exchange carriers, which were previously not eliminated in the accompanying Consolidated Financial Statements in accordance with SFAS No. 71, will be eliminated. Intercompany revenues of such entities amounted to $262 million, $285 million and $225 million in 1995, 1994 and 1993, respectively.

Product Distribution and Directory Publishing

(in millions)

As of or for the years ended December 31,	1995	1994	1993
Net operating revenues	$1,148.0	$1,108.7	$945.2
Operating expenses			
Costs of services and products	965.8	938.2	801.0
Selling, general and administrative	88.1	88.8	74.7
Depreciation and amortization	7.4	6.9	5.4
Merger and integration costs	—	—	2.5
Total operating expenses	1,061.3	1,033.9	883.6
Operating income	$ 86.7	$ 74.8	$ 61.6[1]
Operating margin	7.6%	6.7%	6.5%[1]
Capital expenditures	$ 7.8	$ 6.7	$ 9.0
Identifiable assets	$ 395.4	$ 376.2	$341.8

[1]Excluding the merger and integration costs of $2.5 million, operating income and margin for 1993 would have been $64.1 million and 6.8 percent, respectively.

North Supply, a wholesale distributor of telecommunications products, had 1995 net operating revenues of $854 million compared to $829 million in 1994 and $677 million in 1993. The increase in 1995 primarily reflects growth in sales to nonaffiliates as well as overall price increases. The increase in 1994 primarily reflects increased sales to the local division, partially as a result of sales to the merged Centel telephone operations. As a percentage of net operating revenues, operating expenses for 1995, 1994 and 1993 were 94.4 percent, 95.5 percent and 96.5 percent, respectively.

Sprint Publishing & Advertising, a publisher and marketer of telephone directories, had net operating revenues of $294 million in 1995 compared to $280 million in 1994 and $268 million in 1993. As a percentage of net operating revenues, operating expenses for 1995, 1994 and 1993 were 86.9 percent, 86.7 percent and 84.9 percent, respectively.

CONSOLIDATED STATEMENTS OF CASH FLOWS

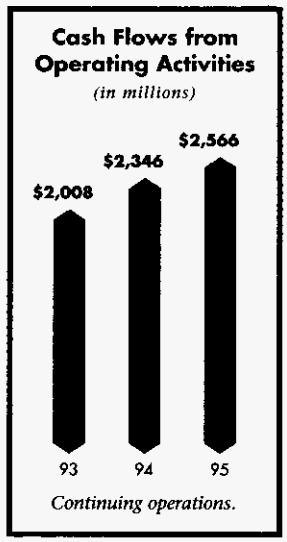
(in millions) *For the years ended December 31,*	1995	1994	1993
Operating Activities			
Net income	$ 395.3	$ 890.7	$ 54.9
Adjustments to reconcile net income to net cash provided by operating activities:			
(Income) Loss from cellular division	(14.5)	15.5	38.1
Extraordinary items	565.3	—	20.4
Cumulative effect of changes in accounting principles	—	—	382.6
Depreciation and amortization	1,466.4	1,386.0	1,283.7
Deferred income taxes and investment tax credits	5.8	53.2	(39.1)
Changes in operating assets and liabilities			
Accounts receivable, net	(135.8)	(226.5)	(166.4)
Inventories and other current assets	(38.6)	(56.1)	(9.9)
Accounts payable and other current liabilities	178.5	120.2	315.3
Noncurrent assets and liabilities, net	124.0	128.5	33.3
Other, net	20.0	34.5	94.9
Net cash provided by continuing operations	2,566.4	2,346.0	2,007.8
Net cash provided by cellular division	162.5	172.9	197.7
Net cash provided by operating activities	2,728.9	2,518.9	2,205.5
Investing Activities			
Capital expenditures	(1,857.3)	(1,751.6)	(1,429.8)
Proceeds from sale of investment in equity securities	—	117.7	—
Investments in affiliates	(948.7)	(74.1)	(31.2)
Other, net	(10.4)	(44.4)	(9.3)
Net cash used by continuing operations	(2,816.4)	(1,752.4)	(1,470.3)
Net cash used by cellular division	(324.6)	(272.4)	(169.9)
Net cash used by investing activities	(3,141.0)	(2,024.8)	(1,640.2)
Financing Activities			
Proceeds from long-term debt	260.7	107.9	840.4
Retirements of long-term debt	(630.0)	(597.0)	(1,589.0)
Net increase in notes payable and commercial paper	1,109.5	321.5	393.5
Proceeds from common stock issued	16.9	42.7	70.8
Proceeds from employee stock purchase installments	38.8	33.1	28.3
Dividends paid	(351.5)	(349.4)	(347.1)
Other, net	(21.8)	(15.7)	(11.5)
Net cash provided (used) by financing activities	422.6	(456.9)	(614.6)
Increase (Decrease) in Cash and Equivalents	10.5	37.2	(49.3)
Cash and Equivalents at Beginning of Year	113.7	76.5	125.8
Cash and Equivalents at End of Year	$ 124.2	$ 113.7	$ 76.5
Supplemental Cash Flows Information			
Cash paid for interest—continuing operations	$ 263.5	$ 320.8	$ 368.2
Cash paid for interest—cellular division	$ 124.0	$ 97.3	$ 85.4
Cash paid for income taxes	$ 532.8	$ 435.1	$ 292.4
Noncash Activities			
Common stock contributed to employee savings plans, at market	$ —	$ 31.0	$ 39.0

See accompanying Notes to Consolidated Financial Statements.

BEYOND TALK: Sprint will serve as managing partner for the North American gateway of Iridium, a satellite-based wireless personal communications network.

Cash Flows—Operating Activities

Cash flows from operating activities, which are Sprint's primary source of liquidity, were $2.6 billion, $2.3 billion and $2.0 billion in 1995, 1994 and 1993, respectively, for continuing operations. The increased cash flows in 1995 reflect improved operating results and reduced working capital requirements. Operating cash flows for 1994 and 1993 reflect improved operating results, partially offset by expenditures of $86 million and $155 million for 1994 and 1993, respectively, related to the 1993 merger, integration and restructuring actions.

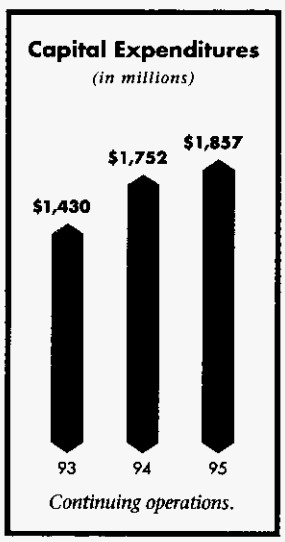


Cash Flows—Investing Activities

Investing activities of Sprint's continuing operations used cash of $2.8 billion, $1.8 billion and $1.5 billion in 1995, 1994 and 1993, respectively. Capital expenditures, which represent Sprint's most significant investing activity, were $1.9 billion, $1.8 billion and $1.4 billion in 1995, 1994 and 1993, respectively.

Long distance capital expenditures were incurred each year primarily to meet increased demand for data related services, to enhance network reliability and to upgrade capabilities for providing new products and services. Capital expenditures for the local division were made to accommodate access line growth, to continue the conversion to digital technologies, and to expand the division's capabilities for providing enhanced telecommunications services.

During 1995 and 1994, Sprint contributed $911 million and $52 million, respectively, to Sprint Spectrum. In 1995, $840 million of this contribution was used to fund Sprint's share of payments to the FCC for licenses acquired in the PCS auction. The remainder was used to fund Sprint's share of the venture's acquisition of a limited partnership interest in APC, as well as related capital and operating requirements. The 1994 contribution funded Sprint's share of the initial payment to the FCC for the PCS auction. Investing activities for 1994 also included $118 million received in connection with the sale of an investment in equity securities.



Cash Flows—Financing Activities

Sprint's financing activities provided cash of $423 million in 1995 and used cash of $457 million and $615 million in 1994 and 1993, respectively. During 1995, Sprint issued $261 million of long-term debt and increased short-term borrowings $1.1 billion. The proceeds from these borrowings were primarily used to fund commitments associated with Sprint Spectrum. Proceeds were also used to repay scheduled long-term debt maturities and to repay $282 million of 9.875 percent notes prior to maturity. The redemption premiums associated with this early retirement were not significant.

Long-term debt retirements during 1994 included the redemption of $102 million of debt called, prior to scheduled maturity, in 1993.

During 1993, a significant level of debt refinancing occurred in order to take advantage of lower interest rates. Accordingly, a majority of the proceeds from long-term borrowings in 1993 was used to finance the redemption prior to scheduled maturities of $1.2 billion of debt.

During 1995, Sprint renewed its revolving credit agreement with a syndicate of domestic and international banks for five years, through October 2000. In addition to the extension, the revolving credit agreement was increased to $1.5 billion from $1.1 billion.

Sprint paid dividends to common and preferred shareholders of $352 million, $349 million and $347 million in 1995, 1994 and 1993, respectively. Sprint's indicated annual dividend rate on common stock is currently $1.00 per share.

Cash Flows—Discontinued Operations

Cellular's cash flows from operating activities were $163 million, $173 million and $198 million in 1995, 1994 and 1993, respectively. Cellular's investing activities used cash of $325 million, $272 million and $170 million in 1995, 1994 and 1993, respectively, primarily consisting of capital expenditures. The increases in capital expenditures reflect the significant increases in the number of cellular customers served.

CONSOLIDATED BALANCE SHEETS

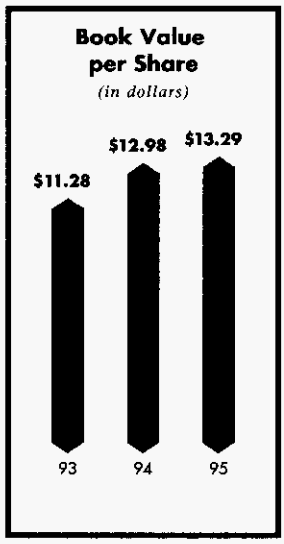
(in millions) *As of December 31,*	1995	1994
Assets		
Current assets		
Cash and equivalents	$ 124.2	$ 113.7
Accounts receivable, net of allowance for doubtful accounts of $222.5 million ($126.9 million in 1994)	1,523.7	1,387.9
Receivable from cellular division	1,400.0	—
Inventories	171.0	187.5
Deferred income taxes	45.5	54.2
Prepaid expenses	166.6	144.5
Other	188.4	155.4
Total current assets	3,619.4	2,043.2
Investments in equity securities	262.9	177.6
Property, plant and equipment		
Long distance communications services	6,773.7	6,056.3
Local communications services	12,603.1	11,827.4
Other	539.1	498.6
	19,915.9	18,382.3
Less accumulated depreciation	10,200.1	8,123.5
	9,715.8	10,258.8
Investments in affiliates	1,130.1	198.6
Receivable from cellular division	—	1,271.1
Net investment in cellular division	106.9	59.7
Other assets	360.8	538.5
	$15,195.9	$14,547.5
Liabilities and Shareholders' Equity		
Current liabilities		
Current maturities of long-term debt	$ 280.4	$ 332.4
Short-term borrowings	2,144.0	—
Accounts payable	938.9	927.8
Accrued interconnection costs	617.7	527.6
Accrued taxes	235.5	237.9
Other	925.6	817.4
Total current liabilities	5,142.1	2,843.1
Long-term debt	3,253.0	4,604.8
Deferred credits and other liabilities		
Deferred income taxes and investment tax credits	843.4	1,197.5
Postretirement and other benefit obligations	889.3	845.9
Other	393.0	494.3
	2,125.7	2,537.7
Redeemable preferred stock	32.5	37.1
Common stock and other shareholders' equity		
Common stock, par value $2.50 per share, authorized 500.0 million shares, issued 349.2 million (348.6 million in 1994), and outstanding 349.2 million (348.3 million in 1994)	872.9	871.4
Capital in excess of par or stated value	960.0	942.9
Retained earnings	2,766.5	2,730.9
Other	43.2	(20.4)
	4,642.6	4,524.8
	$15,195.9	$14,547.5

See accompanying Notes to Consolidated Financial Statements.

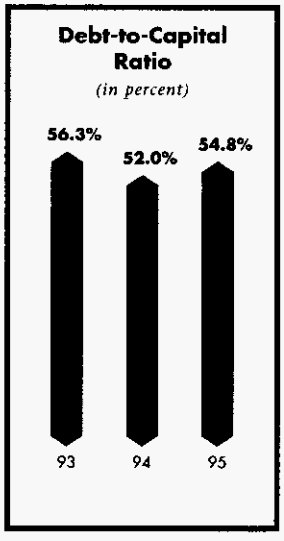
 BEYOND TALK: Sprint was founded in 1899 as a local telephone company in Abilene, Kansas.

Financial Condition

Sprint's consolidated assets totaled $15.2 billion at December 31, 1995 compared to $14.5 billion at December 31, 1994. Accounts receivable increased $136 million from 1994 to 1995, generally due to a 6 percent increase in consolidated net operating revenues. Sprint's allowance for doubtful accounts as a percentage of gross accounts receivable increased from 8 percent at December 31, 1994 to 13 percent at December 31, 1995. The increased percentage generally reflects the timing of sales and customer payments as well as reserves established during 1995 relative to certain of the long distance division's reseller customers. The reseller market has experienced significant competition, which has had a negative impact on these customers' repayment patterns. This increase has not had a significant impact on the revenue growth for the long distance division. Property, plant and equipment, net of accumulated depreciation, decreased $543 million from 1994 to 1995. This decrease was primarily due to the discontinued application of SFAS No. 71, which resulted in a $979 million increase to accumulated depreciation. Exclusive of this write-off, net property, plant and equipment increased $436 million due to increased capital expenditures to enhance and upgrade Sprint's networks, to expand service capabilities and to increase productivity.



Current maturities of long-term debt decreased $52 million from 1994 to 1995 due to scheduled debt payments. As of December 31, 1995, Sprint's total capitalization aggregated $10.4 billion, consisting of short-term borrowings, long-term debt (including current maturities), redeemable preferred stock, and common stock and other shareholders' equity. Short-term borrowings and long-term debt (including current maturities) comprised 54.8 percent of total capitalization as of December 31, 1995 compared to 52.0 percent at year-end 1994. The increase in the debt-to-capital ratio is attributable to increased short-term borrowings to fund investments in Sprint Spectrum.



Liquidity and Capital Resources

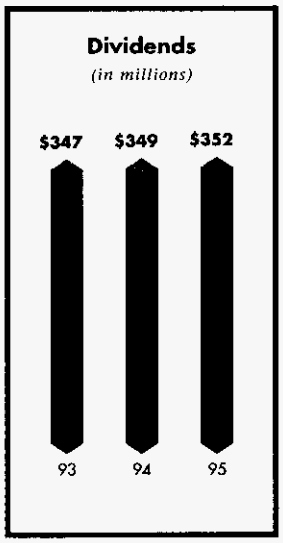
Capital Requirements On January 31, 1996, DT and FT invested $3.0 billion in Sprint and, upon the spin-off of Cellular, will make an additional aggregate investment of approximately $500 million to $700 million. Also in conjunction with the spin-off, Cellular will repay approximately $1.4 billion of intercompany debt payable to Sprint and its subsidiaries. Sprint does not expect to require any additional external financing during 1996.

Cash proceeds received from DT, FT and Cellular are expected to be used to repay approximately $2.1 billion in short-term borrowings and approximately $500 million in long-term borrowings. Approximately $600 million of the proceeds will also be required to fund the termination of an accounts receivable sales agreement. An additional $600 million will be used to fund commitments associated with Sprint Spectrum and its affiliates. Remaining cash proceeds will be invested on a temporary basis.

During 1996, Sprint anticipates funding capital expenditures of approximately $2.0 billion and dividends of approximately $426 million with cash flows from operating activities.

Liquidity At year-end 1995, Sprint had the ability to borrow $880 million under revolving credit agreements with a syndicate of domestic and international banks and other bank commitments. Other available financing sources include a Medium-Term Note program, under which Sprint may offer for sale up to $175 million of unsecured senior debt securities. Additionally, pursuant to shelf registration statements filed with the Securities and Exchange Commission, up to $1.0 billion of debt securities could be offered for sale as of December 31, 1995.

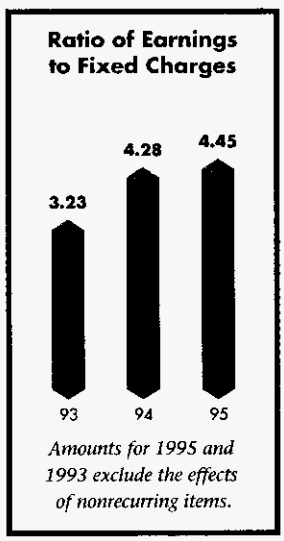
The aggregate amount of additional borrowings which can be incurred is ultimately limited by certain covenants contained in existing debt agreements. As of December 31, 1995, Sprint had borrowing capacity of approximately $3.6 billion under the most restrictive of its debt covenants.



General Hedging Policies

Sprint, on a limited basis, utilizes certain derivative financial instruments in an effort to manage exposure to interest rate risk and foreign exchange risk. Sprint's utilization of such derivative financial instruments related to hedging activities is generally limited to interest rate swap agreements and forward contracts and options in foreign currencies. Sprint will in no circumstance take speculative positions and create an exposure to benefit from market fluctuations. All hedging activity is in accordance with board-approved policies. Any potential loss or exposure related to Sprint's use of derivative instruments is immaterial to its overall operations, financial condition and liquidity. See Note 11 of Notes to Consolidated Financial Statements for more information related to Sprint's portfolio of derivative instruments.

Interest Rate Risk Management Sprint's interest rate risk management program focuses on minimizing vulnerability of net income to movements in interest rates, setting an optimal mixture of floating-rate and fixed-rate debt in the liability portfolio and preventing liquidity risk. Sprint primarily employs a gap methodology to measure interest rate exposure and utilizes simulation analysis to manage interest rate risk. Sprint takes an active stance in modifying hedge positions to benefit from the value of timing flexibility and fixed-rate/floating-rate adjustments.



Foreign Exchange Risk Management Sprint's foreign exchange risk management program focuses on optimizing consolidated cash flows and stabilizing accounting results. Sprint does not hedge translation exposure because it believes that optimizing consolidated cash flows will, over time, maintain shareholder value. Sprint's primary transaction exposure in foreign currencies results from changes in foreign exchange rates between the dates Sprint incurs and settles liabilities (payable in a foreign currency) to overseas telephone companies for the costs of terminating international calls made by Sprint's domestic customers.

Impact of Recently Issued Accounting Pronouncements

In March 1995, the Financial Accounting Standards Board (FASB) issued SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of," which is effective for fiscal years beginning after December 15, 1995. SFAS No. 121 requires that assets to be held and used be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Sprint does not anticipate that the requirements of SFAS No. 121 will have a material effect on its 1996 operating results.

In October 1995, the FASB issued SFAS No. 123, "Accounting for Stock-Based Compensation," which is effective for fiscal years beginning after December 15, 1995. SFAS No. 123 encourages companies to account for stock compensation awards under a fair value based method, whereby compensation cost is measured at the grant date based on the value of the award and is recognized over a service period. Companies may choose not to apply the new accounting method and may continue to apply current accounting requirements, which generally result in no recognition of compensation cost for most fixed stock option plans. Those that so choose, however, will be required to disclose in the notes to the financial statements what net income and earnings per share would have been if they had followed the FASB's new accounting method. Sprint has elected to continue to apply the current accounting requirements for stock-based compensation and will comply with the disclosure requirements in the notes to its 1996 consolidated financial statements.

BEYOND TALK: Sprint's Hospitality Group serves thousands of hotels, motels and colleges/universities across the United States.

CONSOLIDATED STATEMENTS OF COMMON STOCK AND OTHER SHAREHOLDERS' EQUITY

(in millions) *For the years ended December 31, 1995, 1994 and 1993*	Common Stock	Capital in Excess of Par or Stated Value	Retained Earnings	Other	Total
Balance as of January 1, 1993					
(338.9 million shares issued and outstanding)	$847.1	$717.5	$2,451.7	$(44.7)	$3,971.6
Net income	—	—	54.9	—	54.9
Common stock dividends	—	—	(324.5)	—	(324.5)
Preferred stock dividends	—	—	(2.8)	—	(2.8)
Employee stock purchase and other installments received, net	—	—	—	30.8	30.8
Common stock issued	11.0	98.4	—	(2.4)	107.0
Change in unrealized holding gains on investments in equity securities, net	—	—	—	64.8	64.8
Other, net	0.4	11.5	4.9	(0.3)	16.5
Balance as of December 31, 1993					
(343.4 million shares issued and outstanding)	858.5	827.4	2,184.2	48.2	3,918.3
Net income	—	—	890.7	—	890.7
Common stock dividends	—	—	(346.7)	—	(346.7)
Preferred stock dividends	—	—	(2.7)	—	(2.7)
Employee stock purchase and other installments received, net	—	—	—	15.0	15.0
Common stock issued	12.8	111.9	—	(53.4)	71.3
Change in unrealized holding gains on investments in equity securities, net	—	—	—	(20.5)	(20.5)
Other, net	0.1	3.6	5.4	(9.7)	(0.6)
Balance as of December 31, 1994					
(348.6 million shares issued and 348.3 million shares outstanding)	871.4	942.9	2,730.9	(20.4)	4,524.8
Net income	—	—	395.3	—	395.3
Common stock dividends	—	—	(348.9)	—	(348.9)
Preferred stock dividends	—	—	(2.6)	—	(2.6)
Other installments received, net	—	—	—	3.0	3.0
Common stock issued	1.4	13.5	—	—	14.9
Change in unrealized holding gains on investments in equity securities, net	—	—	—	54.6	54.6
Other, net	0.1	3.6	(8.2)	6.0	1.5
Balance as of December 31, 1995					
(349.2 million shares issued and outstanding)	$872.9	$960.0	$2,766.5	$ 43.2	$4,642.6

See accompanying Notes to Consolidated Financial Statements.

1) Summary of Significant Accounting Policies

This summary of significant accounting policies of Sprint Corporation is presented to assist in understanding the accompanying consolidated financial statements.

Basis of Consolidation and Presentation The accompanying consolidated financial statements include the accounts of Sprint Corporation and its wholly-owned and majority-owned subsidiaries (Sprint). Investments in entities in which Sprint does not have a controlling interest are accounted for using the equity method.

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Prior years' financial statements have been restated to reflect Sprint's spin-off of its cellular and wireless communications services division (Cellular) (see Note 3). The operating results, net assets and cash flows of Cellular are separately classified as discontinued operations and are excluded from amounts reported for the continuing operations of Sprint. Intercompany transactions with Cellular and its subsidiaries, which were previously eliminated in consolidation, are now reflected in Sprint's consolidated financial statements.

Certain other amounts previously reported for prior periods have been reclassified to conform to the current period presentation in the accompanying consolidated financial statements. Such reclassifications had no effect on the results of operations or shareholders' equity as previously reported.

In accordance with Statement of Financial Accounting Standards (SFAS) No. 71, "Accounting for the Effects of Certain Types of Regulation," revenues and related net income of nonregulated operations attributable to intercompany transactions with Sprint's regulated telephone companies have not been eliminated in the accompanying consolidated financial statements. Intercompany revenues of such entities amounted to $262 million, $285 million and $225 million in 1995, 1994 and 1993, respectively. In conjunction with the adoption of accounting principles for a competitive marketplace (see Note 2), such intercompany amounts will be eliminated beginning in 1996. All other significant intercompany transactions have been eliminated.

Classification of Operations The long distance communications services division provides domestic and international voice, video and data communications services. The terms under which the division offers its services to the public are subject to different levels of state and federal regulation, but rates are generally not subject to rate-base regulation.

The local communications services division consists principally of the operations of Sprint's regulated telephone companies. These operations provide local exchange services, access by telephone customers and other carriers to local exchange facilities and long distance services within specified geographical areas.

The product distribution and directory publishing businesses include the wholesale distribution of telecommunications products and the publishing and marketing of white and yellow page telephone directories.

Revenue Recognition Operating revenues for the long distance and local communications services divisions are recognized as communications services are rendered. Operating revenues for the long distance communications services division are recorded net of an estimate for uncollectible accounts. Operating revenues for Sprint's product distribution business are recognized upon delivery of products to customers.

Cash and Equivalents Cash equivalents generally include highly liquid investments with original maturities of three months or less and are stated at cost, which approximates market value. As part of its cash management program, Sprint utilizes controlled disbursement banking arrangements. As of December 31, 1995 and 1994, outstanding checks in excess of cash balances of $131 million and $126 million, respectively, are included in accounts payable. Sprint had sufficient funds available to fund these outstanding checks when they were presented for payment.

Investments in Equity Securities Investments in equity securities are classified as available for sale and are reported at fair value (estimated based on quoted market prices) as of December 31, 1995 and 1994. As of December 31, 1995 and 1994, the cost of such investments was $109 million each

BEYOND TALK: Sprint's TranXact was the first network custom-designed for transaction processing applications, such as credit card validation.

year. These investments had gross unrealized holding gains of $154 million and $69 million for 1995 and 1994, respectively, which are reflected as an addition to other shareholders' equity, net of related income taxes.

During 1994, Sprint sold an investment in equity securities, realizing a gain of $35 million.

Inventories Inventories, consisting principally of those related to Sprint's product distribution business, are stated at the lower of cost (principally first-in, first-out method) or market.

Property, Plant and Equipment Property, plant and equipment are recorded at cost. Generally, ordinary asset retirements and disposals are charged against accumulated depreciation with no gain or loss recognized. Repairs and maintenance costs are expensed as incurred.

Effective January 1, 1993, Sprint's long distance communications services division changed its method of accounting for certain costs related to connecting new customers to its network. The change was made to conform Sprint's accounting to the predominant industry practice for such costs. Under the new method, such costs (which were previously capitalized) are being expensed when incurred. The resulting nonrecurring, noncash charge of $32 million ($0.09 per share), net of related income tax benefits, is reflected in the 1993 Consolidated Statement of Income as a cumulative effect of change in accounting principle.

Depreciation The cost of property, plant and equipment for Sprint's local communications division was generally depreciated on a straight-line basis over the lives prescribed by regulatory commissions. In connection with the discontinuation of SFAS No. 71, Sprint will begin recording depreciation expense based on estimated economic useful lives rather than those prescribed by regulatory commissions (see Note 2).

The cost of property, plant and equipment of Sprint's other divisions is depreciated generally on a straight-line basis over the estimated economic useful lives.

Income Taxes Deferred income taxes are provided for certain temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for tax purposes.

Investment tax credits related to regulated telephone property, plant and equipment have been deferred and are being amortized over the estimated useful lives of the related assets.

Capitalized Interest Interest costs associated with the construction of capital assets, including interest costs on borrowings incurred to fund Sprint's investment in Sprint Spectrum, are capitalized. Total amounts capitalized during 1995, 1994 and 1993 were $57 million, $8 million and $7 million, respectively.

Earnings Per Share Earnings per common share amounts are based on the weighted average number of shares both outstanding and issuable assuming exercise of all dilutive options, as applicable. See Note 12 for a discussion of the consummation of the Global One joint venture and the pro forma impact of the related issuance of shares on earnings per share.

2) Adoption of Accounting Principles for a Competitive Marketplace

Effective December 31, 1995, Sprint determined that its local communications services division no longer met the criteria necessary for the continued application of the provisions of SFAS No. 71. As a result of the decision to discontinue the application of SFAS No. 71, Sprint recorded a noncash, extraordinary charge of $565 million, net of income tax benefits of $437 million.

Sprint's determination that it was no longer eligible for the continued application of the accounting required by SFAS No. 71 was based on changes in the regulatory framework, which continues to evolve from rate-base regulation to price regulation and the convergence of competition in the telecommunications industry. Based on these occurrences, Sprint no longer believes that it can be assured that prices will be maintained at levels which will provide for the recovery of specific costs.

The components of the extraordinary charge recognized as a result of the discontinued application of SFAS No. 71 are as follows:

(in millions)	Pre-Tax	After-Tax
Increase to the accumulated depreciation balance	$ 979.1	$607.9
Recognition of switch software asset	(99.5)	(61.7)
Elimination of other net regulatory assets	123.1	76.3
Total	$1,002.7	622.5
Tax-related net regulatory liabilities		(43.9)
Accelerated amortization of investment tax credits		(13.3)
Extraordinary charge		$565.3

The adjustment to the accumulated depreciation balance was determined by the completion of depreciation reserve and impairment studies. The depreciation reserve study analyzed, by individual plant asset categories, the impacts of regulator-prescribed depreciable asset lives compared to Sprint's estimated economic lives. The results identified the cumulative under depreciation of certain asset categories. The impairment study, which validated the results of the depreciation study, estimated the impact on future revenues caused by price changes and developing industry competition, and the resulting effects on cash flows.

The following is a summary of the telecommunications plant in service asset balances and corresponding reserve adjustment.

(in millions)

	Pre-Change			Post-Change	
Category of Plant Asset	Plant in Service	Reserve	Net Plant	Reserve Adjustment	Revised Net Plant
Cable	$ 5,006.4	$2,553.3	$2,453.1	$633.4	$1,819.7
Circuit	1,699.7	916.8	782.9	118.3	664.6
Switching	2,989.1	1,223.3	1,765.8	143.9	1,621.9
Other	2,441.5	1,070.2	1,371.3	83.5	1,287.8
Total plant	$12,136.7	$5,763.6	$6,373.1	$979.1	$5,394.0

The following is a summary of lives before and after the discontinued application of SFAS No. 71.

Category of Plant Asset	Pre-Change Composite of Regulator-Approved Asset Lives	Post-Change Estimated Economic Asset Lives
Cable	17-43	15-20
Circuit	9-13	7-11
Digital switching	12-20	11-12

The discontinued application of SFAS No. 71 also required Sprint to eliminate from its consolidated balance sheet the effects of any actions of regulators that had been recognized as assets and liabilities pursuant to SFAS No. 71, but would not have been recognized as assets and liabilities by enterprises in general. The elimination of other net regulatory assets primarily related to deferred postretirement benefit obligations and deferred debt financing costs. Additionally, revenues and related net income of nonregulated operations attributable to transactions with Sprint's regulated local exchange carriers, which were previously not eliminated in the accompanying consolidated financial statements in accordance with SFAS No. 71, will be eliminated beginning in 1996. Intercompany revenues of such entities amounted to $262 million, $285 million and $225 million in 1995, 1994 and 1993, respectively.

The tax-related adjustments were required to adjust deferred income tax amounts to the currently enacted statutory rates and to eliminate tax-related regulatory assets and liabilities. Sprint's local division uses the deferral method of accounting for investment tax credits and amortizes the credits as a reduction to tax expense over the life of the asset that gave rise to the tax credit. Since plant asset lives were shortened, the investment tax credits were adjusted to reduce the unamortized balance by a corresponding amount.

 BEYOND TALK: A Sprint-designed network allows Russian banks to trade currency electronically.

3) Spin-off of Cellular Division

Due in part to divestiture requirements imposed by the Federal Communications Commission (FCC) with respect to Personal Communications Services (PCS) licenses awarded to Sprint Spectrum, the Sprint board of directors has approved the spin-off of Cellular to the holders of Sprint common stock. Sprint has received a favorable ruling from the Internal Revenue Service regarding the tax-free nature of the spin-off.

The spin-off will be effected by distributing to all holders of Sprint common stock all shares of Cellular common stock at a rate of 1 share of Cellular common stock for every 3 shares of Sprint common stock held. In connection with the closing, Cellular will repay approximately $1.4 billion of intercompany debt owed by Cellular to Sprint and its subsidiaries, and Sprint will contribute to the equity capital of Cellular any debt owed by Cellular in excess of the intercompany debt being repaid.

The net operating results of Cellular have been separately classified as discontinued operations in the Consolidated Statements of Income as summarized below. Interest expense has been allocated to Cellular based on the assumed repayment of intercompany debt to Sprint by Cellular. The operating expenses as presented below do not include Cellular's share of general corporate overhead expenses. These expenses have been reallocated to Sprint's other operating segments. Accordingly, Cellular's results of operations as reflected below may not be indicative of its future operating results once the spin-off is completed. Such expenses were $13 million, $12 million and $12 million for each of the years ended December 31, 1995, 1994 and 1993, respectively.

(in millions)	1995	1994	1993
Net operating revenues	$834.4	$626.5	$410.5
Operating expenses	675.6	529.4	374.0
Operating income	158.8	97.1	36.5
Interest expense	(124.0)	(97.3)	(85.4)
Other income (expense), net	10.9	(5.6)	11.7
Income (Loss) before income taxes	45.7	(5.8)	(37.2)
Income tax provision (benefit)	31.2	9.7	(0.7)
Cumulative effect of change in accounting principle, net	—	—	(1.6)
Income (Loss) from cellular division	$ 14.5	$ (15.5)	$ (38.1)

The net assets and liabilities of Cellular have been separately classified as net investment in cellular division in the Consolidated Balance Sheets as summarized below:

(in millions)	1995	1994
Current assets	$ 153.9	$ 145.9
Noncurrent assets	1,799.0	1,581.7
Advance payable	(1,433.0)	(1,271.1)
Other current liabilities	(166.6)	(212.1)
Noncurrent liabilities	(246.4)	(184.7)
Net investment in cellular division	$ 106.9	$ 59.7

4) Employee Benefit Plans

Defined Benefit Pension Plan Substantially all Sprint employees are covered by a noncontributory defined benefit pension plan. For participants of the plan represented by collective bargaining units, benefits are based upon schedules of defined amounts as negotiated by the respective parties. For participants not covered by collective bargaining agreements, the plan provides pension benefits based upon years of service and participants' compensation.

Sprint's policy is to make contributions to the plan each year equal to an actuarially determined amount consistent with applicable federal tax regulations. The funding objective is to accumulate funds at a relatively stable rate over the participants' working lives so that benefits are fully funded at retirement. As of December 31, 1995, the plan's assets consisted principally of investments in corporate equity securities and U.S. government and corporate debt securities.

The components of the net pension costs (credits) and related weighted average assumptions are as follows:

(in millions)	1995	1994	1993
Service cost — benefits earned during the period	$ 51.8	$ 61.6	$ 58.2
Interest cost on projected benefit obligation	129.7	121.6	103.9
Actual return on plan assets	(472.1)	(1.1)	(241.2)
Net amortization and deferral	287.9	(176.6)	62.5
Net pension cost (credit)	$ (2.7)	$ 5.5	$ (16.6)
Discount rate	8.5%	7.5%	8.0%
Expected long-term rate of return on plan assets	9.5%	9.5%	9.5%
Anticipated composite rate of future increases in compensation	5.0%	4.5%	5.5%

The funded status and amounts recognized in the Consolidated Balance Sheets for the plan, as of December 31, are as follows:

(in millions)	1995	1994
Actuarial present value of benefit obligations		
Vested benefit obligation	$(1,705.1)	$(1,338.1)
Accumulated benefit obligation	$(1,866.0)	$(1,459.5)
Projected benefit obligation	$(1,962.7)	$(1,547.3)
Plan assets at fair value	2,331.3	1,950.2
Plan assets in excess of the projected benefit obligation	368.6	402.9
Unrecognized net gains	(199.2)	(203.8)
Unrecognized prior service cost	101.3	107.4
Unamoritized portion of transition asset	(170.9)	(197.0)
Prepaid pension cost	$ 99.8	$ 109.5

The projected benefit obligations as of December 31, 1995 and 1994 were determined using discount rates of 7.25 percent and 8.5 percent, respectively, and anticipated composite rates of future increases in compensation of 4.25 percent and 5.0 percent, respectively.

Defined Contribution Plans Sprint sponsors defined contribution employee savings plans covering substantially all employees. Participants may contribute portions of their compensation to the plans. Contributions of participants represented by collective bargaining units are matched by Sprint based upon defined amounts as negotiated by the respective parties. Contributions of participants not covered by collective bargaining agreements are also matched by Sprint. For these participants, Sprint provides matching contributions in common stock equal to 50 percent of participants' contributions up to 6 percent of their compensation and may, at the discretion of the board of directors, provide additional matching contributions based upon the performance of Sprint's common stock in comparison to other telecommunications companies. Sprint's matching contributions aggregated $51 million, $47 million and $49 million in 1995, 1994 and 1993, respectively.

Postretirement Benefits Sprint sponsors postretirement benefit (principally health care benefits) arrangements covering substantially all employees. Employees who retired before specified dates are eligible for these benefits at no cost or a reduced cost. Employees retiring after specified dates are eligible for these benefits on a shared cost basis. Sprint funds the accrued costs as benefits are paid.

Effective January 1, 1993, Sprint changed or modified its method of accounting for postretirement benefits by adopting SFAS No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions." The resulting nonrecurring, noncash charge of $339 million ($1.00 per share), net of related income tax benefits, is reflected in the 1993 Consolidated Statement of Income as a cumulative effect of change in accounting principle.

The components of the net postretirement benefits cost are as follows:

(in millions)	1995	1994	1993
Service cost—benefits earned during the period	$22.2	$23.2	$21.7
Interest on accumulated benefit obligation	58.7	53.2	56.3
Net amortization and deferral	(9.4)	(1.9)	—
Net postretirement benefits cost	$71.5	$74.5	$78.0

For measurement purposes, a weighted average annual health care cost trend rate of 12 percent was assumed for 1995, gradually decreasing to 6 percent by 2001 and remaining constant thereafter. The effect of a 1 percent increase in the assumed trend rates would have increased the 1995 net postretirement benefits cost by approximately $14 million. The discount rates for 1995, 1994 and 1993 were 8.5 percent, 7.5 percent and 8.0 percent, respectively.

 BEYOND TALK: SprintMail connects e-mail users on more than 300 electronic messaging systems.

The amounts recognized in the Consolidated Balance Sheets, as of December 31, are as follows:

(in millions)	1995	1994
Accumulated postretirement benefits obligation		
Retirees	$312.4	$298.8
Active plan participants – fully eligible	118.3	130.4
Active plan participants – other	328.6	244.5
	759.3	673.7
Unrecognized prior service benefit	5.6	5.9
Unrecognized net gains	115.3	154.1
Accrued postretirement benefits cost	$880.2	$833.7

The accumulated benefits obligations as of December 31, 1995 and 1994 were determined using discount rates of 7.25 percent and 8.5 percent, respectively. A weighted average annual health care trend rate of 9.6 percent was assumed for 1996, gradually decreasing to 5 percent by 2001 and remaining constant thereafter. The effect of a 1 percent annual increase in the assumed health care cost trend rates would have increased the accumulated benefits obligation as of December 31, 1995 by approximately $100 million.

Postemployment Benefits Effective January 1, 1993, Sprint adopted SFAS No. 112, "Employers' Accounting for Postemployment Benefits." Upon adoption, Sprint recognized certain previously unrecorded obligations for benefits being provided to former or inactive employees and their dependents after employment, but before retirement. The resulting nonrecurring, noncash charge of $11 million ($0.03 per share), net of related income tax benefits, is reflected in the 1993 Consolidated Statement of Income as a cumulative effect of change in accounting principle. Such postemployment benefits offered by Sprint include severance, disability and workers compensation benefits, including the continuation of other benefits such as health care and life insurance coverage.

5) Income Taxes

The components of the income tax provisions allocated to continuing operations are as follows:

(in millions)	1995	1994	1993
Current income tax provision			
Federal	$437.4	$355.7	$283.8
State	91.1	79.8	51.3
	528.5	435.5	335.1
Deferred income tax provision (benefit)			
Federal	45.9	81.6	11.8
State	(23.6)	(6.4)	(26.2)
Amortization of deferred investment tax credits	(16.5)	(22.0)	(24.7)
	5.8	53.2	(39.1)
Total income tax provision	$534.3	$488.7	$296.0

On August 10, 1993, the Revenue Reconciliation Act of 1993 was enacted which, among other changes, raised the federal income tax rate for corporations to 35 percent from 34 percent, retroactive to January 1, 1993. Accordingly, Sprint adjusted its deferred income tax assets and liabilities to reflect the revised rate. The resulting adjustment related to Sprint's nonregulated subsidiaries increased the 1993 deferred income tax provision by $11 million ($0.03 per share). Adjustments to the net deferred income tax liabilities associated with the regulated telephone companies were generally recorded as reductions to regulatory liabilities and have subsequently been eliminated in connection with Sprint's discontinued application of SFAS No. 71 (see Note 2).

The differences which cause the effective income tax rate to vary from the statutory federal income tax rate of 35 percent in 1995, 1994 and 1993 are as follows:

(in millions)	1995	1994	1993
Income tax provision at the statutory rate	$518.1	$485.8	$284.6
Less investment tax credits included in income	16.5	22.0	24.7
Expected federal income tax provision after investment tax credits	501.6	463.8	259.9
Effect of			
State income taxes, net of federal income tax effect	43.9	47.7	16.3
Differences required to be flowed through by regulatory commissions	4.9	4.8	6.0
Reversal of rate differentials	(8.6)	(9.7)	(13.0)
Merger related costs	—	—	18.0
Other, net	(7.5)	(17.9)	8.8
Income tax provision, including investment tax credits	$534.3	$488.7	$296.0
Effective income tax rate	36.1%	35.2%	36.4%

The income tax provisions (benefits) allocated to other items are as follows:

(in millions)	1995	1994	1993
Discontinued operations:			
Cellular division	$ 31.2	$ 9.7	$ (0.7)
Other	—	(9.0)	(6.6)
Extraordinary loss on discontinuance of SFAS No. 71	(437.4)	—	—
Extraordinary losses on early extinguishments of debt	—	—	(20.3)
Cumulative effect of changes in accounting principles			
Postretirement benefits	—	—	(216.0)
Postemployment benefits	—	—	(6.6)
Circuit activity costs	—	—	(21.5)
Unrealized holding gains on investments in equity securities (recorded directly to shareholders' equity)	30.7	(11.6)	36.5
Stock ownership, purchase and options arrangements (recorded directly to shareholders' equity)	(7.5)	(8.1)	(10.6)

Deferred income taxes are provided for the temporary differences between the carrying amounts of Sprint's assets and liabilities for financial statement purposes and their tax bases. The sources of the differences that give rise to the deferred income tax assets and liabilities as of December 31, 1995 and 1994, along with the income tax effect of each, are as follows:

	1995 Deferred Income Tax		1994 Deferred Income Tax	
(in millions)	Assets	Liabilities	Assets	Liabilities
Property, plant and equipment	$ —	$1,276.7	$ —	$1,525.3
Postretirement and other benefits	347.0	—	298.0	—
Alternative minimum tax credit carryforwards	8.6	—	93.0	—
Operating loss carryforwards	26.9	—	45.8	—
Integration and restructuring costs	32.7	—	12.2	—
Revenue reserves	33.3	—	33.4	—
Other, net	69.8	—	—	5.3
	518.3	1,276.7	482.4	1,530.6
Less valuation allowance	17.4	—	21.1	—
Total	$500.9	$1,276.7	$461.3	$1,530.6

During 1995, 1994 and 1993, the valuation allowance related to deferred income tax assets decreased $4 million, $1 million and $7 million, respectively.

As of December 31, 1995, Sprint has available, for income tax purposes, $9 million of alternative minimum tax credit carryforwards to offset regular income tax payable in future years, and tax benefits of $27 million associated with state operating loss carryforwards. The loss carryforwards expire in varying amounts annually from 1996 through 2010.

BEYOND TALK: Sprint was the first major long distance carrier to introduce retail prepaid calling cards in the United States.

6) Borrowings

Long-term debt, as of December 31, is as follows:

(in millions)	Maturing	1995	1994
Corporate			
Senior notes			
9.45%	1995	$ —	$ 50.0
9.88%	1995	—	80.0
10.45%	1996	100.0	200.0
9.19% to 9.60%	1998	43.0	43.0
8.25%[1]	2000	138.4	—
8.13% to 9.80%	2000 to 2003	632.3	632.3
Debentures			
9.25%	2022	200.0	200.0
Notes payable and commercial paper, classified as long-term debt	1995	—	934.0
Long Distance Communications Services			
Vendor financing agreements			
6.19% to 10.17%	1996 to 1999	177.6	223.1
Local Communications Services			
First mortgage bonds			
2.00% to 9.37%	1996 to 2000	342.9	355.3
6.25% to 7.88%	2001 to 2005	510.7	511.5
4.00% to 9.79%	2006 to 2010	151.9	151.9
6.88% to 7.46%	2011 to 2015	90.0	90.0
8.77% to 9.68%	2016 to 2020	278.5	279.1
7.13% to 9.89%	2021 to 2025	193.0	123.5
Debentures and notes			
2.00% to 9.61%	1996 to 2016	415.6	424.0
Notes payable and commercial paper, classified as long-term debt	1996	42.8	143.4
Other			
2.00% to 19.45%	1996 to 2009	9.8	20.0
Other			
Senior notes			
9.88%	1995	—	250.0
Debentures			
9.00%	2019	150.0	150.0
Other			
5.39% to 12.50%	1996 to 1999	56.9	76.1
		3,533.4	4,937.2
Less current maturities		280.4	332.4
Long-term debt		$3,253.0	$4,604.8

[1]*Notes are exchangeable for 4.4 million shares of Southern New England Telecommunications Corporation common stock owned by Sprint and included in investments in equity securities at December 31, 1995.*

Long-term debt maturities during each of the next five years are as follows:

(in millions)	
1996	$280.4
1997	123.0
1998	160.9
1999	28.9
2000	682.9

Property, plant and equipment with an aggregate cost of approximately $11.2 billion is either pledged as security for first mortgage bonds and certain notes or is restricted for use as mortgaged property.

Notes payable and commercial paper outstanding and related weighted average interest rates, as of December 31, are as follows:

(in millions)	1995	1994
Bank notes, 5.90% (5.85% in 1994)	$1,551.8	$ 263.0
Master Trust notes (6.33% in 1994)	—	248.7
Commercial paper, 6.31% (5.08% in 1994)	635.0	565.7
Total notes payable and commercial paper	$2,186.8	$1,077.4

As of December 31, 1995, $2.1 billion of notes payable and commercial paper was classified as short-term borrowings. As of December 31, 1995 and 1994, $43 million and $1.1 billion, respectively, of notes payable and commercial paper were classified as long-term debt. Such classifications were based on Sprint's ability and intent to refinance such borrowings on a long-term basis.

The bank notes are renewable at various dates throughout the year. Sprint pays a fee to certain commercial banks to support current and future credit requirements based upon loan commitments. Lines of credit may be withdrawn by the banks if there is a material adverse change in Sprint's financial condition.

At December 31, 1995, Sprint had aggregate credit arrangements which provided $2.8 billion. Of the $2.2 billion of notes payable and commercial paper outstanding at December 31, 1995, $2.0 billion had been specifically borrowed under such credit arrangements, resulting in $790 million of availability.

Sprint is in compliance with all restrictive or financial covenants relating to its debt arrangements at December 31, 1995.

During 1993, Sprint redeemed or called for redemption prior to scheduled maturities $1.3 billion of first mortgage bonds, senior notes and debentures. Excluding amounts deferred by the rate-regulated telephone companies as required by certain regulatory commissions, the prepayment penalties incurred in connection with early extinguishments of debt and the write-off of related debt issuance costs aggregated $29 million, net of related income tax benefits, and is reflected as an extraordinary loss in the Consolidated Statements of Income.

7) Redeemable Preferred Stock

Sprint has 20 million authorized shares and subsidiaries have approximately 5 million authorized shares of preferred stock, including nonredeemable preferred stock. The redeemable preferred stock outstanding, as of December 31, is as follows:

(in millions)	1995	1994
Third series—stated value $100 per share, shares—184,000 in 1995 and 196,000 in 1994, nonparticipating, nonvoting, cumulative 7.75% annual dividend rate	$18.4	$19.6
Fifth series—stated value $100,000 per share, shares—95 in 1995 and 1994, voting, cumulative 6% annual dividend rate	9.5	9.5
Subsidiaries—stated value ranging from $10 to $100 per share, shares—110,675 in 1995 and 364,345 in 1994, annual dividend rates ranging from 4.7% to 5.0%	4.6	8.0
Total redeemable preferred stock	$32.5	$37.1

Sprint's third series preferred stock was called in January 1996. In March 1996, 24,000 shares will be redeemed at a price of $100.00 per share and the remaining shares will be redeemed at a price of $101.77 per share.

Sprint's fifth series preferred stock must be redeemed in full in 2003. If less than full dividends have been paid for four consecutive dividend periods or if the total amount of dividends in arrears exceeds an amount equal to the dividend payment for six dividend periods, the holders of the fifth series preferred stock are entitled to elect a majority of directors standing for election until all arrears in dividend payments have been paid.

8) Common Stock

Common stock activity during 1995 and shares reserved for future grants under stock option plans or for future issuances under various arrangements are as follows:

	Number of Shares	
(in millions)	1995 Activity	Reserved as of December 31, 1995
Employees Stock Purchase Plan	0.1	7.1
Employee savings plans	—	3.4
Automatic Dividend Reinvestment Plan	—	1.1
Officer and key employees' and directors' stock options	0.4	16.9
Conversion of preferred stock and other	0.1	1.3
Total	0.6	29.8

As of December 31, 1995, elections to purchase 2 million of Sprint's common shares were outstanding under the 1994 offering of the Employees Stock Purchase Plan (ESPP). The purchase price under the offering cannot exceed $32.35 per share, such price representing 85 percent of the average market price on the offering date, or fall below $12.00 per share. The 1994 offering terminates on June 30, 1996. Upon the spin-off of Cellular, the number of shares underlying elections by non-Cellular employees and the related per share purchase price will be adjusted to maintain both the aggregate fair market value of stock underlying the elections and the relationship between the per share purchase price and the related per share market value. At the option of Cellular employees, elections made by Cellular employees are expected to be terminated under the terms and conditions of Sprint's ESPP, or to be replaced by elections to purchase shares of the common stock of Cellular. As of December 31, 1995, Cellular employees held elections to purchase approximately 58,000 shares of Sprint common stock under the ESPP.

Under various stock option plans, shares of common stock are reserved for issuance to officers, outside directors and certain employees. All options are granted at 100 percent of the market price at date of grant. Approximately 1 percent of all options outstanding as of December 31, 1995 provide for the granting of stock appreciation rights as an alternate

 BEYOND TALK: In 1995 Sprint launched the world's fastest transoceanic Internet link.

method of settlement upon exercise. A summary of stock option activity under the plans is as follows:

(in millions, except per share data)	Number of Shares	Per Share Exercise Price Low	Per Share Exercise Price High	Aggregate Exercise Amount
Shares under option as of January 1, 1993 (5.5 million shares exercisable)	7.5	$ 9.44	$39.31	$170.2
Granted	1.6	27.50	38.44	50.3
Exercised				
Options without stock appreciation rights	(2.1)	9.44	33.75	(41.0)
Options with stock appreciation rights	(0.3)	11.09	29.68	(5.5)
Terminated and expired	(0.1)	18.16	33.75	(3.2)
Shares under option as of December 31, 1993 (4.5 million shares exercisable)	6.6	9.44	39.31	170.8
Granted	2.8	30.81	39.50	100.3
Exercised				
Options without stock appreciation rights	(0.8)	9.44	33.75	(17.4)
Options with stock appreciation rights	(0.2)	11.09	29.68	(3.8)
Terminated and expired	(0.6)	22.13	36.69	(16.7)
Shares under option as of December 31, 1994 (3.7 million shares exercisable)	7.8	11.09	39.50	233.2
Granted	3.3	28.69	40.75	97.8
Exercised				
Options without stock appreciation rights	(0.6)	11.09	36.69	(13.9)
Options with stock appreciation rights	(0.1)	11.09	29.68	(1.1)
Terminated and expired	(0.4)	14.03	39.31	(14.3)
Shares under option as of December 31, 1995 (5.3 million shares exercisable)	10.0	$14.03	$40.75	$301.7

Upon the spin-off of Cellular, the number of shares underlying options held by non-Cellular employees and the related per share purchase price will be adjusted to maintain both the aggregate fair market value of stock underlying the options and the relationship between the per share purchase price and the related per share market value. Options held by Cellular employees are expected to be converted into options to purchase shares of Cellular common stock. As of December 31, 1995, Cellular employees held options to purchase approximately 320,000 shares of Sprint common stock.

During 1990, the Savings Plan Trust, an employee savings plan, acquired shares of common stock from Sprint in exchange for a $75 million promissory note payable to Sprint. The note bears an interest rate of 9 percent and is to be repaid from the common stock dividends received by the plan and the contributions made to the plan by Sprint in accordance with plan provisions. The remaining balance of the note receivable of $55 million as of December 31, 1995 is reflected as a reduction to other shareholders' equity. At December 31, 1995 the Savings Plan Trust held approximately 18 million shares of Sprint common stock.

Under a Shareholder Rights plan, one-half of a Preferred Stock Purchase Right is attached to each share of common stock. Each Right, which is exercisable and detachable only upon the occurrence of certain takeover events, entitles shareholders to buy units consisting of one one-hundredth of a newly issued share of Preferred Stock-Fourth Series, Junior Participating at a price of $235.00 per unit or, in certain circumstances, common stock. Under certain circumstances, Rights beneficially owned by an acquiring person become null and void. Sprint's Preferred Stock-Fourth Series is without par value. It is voting, cumulative and accrues dividends equal generally to the greater of $10.00 per share or 200 times the aggregate per share amount of all common stock dividends. No shares of Preferred Stock-Fourth Series were issued or outstanding at December 31, 1995. The Rights may be redeemed by Sprint at a price of $0.01 per Right and will expire on September 8, 1999.

During 1995, 1994 and 1993, Sprint declared and paid annual dividends on common stock of $1.00 per share, and Centel declared pre-merger (see Note 10) common stock dividends of $0.15 per share during 1993. The most restrictive covenant applicable to dividends on common stock results from the $1.5 billion revolving credit agreement. Among other restrictions, this agreement requires Sprint to maintain specified levels of consolidated net worth, as defined. As a result of this requirement, $1.9 billion of Sprint's $2.8 billion consolidated retained earnings were effectively restricted from the payment of dividends as of December 31, 1995. The indentures and financing agreements of certain of Sprint's subsidiaries contain various provisions restricting the payment of cash dividends on subsidiary common stock held by Sprint. In connection with these restrictions, $192 million of the related subsidiaries' $653 million total retained earnings is restricted as of December 31, 1995. The flow of cash in the form of advances from the subsidiaries to Sprint is generally not restricted.

9) Commitments and Contingencies

Litigation, Claims and Assessments Following announcement in 1992 of Sprint's merger agreement with Centel (see Note 10), class action suits were filed against Centel and certain of its officers and directors in federal and state courts. The state suits have been dismissed, while the federal suits have been consolidated into a single action which seeks damages for alleged violations of securities laws. On October 12, 1995, the New York trial court granted the motion of Centel's financial advisors to dismiss a purported class action suit filed against them in connection with their representation of Centel in the merger. The plaintiffs have appealed from the order dismissing their claims. Sprint may have indemnification obligations to the financial advisors in connection with this suit. Various other suits arising in the ordinary course of business are pending against Sprint. Management cannot predict the ultimate outcome of these actions but believes they will not result in a material effect on Sprint's consolidated financial statements.

Accounts Receivable Sold with Recourse Under an agreement available through December 1996, Sprint could sell on a continuous basis, with recourse, up to $600 million of undivided interests in a designated pool of its accounts receivable. Subsequent collections of receivables sold to investors were typically reinvested in the pool. Sprint was required to repurchase the designated pool of accounts receivable only upon the occurrence of specified events involving non-collectibility of accounts. As of December 31, 1995, Sprint had not been required to repurchase receivables under this recourse provision. Because Sprint retained credit losses associated with its accounts receivable, any exposure related to this retention was estimated in conjunction with Sprint's calculation of its reserve for uncollectible accounts. Receivables sold that remained uncollected as of December 31, 1995 and 1994 aggregated $600 million. In January 1996, Sprint elected to terminate this agreement.

Commitments See "Liquidity and Capital Resources" in "Review of Financial Position, Liquidity and Capital Resources" for a discussion of cash commitments associated with Sprint Spectrum.

Operating Leases Minimum rental commitments as of December 31, 1995 for all noncancelable operating leases, consisting principally of leases for data processing equipment and real estate, are as follows:

(in millions)	
1996	$237.4
1997	186.4
1998	137.7
1999	108.6
2000	76.8
Thereafter	270.7

Gross rental expense aggregated $402 million in 1995, $379 million in 1994 and $382 million in 1993. The amount of rental commitments applicable to subleases, contingent rentals and executory costs is not significant.

10) Sprint/Centel Merger

Effective March 9, 1993, Sprint consummated its merger with Centel, a telecommunications company with local exchange and cellular and wireless communications services operations. Pursuant to the merger agreement dated May 27, 1992, Sprint issued 1.37 shares of its common stock in exchange for each outstanding share of Centel common stock, or approximately 119 million shares. The transaction costs associated with the merger (consisting primarily of investment banking and legal fees) and the expenses of integrating and restructuring the operations of the two companies (consisting primarily of employee severance and relocation expenses and costs of eliminating duplicative facilities) resulted in nonrecurring charges of $259 million, which reduced 1993 income from continuing operations by $172 million ($0.50 per share). The merger was accounted for as a pooling of interests.

11) Additional Financial Information

Segment Information Information related to Sprint's operating business segments is included in the tables in "Review of Segmental Results of Operations." The net operating revenues and operating expenses shown in such tables include revenues and expenses eliminated in consolidation totaling $380 million, $340 million and $296 million for the years ended December 31, 1995, 1994 and 1993, respectively. Sprint incurred capital expenditures of

BEYOND TALK: Ten high-tech companies and educational institutions explore new multimedia applications on the Sprint Silicon Valley Test Track.

$37 million, $57 million and $46 million for the years ended December 31, 1995, 1994 and 1993, respectively, and had assets, including the net assets of the discontinued cellular division, of $2.9 billion, $1.8 billion and $1.8 billion at December 31, 1995, 1994 and 1993, respectively, not attributable to operating segments. Additionally, Sprint incurred $54 million of merger, integration and restructuring costs not attributable to its segmental operations for the year ended December 31, 1993.

Realignment and Restructuring Charge During 1995, Sprint initiated a realignment and restructuring of its local communications services division, including the elimination of approximately 1,600 positions primarily in the network and finance functions. These actions resulted in a nonrecurring charge of $88 million, which reduced income from continuing operations by $55 million ($0.16 per share). The accrued liability associated with this charge specifically relates to the benefits that affected employees will receive upon termination.

During 1993, Sprint initiated a realignment and restructuring of its long distance communications services division, including the elimination of approximately 1,000 positions and the closure of two facilities. These actions resulted in a nonrecurring charge of $34 million, which reduced income from continuing operations by $21 million ($0.06 per share).

Concentrations of Credit Risk Sprint's accounts receivable are not subject to any concentration of credit risk. Interest rate swap agreements and foreign currency contracts involve the risk of dealing with counterparties and their ability to meet the terms of the contracts. Notional principal amounts often are used to express the volume of these transactions, but the amounts subject to credit risk are significantly smaller. In the event of nonperformance by the counterparties, Sprint's accounting loss would be limited to the net amount that it would be entitled to receive under the terms of the applicable interest rate swap agreement or foreign currency contract. However, Sprint does not anticipate nonperformance by any of the counterparties with which it has such agreements. Sprint controls the amount of credit risk as well as the concentration of credit risk of its interest rate swap agreements and foreign currency contracts through credit approvals, dollar exposure limits and internal monitoring procedures.

Financial Instruments Sprint estimates the fair value of its financial instruments using available market information and appropriate valuation methodologies. Accordingly, the estimates presented herein are not necessarily indicative of the values Sprint could realize in a current market exchange. Although management is not aware of any factors that would affect the estimated fair value amounts presented as of December 31, 1995, such amounts have not been comprehensively revalued for purposes of these financial statements since that date and, therefore, estimates of fair value subsequent to that date may differ significantly from the amounts presented herein. The carrying amounts and estimated fair values of Sprint's financial instruments, as of December 31, are as follows:

	1995		1994	
(in millions)	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
Financial assets				
Cash and cash equivalents	$ 124.2	$ 124.2	$ 113.7	$ 113.7
Investments in equity securities	262.9	262.9	177.6	177.6
Financial liabilities				
Short-term borrowings	2,144.0	2,144.0	—	—
Long-term debt				
Corporate	1,113.7	1,282.9	2,139.3	2,170.5
Long distance communications services	177.6	184.5	223.1	222.1
Local communications services	2,035.2	2,237.5	2,098.7	1,966.4
Other	206.9	242.8	476.1	488.2
Off-balance sheet instruments				
Interest rate swap agreements	—	(3.4)	—	2.6
Foreign currency contracts	0.5	0.4	—	(0.4)

The carrying values of Sprint's cash equivalents approximate fair value as of December 31, 1995 and 1994. The fair value of Sprint's investments in equity securities are estimated by reference to quoted market prices. The fair values of Sprint's long-term debt are estimated based on quoted market prices for publicly traded issues, and the present value of estimated future cash flows using a discount rate commensurate with the risks involved for all other issues. The fair value of interest rate swap agreements is estimated as the cost that Sprint would receive (pay) to terminate the swap agreements

at December 31, 1995 and 1994, taking into account the then-current interest rates. The fair value of foreign currency contracts is estimated as the replacement cost of the contracts at December 31, 1995 and 1994, taking into account the then-current foreign currency exchange rates.

Interest Rate Swap Agreements Interest rate swap agreements are utilized by Sprint as part of its interest rate risk management program. Net interest paid or received related to such agreements is recorded using the accrual method and is recorded as an adjustment to interest expense. Sprint had interest rate swap agreements with notional amounts of $275 million and $125 million outstanding at December 31, 1995 and 1994, respectively. Net interest (income) expense related to interest rate swap agreements was ($400,000), $1 million and $2 million for the years ended December 31, 1995, 1994 and 1993, respectively. There were no deferred gains or losses relating to any terminated interest rate swap agreements at December 31, 1995, 1994 and 1993.

Foreign Currency Contracts As part of its foreign currency exchange risk management program, Sprint purchases and sells over-the-counter forward contracts and options in various foreign currencies. Sprint had outstanding approximately $13 million of open forward contracts to buy various foreign currencies at both December 31, 1995 and 1994. Sprint had no outstanding open forward contracts to sell various foreign currencies at December 31, 1995 and $1 million outstanding at December 31, 1994. Sprint had approximately $24 million of outstanding open purchase option contracts to call various foreign currencies at December 31, 1995. The premium paid for an option is amortized over the life of the option. The unamortized premiums paid for options outstanding at December 31, 1995 were $300,000. There were no foreign currency option contracts outstanding at December 31, 1994. The forward contracts open at December 31, 1995 all had an original maturity of six months or less. The net gain or loss recorded to reflect the fair value of such contracts is recorded in the period incurred. Total net losses of $1 million, $2 million and $1 million were recorded related to foreign currency transactions and contracts for the years ended December 31, 1995, 1994 and 1993, respectively.

At December 31, 1995, 1994 and 1993, Sprint had foreign currency translation gains (losses) of ($10) million, $1 million and $2 million, respectively, included in "Other, net" in the Consolidated Statements of Common Stock and Other Shareholders' Equity.

12) Subsequent Event

On January 31, 1996, Sprint, along with Deutsche Telekom (DT) and France Telecom (FT), consummated their joint venture, operating as Global One, which will provide seamless global telecommunications services to business, consumer and carrier markets worldwide.

Upon closing of the agreement, DT and FT acquired shares of a new class of preference stock for a total of $3.0 billion, which resulted in DT and FT each holding approximately 7.5 percent of the Sprint voting power. DT and FT will make the remainder of their investment in Sprint following the spin-off of Cellular. Following their full investment, DT and FT will each own shares of Class A common stock with approximately 10 percent of Sprint's voting power. Depending on the price of Cellular shares at the time of the spin-off, the total amount of the investment is expected to be between $3.5 billion and $3.7 billion.

Assuming the $3.0 billion of proceeds from the issuance of the Class A preference stock was initially used to the extent possible to repay debt outstanding at December 31, 1995, and such issuance and repayment is assumed to have taken place as of January 1, 1995, Sprint's earnings per share from continuing operations would have decreased from $2.69 per share to $2.52 per share for the year ended December 31, 1995.

BEYOND TALK: Sprint completed the nation's first survivable coast-to-coast network using interconnected Synchronous Optical Network rings.

Management Report

The management of Sprint Corporation has the responsibility for the integrity and objectivity of the information contained in this Annual Report. Management is responsible for the consistency of reporting such information and for ensuring that generally accepted accounting principles are used.

In discharging this responsibility, management maintains a comprehensive system of internal controls and supports an extensive program of internal audits, has made organizational arrangements providing appropriate divisions of responsibility and has established communication programs aimed at assuring that its policies, procedures and codes of conduct are understood and practiced by its employees.

The consolidated financial statements included in this Annual Report have been audited by Ernst & Young LLP, independent auditors. Their audit was conducted in accordance with generally accepted auditing standards and their report is included herein.

The responsibility of the Board of Directors for these financial statements is pursued primarily through its Audit Committee. The Audit Committee, composed entirely of directors who are not officers or employees of Sprint, meets periodically with the internal auditors and independent auditors, both with and without management present, to assure that their respective responsibilities are being fulfilled. The internal and independent auditors have full access to the Audit Committee to discuss auditing and financial reporting matters.



William T. Esrey
Chairman and Chief Executive Officer



Arthur B. Krause
Executive Vice President and Chief Financial Officer

Report of Independent Auditors

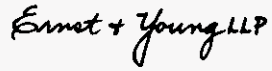
The Board of Directors and Shareholders
Sprint Corporation

We have audited the accompanying consolidated balance sheets of Sprint Corporation (Sprint) as of December 31, 1995 and 1994, and the related consolidated statements of income, cash flows, and common stock and other shareholders' equity for each of the three years in the period ended December 31, 1995, appearing on pages 32, 36, 38 and 41 through 54. These financial statements are the responsibility of the management of Sprint. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Sprint at December 31, 1995 and 1994, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 1995, in conformity with generally accepted accounting principles.

As discussed in Notes 1 and 2 to the consolidated financial statements, Sprint discontinued accounting for the operations of its local telecommunications division in accordance with Statement of Financial Accounting Standards No. 71, "Accounting for the Effects of Certain Types of Regulation," in 1995. As discussed in Notes 1 and 4 to the consolidated financial statements, Sprint changed its method of accounting for postretirement benefits, postemployment benefits and circuit activity costs in 1993.



Kansas City, Missouri
February 14, 1996

QUARTERLY FINANCIAL DATA

(unaudited)

(in millions, except per share data)	First Quarter 1995[1]	First Quarter 1994[1]
Net operating revenues	$3,079.1	$2,896.5
Operating expenses		
Costs of services and products	1,581.6	1,488.5
Selling, general and administrative	694.7	665.4
Depreciation and amortization	360.0	329.6
Merger, integration and restructuring costs[2]	—	—
Total operating expenses	2,636.3	2,483.5
Operating income	442.8	413.0
Interest expense	(68.2)	(81.1)
Other income (expense), net[3]	(20.5)	30.6
Income from continuing operations before income taxes	354.1	362.5
Income tax provision	(129.4)	(128.4)
Income from continuing operations	224.7	234.1
Discontinued operations, net		
Cellular division	(0.4)	(6.7)
Other	—	—
Extraordinary items, net[4]	—	—
Net income (loss)	224.3	227.4
Preferred stock dividends	(0.7)	(0.7)
Earnings (Loss) applicable to common stock	$ 223.6	$ 226.7
Earnings (Loss) per common share		
Continuing operations	$ 0.64	$ 0.67
Discontinued operations	—	(0.02)
Extraordinary items	—	—
Total	$ 0.64	$ 0.65

[1]The accompanying Quarterly Financial Data have been restated from previously reported amounts to reflect the spin-off of Sprint's cellular and wireless division (Cellular) to shareholders of Sprint common stock. Accordingly, Cellular's operating results have been excluded from income from continuing operations and are reported as discontinued operations.

[2]During fourth quarter 1995, nonrecurring charges of $88 million were recorded related to a restructuring within the local communications division. Such charges reduced net income by $55 million ($0.16 per share). See Note 11 of Notes to Consolidated Financial Statements for additional information.

[3]During first quarter 1994, Sprint sold an investment in equity securities, realizing a gain of $35 million, which increased net income by $22 million ($0.06 per share).

[4]During fourth quarter 1995, Sprint adopted accounting principles for a competitive marketplace for its local communications division and discontinued the application of SFAS No. 71. As a result, Sprint recorded a noncash, after-tax extraordinary charge of $565 million ($1.61 per share). See Note 2 of Notes to Consolidated Financial Statements for additional information.

BEYOND TALK: In 1995 Sprint became the first to offer a frame relay-ATM internetworking service.

Second Quarter		Third Quarter		Fourth Quarter		Total Year	
1995[1]	1994[1]	1995[1]	1994[1]	1995	1994[1]	1995	1994[1]
$3,142.1	$2,984.7	$3,205.3	$3,054.6	$3,338.6	$3,050.8	$12,765.1	$11,986.6
1,606.7	1,525.0	1,623.7	1,563.4	1,692.9	1,577.6	6,504.9	6,154.5
714.1	687.5	715.9	711.8	747.2	690.7	2,871.9	2,755.4
359.5	343.8	368.6	344.2	378.3	368.4	1,466.4	1,386.0
—	—	—	—	87.6	—	87.6	—
2,680.3	2,556.3	2,708.2	2,619.4	2,906.0	2,636.7	10,930.8	10,295.9
461.8	428.4	497.1	435.2	432.6	414.1	1,834.3	1,690.7
(69.0)	(76.2)	(64.7)	(73.3)	(58.8)	(70.1)	(260.7)	(300.7)
(13.9)	(9.2)	(20.3)	(5.8)	(38.5)	(17.7)	(93.2)	(2.1)
378.9	343.0	412.1	356.1	335.3	326.3	1,480.4	1,387.9
(135.7)	(123.6)	(148.5)	(127.9)	(120.7)	(108.8)	(534.3)	(488.7)
243.2	219.4	263.6	228.2	214.6	217.5	946.1	899.2
2.5	0.2	4.9	1.9	7.5	(10.9)	14.5	(15.5)
—	—	—	—	—	7.0	—	7.0
—	—	—	—	(565.3)	—	(565.3)	—
245.7	219.6	268.5	230.1	(343.2)	213.6	395.3	890.7
(0.6)	(0.7)	(0.6)	(0.6)	(0.7)	(0.7)	(2.6)	(2.7)
$ 245.1	$ 218.9	$ 267.9	$ 229.5	$ (343.9)	$ 212.9	$ 392.7	$ 888.0
$ 0.69	$ 0.63	$ 0.75	$ 0.65	$ 0.61	$ 0.62	$ 2.69	$ 2.57
0.01	—	0.01	0.01	0.02	(0.01)	0.04	(0.02)
—	—	—	—	(1.61)	—	(1.61)	—
$ 0.70	$ 0.63	$ 0.76	$ 0.66	$ (0.98)	$ 0.61	$ 1.12	$ 2.55

DuBose Ausley is chairman of Macfarlane, Ausley, Ferguson & McMullen, a law firm in Tallahassee, Florida. He is also chairman of the Capital City Bank Group, Inc. Prior to becoming a Sprint director in 1993, Ausley had been a director of Centel Corporation since 1982. He is a member of the audit committee.

Warren L. Batts is chairman and chief executive officer of Premark International, Inc., in Deerfield, Illinois. He has been a Sprint director since 1982. Batts is chairman of the audit committee and a member of the executive committee.

Michel Bon is chairman of France Telecom. From 1993 to September 1995, he was head of France's national job placement agency. Prior to that he was chairman and chief executive officer of Carrefour, the largest retailer in France. He became a Sprint director in January 1996.

Ruth M. Davis is president and chief executive officer of The Pymatuning Group, Inc., in Alexandria, Virginia. She has been a Sprint director since 1981. Davis is a member of the audit committee.

William T. Esrey is chairman and chief executive officer of Sprint. He joined Sprint in 1980 as executive vice president-corporate planning, was named president and chief executive officer in 1985 and became chairman and chief executive officer in 1990. He has been a Sprint director since 1985. Esrey is chairman of the board's executive committee.

Donald J. Hall is chairman of Hallmark Cards, Inc., in Kansas City, Missouri. He has been a Sprint director since 1986. Hall is a member of the audit committee.

Harold S. Hook is chairman and chief executive officer of American General Corporation, in Houston, Texas. He has been a Sprint director since 1982. Hook is a member of the organization, compensation and nominating committee.

*Robert E. R. Huntley is counsel to Hunton & Williams, a law firm in Richmond, Virginia. Prior to becoming a Sprint director in 1993, he had been a director of Centel Corporation since 1975.

Ronald T. LeMay is president and chief operating officer of Sprint, and chairman of the partners committee of Sprint Spectrum. Prior to that, he was vice chairman of Sprint, and chief executive officer of Sprint Spectrum. From 1989 to 1995, he was president and chief operating officer of the long distance division of Sprint. LeMay has been a Sprint director since 1993.

Linda Koch Lorimer is vice president and secretary of Yale University, in New Haven, Connecticut. Prior to becoming a Sprint director in 1993, she had been a director of Centel Corporation since 1988. She is a member of the organization, compensation and nominating committee.

*Charles H. Price II is chairman of the board of Mercantile Bank of Kansas City, in Kansas City, Missouri. He was the United States Ambassador to the United Kingdom of Great Britain and Northern Ireland from 1983 to 1989. Price has been a Sprint director since 1989.

*Frank E. Reed is the former president and chief executive officer of Philadelphia National Bank, in Philadelphia, Pennsylvania. Prior to becoming a Sprint director in 1993, he had been a director of Centel Corporation since 1978.

Charles E. Rice is chairman and chief executive officer of Barnett Banks, Inc., in Jacksonville, Florida. He has been a Sprint director since 1975. Rice is a member of the executive and the organization, compensation and nominating committees.

Ron Sommer is chairman of the board of management of Deutsche Telekom A.G. From 1989 until May 1995, he worked for the German subsidiary of the Sony Group, where he was last responsible for the 22 European subsidiaries as the head of Sony Europe. He became a Sprint director in January 1996.

Stewart Turley is chairman and chief executive officer of Eckerd Corporation, in Clearwater, Florida. He has been a Sprint director since 1980. Turley is chairman of the organization, compensation and nominating committee.

** Will resign from the Sprint board, effective with the spin-off of Sprint's cellular company, to join the board of 360° Communications Company.*

BEYOND TALK: Sprint was honored by the American Facsimile Association for Best Comprehensive Enhanced Fax Service Bureau.

PRINCIPAL CORPORATE OFFICERS

William T. Esrey
Chairman and Chief Executive Officer

Ronald T. LeMay
President and Chief Operating Officer

Gary D. Forsee
President and Chief Operating Officer
Long Distance Division

D. Wayne Peterson
President and Chief Operating Officer
Local Communications Division

*Dennis E. Foster
President and Chief Operating Officer
Cellular and Wireless Division

J. Richard Devlin
Executive Vice President
Law and External Affairs

Arthur B. Krause
Executive Vice President
Chief Financial Officer

Gene M. Betts
Senior Vice President
Corporate Finance

John R. Hoffman
Senior Vice President
External Affairs

John P. Meyer
Senior Vice President
Controller

Theodore H. Schell
Senior Vice President
Strategic Planning & Corporate Development

Richard C. Smith Jr.
Senior Vice President
Quality Development & Public Relations

M. Jeannine Strandjord
Senior Vice President
Treasurer

I. Benjamin Watson
Senior Vice President
Human Resources

Don A. Jensen
Vice President
Secretary

*Will resign from Sprint, effective with the spin-off of Sprint's cellular company, to become President and CEO of 360° Communications Company.

OPERATING COMPANY OFFICERS

Long Distance Division

Robba L. Benjamin
President
Multimedia and Strategic Services

Kevin E. Brauer
President
Business Services Group

R. Michael Franz
President
Diversified Brands Group

George N. Fuciu
President
Technology Services

William J. Gunter
Senior Vice President
Finance

Thomas E. Weigman
President
Consumer Services Group

Local Communications Division

Dale L. Cross
President and Chief Executive Officer
Sprint United Telephone (Eastern)

Michael B. Fuller
President and Chief Executive Officer
Sprint United Telephone (Midwest)

J. Darrell Kelley
President and Chief Executive Officer
Sprint United Telephone (Florida)
Sprint Centel (Florida)

William E. McDonald
President and Chief Executive Officer
Sprint Mid-Atlantic Telecom

Steven L. McMahon
President
Sprint United Telephone (Northwest)

Randy W. Osler
President
Sprint United Telephone (North Central)
Sprint Centel (Illinois)

Dianne M. Jett
President
Sprint Central Telephone (Nevada)

Product Distribution/ Directory Publishing Division

William G. Obermayer
President
Sprint North Supply

Robert J. Walsh
President
Sprint Publishing & Advertising

Annual Meeting: **The Annual Meeting of Shareholders will be held Tuesday, April 16, 1996 at the world headquarters.**

Common Stock Dividends: **Dividends on Sprint common stock, declared by the board of directors, are usually paid quarterly at the end of March, June, September and December. The exact record dates and payment dates are set by the board of directors. The last quarterly dividend payment in the Fourth Quarter 1995 was 25 cents per share, or an indicated annual dividend of $1.00 per common share.**

Investor Information Line: **Requests for the following information may be made in writing or by calling the Sprint Investor Information Line at 1 (800) 259-3755:**

Automatic Dividend Reinvestment Plan: **Sprint offers a dividend reinvestment and stock purchase plan to registered shareholders at no commission or handling charge for purchases made with reinvested dividends and/or optional cash payments. Shareholders may obtain information about the plan by writing to Shareholder Relations at the corporate headquarters or by calling the above 800 number.**

Form 10-K: **Copies of Sprint's Annual Report on Form 10-K to the Securities and Exchange Commission may be obtained by shareholders without charge by writing to Investor Relations at the corporate headquarters or by calling the above 800 number.**

Investor Inquiries: **Security analysts, shareholders and investment professionals should direct inquiries regarding Sprint and its business in writing to Investor Relations at the corporate headquarters or by calling the above 800 number. Copies of the investor supplement to the Annual Report are available upon request.**

Shareholder Inquiries: **Inquiries regarding stock transfer, lost certificates, direct deposit of dividends or address change should be directed to the stock transfer agent, UMB Bank, n.a. in writing at their address (see right column) or by calling the above 800 number and connecting with the transfer agent.**

COMMON STOCK DATA

	Market Price Per Share					
	1995			1994		
	High	Low	End of Period	High	Low	End of Period
First Quarter	31⅞	25⅞	30¼	38⅛	32½	34¼
Second Quarter	35⅞	30⅜	33⅝	40⅛	33¼	34⅞
Third Quarter	36⅞	32⅝	35	40⅛	34⅛	38⅛
Fourth Quarter	41⅛	33¼	39⅝	38⅞	26⅛	27⅝

Quarterly Financial Information: **Shareholders can receive a faxed or mailed copy of the quarterly financial results upon request through Sprint's toll-free Shareholder Information Line. Shareholders can dial 1 (800) 284-6977 to hear a recorded report on Sprint's financial performance and request a copy of printed quarterly results.**

Sprint on the Internet @http://www.sprint.com/
Sprint's World Wide Web site is continuously updated and includes an electronic version of this annual report. Shareholders are also invited to visit Sprint's home page at this Internet address for quarterly financial data, important news releases and current information about products and services.



Corporate Headquarters Mailing Address:
Sprint
Post Office Box 11315
Kansas City, Missouri 64112

Shareholder Relations:
(913) 624-2541

Auditors:
Ernst & Young LLP, Kansas City, Missouri

Stock Transfer Agent, Registrar and Dividend Paying Agent:
UMB Bank, n.a.
Post Office Box 410064
Kansas City, Missouri 64141-0064
(816) 860-7786

Co-Transfer Agent and Registrar:
Chemical Mellon Shareholder Services, L.L.C.
New York, New York

Dividend Reinvestment Agent:
UMB Bank, n.a.
Kansas City, Missouri

Stock Exchange Listings:
Common Stock
- New York Stock Exchange
- Chicago Stock Exchange
- Pacific Stock Exchange

Convertible Preferred Stock
- New York Stock Exchange

Stock Symbol: FON

BEYOND TALK: Sprint's DRUMS service allows producers thousands of miles apart to simultaneously collaborate on videos and commercials.

HOW TO REACH US

Sprint World Headquarters
2330 Shawnee Mission Parkway
Westwood, KS 66205
(913) 624-3000

Sprint's Long Distance Division
Headquarters
8140 Ward Parkway
Kansas City, MO 64114
(913) 624-6000

Business Services Group
(Business customers)
Business Marketing
5420 LBJ Freeway
Dallas, TX 75240
(214) 405-3000

Diversified Brands Group
(Wholesale solutions)
8140 Ward Parkway
Kansas City, MO 64114
(913) 624-6000

Government Systems Division
(Federal, state and local governments)
13221 Woodland Park Road
Herndon, VA 22071
(703) 904-2000

Hospitality Group
(Hotels, universities and payphone markets)
925 Dillingham Boulevard
Honolulu, HI 96817
(808) 847-2121

Consumer Services Group
(Residential customers)
8140 Ward Parkway
Kansas City, MO 64114
(913) 624-6000

Multimedia
(Internet, Telemedia, video and messaging)
8140 Ward Parkway
Kansas City, MO 64114
(913) 624-6000

Sprint's Local Communications Division
Headquarters
2330 Shawnee Mission Parkway
Westwood, KS 66205
(913) 624-3000

Sprint United Telephone (Eastern)
1201 Walnut Bottom Road
Carlisle, PA 17013
(717) 245-6312

Sprint United Telephone (Florida)
Sprint Centel (Florida)
555 Lake Border Drive
Apopka, FL 32703
(407) 889-6000

Sprint Mid-Atlantic Telecom
14111 Capital Boulevard
Wake Forest, NC 27587
(919) 554-7900

Sprint United Telephone (Midwest)
5454 West 110th Street
Overland Park, KS 66211
(913) 345-7600

Sprint Central Telephone (Nevada)
330 South Valley View Boulevard
Las Vegas, NV 89152
(702) 244-7171

Sprint United Telephone (North Central)
Sprint Centel (Illinois)
665 Lexington Avenue
Post Office Box 3555
Mansfield, OH 44907
(419) 755-8011

Sprint United Telephone (Northwest)
902 Wasco Street
Hood River, OR 97031
(541) 386-2211

Use this FŌNCARD℠ free of charge to experience Sprint's pin-drop quality from the U.S. to anywhere in the world.

To Place Calls
1. Dial **1-800-621-5744** from any touchtone phone.
2. At the prompt, enter **7176327051**
3. Follow prompts to place calls.

Next Call—Don't Hang Up!
Push [#] for one full second and follow prompts for the next call.

Call 1-800-366-0707 for 24-hour Customer Service.

You are entitled to rights of usage on Sprint's network for the amount shown on the card. Card has no cash redemption value. Card cannot be applied to any Sprint invoice. Non-refundable. Non-transferable.

Expires: 3/1/97 **Batch:** 00122396 4

WE WANT YOU TO BE OUR CUSTOMER
In the United States, Sprint long distance residential service can be ordered by calling 1-800-PIN DROP (746-3767). Long distance business service can be ordered by calling 1-800-877-2000. Long distance service for the deaf and hard of hearing can be ordered by calling 1-800-676-3777 (TTY/VOICE).

Sprint's Product Distribution/ Directory Publishing Division
Sprint North Supply
600 Industrial Parkway
Industrial Airport, KS 66031
(913) 791-7000

Sprint Publishing & Advertising
7015 College Boulevard
Suite 400
Overland Park, KS 66211
(913) 491-7000

Joint Ventures
Global One
(World)
12490 Sunrise Valley Drive
Reston, VA 22096
(703) 689-6000

(Europe)
Park Atrium
Rue des Colonies 11
B-1000 Brussels, Belgium
(011) 32-2-545-2000

Sprint Spectrum
4717 Grand Avenue
Kansas City, MO 64112
(816) 559-1000

Design: The Folk Design Group

Printed entirely on recycled paper meeting or exceeding the Environmental Protection Agency minimum requirements for recycled stock.

EVA® is a registered trademark of Stern Stewart & Co., New York, NY



Use this free prepaid FŌNCARD℠ to experience for yourself Sprint's pin-drop quality. Sprint leads the industry in prepaid calling cards in the United States.

Shareholder Return

10 years ended fourth quarter 1995



**Local Exchange Carriers (average) are seven regional Bell companies and GTE*

Sprint's compounded annual return exceeded industry averages over a 10-year period through fourth quarter 1995. Returns reflect stock appreciation and reinvestment of dividends.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

[x] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 (FEE REQUIRED)

For the fiscal year ended December 31, 1995

OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 (NO FEE REQUIRED)

For the transition period from _____ to _____

Commission file number 1-4721

SPRINT CORPORATION

(Exact name of registrant as specified in its charter)

KANSAS	48-0457967
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
P.O. Box 11315, Kansas City, Missouri	64112
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (913) 624-3000

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Preferred Stock, without par value	
First series, $7.50 stated value	New York Stock Exchange
Second series, $6.25 stated value	New York Stock Exchange
Common stock, $2.50 par value, and Rights (shares outstanding at March 1, 1996, 350,267,424)	New York Stock Exchange Chicago Stock Exchange Pacific Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes X No _____

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Aggregate market value of voting stock held by non-affiliates at March 1, 1996 is $14,896,581,249.

Documents incorporated by reference.

Registrant's definitive proxy statement filed pursuant to Regulation 14A promulgated by the Securities and Exchange Commission under the Securities Exchange Act of 1934 is incorporated by reference in Part III hereof.

SPRINT CORPORATION

SECURITIES AND EXCHANGE COMMISSION
ANNUAL REPORT ON FORM 10-K

Part I

Item 1. Business

THE CORPORATION

Sprint Corporation (Sprint), incorporated in 1938 under the laws of Kansas, is primarily a holding company. Sprint's principal subsidiaries provide domestic and international long distance and local exchange telecommunications services. Other subsidiaries are engaged in the wholesale distribution of telecommunications products and the publishing and marketing of white and yellow page telephone directories. Beginning in January 1996, Sprint will operate a small telephone refurbishing business in the state of Kansas. In March 1996, Sprint spun-off its cellular division to holders of Sprint's common stock.

Sprint is a 40 percent partner in Sprint Spectrum LP, a partnership with Tele-Communications Inc. (TCI), Comcast Corporation (Comcast) and Cox Communications, Inc. (Cox) to provide wireless personal communications services (PCS) on a broad geographic basis within the United States.

Sprint is also a partner in Global One, a joint venture with France Telecom (FT) and Deutsche Telekom AG (DT) to provide seamless global telecommunications services to business, consumer and carrier markets worldwide. The interests of DT and FT in the venture are held by their own joint venture, referred to as Atlas. The operating group serving Europe (excluding Germany and France) is owned one-third by Sprint and two-thirds by Atlas. The operating group for the worldwide activities outside the United States and Europe is owned 50 percent by Sprint and 50 percent by Atlas. Home country markets will be served by DT in Germany, FT in France and Sprint in the United States.

TELECOMMUNICATIONS LAW

The Telecommunications Act of 1996, which was signed into law in February 1996, promotes competition in all aspects of telecommunications. In particular, the new law removes barriers to competition that will enable local and long distance companies and cable TV companies to enter each others' markets. The regional Bell Operating Companies (RBOCs) were allowed to provide out-of-region and incidental long distance service upon enactment. The RBOCs will be allowed to provide in-region long distance service once they obtain state certification of compliance with a competitive "checklist" and a Federal Communications Commission (FCC) ruling that it is in the public interest and that a facilities based competitor exists in each market (or the failure of potential providers to request local access). The new law directs the FCC to conclude a large number of rule-makings in a relatively short period of time, including defining the requirements of the competitive "checklist"; such rules will significantly influence the amount and shape of competition in both local and long distance markets in the future.

The new law eliminates regulatory barriers to entry into local telephone markets and imposes several obligations upon incumbent local exchange carriers (LECs). They must allow local resale without unreasonable restrictions, provide number portability (to the extent technically feasible) and dialing parity, afford access to rights-of-way, establish reciprocal compensation arrangements, negotiate interconnection agreements, provide nondiscriminatory access to unbundled network elements and allow collocation of interconnection equipment by competitors. The FCC is presently developing regulations to implement these requirements. Some of Sprint's LECs in rural areas may be exempted from some of these requirements. Many states, including most of the states in which Sprint's LECs operate, allow some competitive entry into the intraLATA long-distance and local service markets. The federal law preempts inconsistent state laws.

The impact of the Act on Sprint is unknown because a number of important implementation issues (such as the nature and extent of continued subsidies for local rates) still need to be decided by state or federal regulators. However, the Act offers opportunities as well as risks. Sprint should benefit from the opportunity to enter local telephone markets. The new competitive environment should lead to a reduction in local access fees, the largest single cost in providing long distance service today. The risk aspect of local competition is that historical prices and market shares of Sprint's LECs in their current operating regions (approximately 4 percent of the nation's local phone lines) are likely to decline.

The removal of the long distance restrictions on the RBOCs is not anticipated to have an immediate significant adverse impact on Sprint because of the substantial preconditions that must be met before RBOCs can provide most in-region long distance services. In addition, Sprint could potentially offset some losses of long distance customers at the retail level if it were successful in becoming the underlying carrier for resellers (including the RBOCs) entering the long distance market.

LONG DISTANCE COMMUNICATIONS SERVICES

Sprint's long distance division is the nation's third largest long distance telephone company, operating a nationwide all-digital long distance communications network utilizing state-of-the-art fiber-optic and electronic technology. The division provides domestic and international long distance voice, video, and data communications services, and consists principally of Sprint Communications Company L.P. (the Limited Partnership). The terms under which the division offers its services to the public are subject to different levels of state and federal regulation, but rates are not subject to rate-base regulation except nominally in some states. The division had net operating revenues of $7.3 billion, $6.8 billion and $6.1 billion in 1995, 1994 and 1993, respectively.

AT&T dominates the long distance communications market and is expected to continue to dominate the market for some years into the future. MCI Communications Corporation (MCI) is the nation's second largest long distance telephone company. Sprint's long distance division competes with AT&T, MCI and other telecommunications providers in all segments of the long distance communications market. Competition is based upon price and pricing plans, the types of services offered, customer service, and communications quality, reliability and availability.

As competition has developed in long distance markets in recent years, the FCC has streamlined regulation of interstate interexchange carriers, including AT&T. Nondominant competitive long distance carriers (like Sprint) have been subject to considerably less regulation, because market forces served as a more effective regulator of prices. As AT&T lost domestic market share, it sought to be relieved of regulation as well. The FCC ended rate-of-return regulation of AT&T in 1989, and removed some competitive services from price caps regulation in 1991. In October 1995, the FCC reclassified AT&T as a nondominant domestic carrier, in exchange for commitments to protect rates charged to low income, low volume, and reseller customers. The FCC did not find that the long distance market was completely competitive and some interstate regulation continues to apply. AT&T also subsequently sought to be declared a nondominant international carrier, and that request is pending.

See "Telecommunications Law" for a discussion of the new telecommunications legislation and its potential impact on the long distance division.

LOCAL COMMUNICATIONS SERVICES

The local division is comprised of regulated LECs which serve approximately 6.7 million access lines in 19 states. In addition to furnishing local exchange services, the division provides intraLATA toll service and interLATA access by telephone customers and other carriers to Sprint's local exchange facilities.

The division had net operating revenues of $4.7 billion, $4.4 billion and $4.1 billion in 1995, 1994 and 1993, respectively. Florida and North Carolina were the only jurisdictions in which 10 percent or more of the division's total 1995 net operating revenues were generated. The following table reflects major revenue categories as a percentage of the division's total net operating revenues:

	1995	1994	1993
Local service	39.7%	39.7%	39.4%
Network access	36.1	36.2	37.1
Toll service	10.3	12.0	12.2
Other	13.9	12.1	11.3
	100.0%	100.0%	100.0%

AT&T is the division's largest customer for network access services. In 1995, 15.2 percent of the division's net operating revenues was derived from services provided to AT&T, primarily network access services, compared to 16.6 percent in 1994 and 17.3 percent in 1993. While AT&T is a significant customer, Sprint does not believe the division's revenues are dependent upon AT&T, as customers' demand for interLATA long distance telephone service is not tied to any one long distance carrier. Historically, as the market share of AT&T's long distance competitors increases, the percent of revenues derived from network access services provided to AT&T decreases.

The LECs comprising the division are subject to the jurisdiction of the FCC and the public service commissions of each of the states in which they operate. In each state in which the commission exercises authority to grant certificates of public convenience and necessity, the LECs have been granted certificates of indefinite duration to provide local exchange telephone service in their current service areas.

Effective January 1, 1991, the FCC adopted a price caps regulatory format for the RBOCs and the GTE local exchange companies. Other LECs could voluntarily become subject to price caps regulation. Under price caps, prices for network access service must be adjusted annually to reflect industry average productivity gains (as specified by the FCC), inflation and certain allowed cost changes. Sprint elected to be subject to price caps regulation. The LECs owned by Centel Corporation did not originally elect price caps, but as a result of the merger with Sprint, these LECs adopted price caps effective July 1, 1993. During 1995, the FCC adopted modifications to the price cap plan to reset productivity elections, change certain rate adjustment methods, address new service offerings and generally reduce regulatory requirements. Under these changes, Sprint's LECs elected a productivity factor that allows them to avoid sharing of interstate access earnings.

See "Telecommunications Law" for a discussion of the new telecommunications legislation and its potential impact on the local communications division.

PRODUCT DISTRIBUTION AND DIRECTORY PUBLISHING

North Supply Company (North Supply), a wholesale distributor of telecommunications and security and alarm products, distributes products of more than 1,200 manufacturers to approximately 9,500 customers. Products range from basics, such as wire and cable, telephones and repair parts, to complete PBX systems, transmission systems and security and alarm equipment. North Supply also provides material management services to several of its affiliates and to several subsidiaries of the Bell Operating Companies.

The nature of competition in North Supply's markets demands a high level of customer service to succeed, as a number of competitors, including other national wholesale distributors, sell the same products and services.

North Supply sells to telephone companies and other users of telecommunications products, including Sprint's local and long distance divisions, other local and long distance telephone companies, and companies with large private networks. Other North Supply customers include original equipment

manufacturers, interconnect companies, security and alarm dealers and local, state and federal governments. Sales to affiliates represented 39.5 percent of North Supply's total sales in 1995, 42.4 percent in 1994 and 39.3 percent in 1993. North Supply's net operating revenues were $854 million, $829 million, and $677 million in 1995, 1994 and 1993, respectively.

Sprint Publishing & Advertising along with Centel Directory Company publish and market white and yellow page telephone directories in certain of Sprint's local exchange territories, as well as in the greater metropolitan areas of Milwaukee, Wisconsin and Chicago, Illinois. The companies publish approximately 325 directories in 20 states with a circulation of 17 million copies. Sprint Publishing & Advertising's net operating revenues were $294 million, $280 million and $268 million in 1995, 1994 and 1993, respectively. Centel Directory Company operates through The CenDon Partnership, a general partnership between Centel Directory Company and The Reuben H. Donnelley Corporation. Revenues of Sprint Publishing & Advertising and The CenDon Partnership are principally derived from selling directory advertisements. The companies compete with publishers of telephone directories and others for advertising revenues.

JOINT VENTURES

In March 1995, Sprint Spectrum achieved a national wireless presence in the first round of PCS license auctions by the FCC. Sprint Spectrum and its affiliates won the rights to PCS licenses in 30 major trading areas at a cost of $2.2 billion. It is Sprint Spectrum's objective to begin offering PCS in 20 to 25 major metropolitan markets, with a population of approximately 100 million, by the end of 1996.

Also in March 1995, the four partners agreed that Sprint Spectrum would provide local telecommunications services on a national basis using the facilities of the cable partners. Effective as of January 31, 1996, the four partners entered into a series of agreements amending their approach to providing competitive local services. Under the revised agreements, local offerings in each market will be the subject of individual joint ventures to be negotiated between Sprint and the applicable cable company. However, there can be no assurances that any such joint ventures will be formed.

On January 31, 1996, Sprint consummated its global joint venture (Global One) with DT and FT. Sprint contributed to the joint venture certain subsidiaries which conducted its international telecommunications business and certain assets of its U.S. subsidiaries used in such business.

ENVIRONMENT

Sprint's environmental compliance and remediation expenditures are primarily related to the operation of standby power generators for its telecommunications equipment. The expenditures arise in connection with permits, standards compliance, or occasional remediation, which are usually associated with generators, batteries or fuel storage. Certain Sprint subsidiaries have been designated a potentially responsible party at sites relating to either landfill contamination or discontinued power generation operations. Sprint's expenditures relating to environmental compliance and remediation have not been material to the financial statements or to the operations of Sprint and are not expected to have any future material effects.

PATENTS, TRADEMARKS AND LICENSES

Sprint and its subsidiaries own numerous patents, patent applications and trademarks in the U.S. and other countries. Sprint and its subsidiaries are also licensed under domestic and foreign patents and trademarks owned by others. In the aggregate, these patents, patent applications, trademarks and licenses are of material importance to Sprint's business. Generally, Sprint's trademarks and trademark licenses have no limitation on duration; Sprint's patents and the patents to which Sprint is licensed range generally in duration from 1 to 17 years.

EMPLOYEE RELATIONS

As of December 31, 1995, Sprint and its subsidiaries had approximately 48,300 employees, of whom approximately 26 percent are represented by unions. During 1995, Sprint and its subsidiaries had no material work stoppages caused by labor controversies.

INFORMATION AS TO INDUSTRY SEGMENTS

Sprint's net operating revenues from affiliates and non-affiliates, by segment, for the three years ended December 31, 1995, 1994 and 1993, are as follows (in millions):

	Net Operating Revenues		
	1995	1994	1993
Long Distance Communications Services			
Non-affiliates	$ 7,238.5	$ 6,763.5	$ 6,096.5
Affiliates	38.9	41.6	42.7
	7,277.4	6,805.1	6,139.2
Local Communications Services			
Non-affiliates	4,453.0	4,179.7	3,914.3
Affiliates	266.4	233.1	211.7
	4,719.4	4,412.8	4,126.0
Product Distribution and Directory Publishing			
Non-affiliates	811.2	757.9	679.2
Affiliates	336.8	350.8	266.0
	1,148.0	1,108.7	945.2
Subtotal	13,144.8	12,326.6	11,210.4
Intercompany revenues	(379.7)	(340.0)	(295.7)
Net operating revenues	$ 12,765.1	$ 11,986.6	$ 10,914.7

In accordance with Statement of Financial Accounting Standards (SFAS) No. 71, "Accounting for the Effects of Certain Types of Regulation," revenues and related net income of nonregulated operations attributable to intercompany transactions with Sprint's regulated telephone companies have not been eliminated in the above table or the accompanying consolidated financial statements. Intercompany revenues of such entities amounted to $262 million, $285 million and $225 million in 1995, 1994 and 1993, respectively. In conjunction with the adoption of accounting principles for a competitive marketplace (see Note 2 of Notes to Consolidated Financial Statements) such intercompany amounts will be eliminated beginning in 1996. All other significant intercompany transactions have been eliminated. For additional information as to industry segments of Sprint, refer to "Segmental Results of Operations" within Management's Discussion and Analysis of Financial Condition and Results of Operations filed as part of this report (pages F-6 through F-9).

Item 2. Properties

The aggregate cost of Sprint's property, plant and equipment was $19.9 billion as of December 31, 1995, of which $12.6 billion relates to local communications services and $6.8 billion relates to long distance communications services. These properties consist primarily of land, buildings, digital fiber-optic network, switching equipment, microwave radio and cable and wire facilities and are in good operating condition. Certain switching equipment and several general office facilities are located on leased premises. The long distance division has been granted easements, rights-of-way and rights-of-occupancy, primarily by railroads and other private landowners, for its fiber-optic network.

The properties of the product distribution and directory publishing businesses consist primarily of office and warehouse facilities to support the business units in the distribution of telecommunications products and publication of telephone directories.

Sprint owns its corporate headquarters building and certain other property located in the greater Kansas City metropolitan area.

Property, plant and equipment with an aggregate cost of approximately $11.2 billion is either pledged as security for first mortgage bonds and certain notes or is restricted for use as mortgaged property.

Item 3. Legal Proceedings

Following announcement of the Sprint/Centel merger agreement in May 1992, class action suits were filed against Centel and certain of its officers and directors. The federal actions were consolidated in the United States District Court for the Northern District of Illinois. An amended complaint was filed against the Company and two officers/directors. The amended complaint alleges violations of federal securities laws by failing to disclose pertinent information regarding the value of Centel common stock. The plaintiffs seek damages in an unspecified amount. In January 1995, a purported class action suit was filed against Centel's financial advisors in state court in New York in connection with the Sprint/Centel merger. In October 1995, the New York trial court granted a motion to dismiss that suit, but the plaintiffs have appealed from the order dismissing their claims. Sprint may have indemnification obligations to the financial advisors in connection with this suit.

Other suits arising in the ordinary course of business are pending against Sprint and its subsidiaries. Sprint cannot predict the ultimate outcome of these actions or the above-described litigation, but believes they will not result in a material effect on Sprint's consolidated financial statements.

Item 4. Submission of Matters to a Vote of Security Holders

On January 29, 1996, Sprint held a Special Meeting of Shareholders to vote on three proposals relating to the investment in Sprint by DT and FT (see "Management's Discussion and Analysis of Financial Condition and Results of Operations. - Strategic Developments - Global One" (pages F-3 and F-4) for further discussion related to this investment). The shareholders approved all three proposals.

The following votes were cast with respect to the proposal to approve and adopt the Investment Agreement dated as of July 31, 1995, as amended, among Sprint, FT and DT and the transactions contemplated by the Investment Agreement (Proposal No. 1).

FOR	254,701,899
AGAINST	11,925,847
ABSTAIN	2,178,235

The following votes were cast with respect to the proposal to approve and adopt the Charter Amendments and the Bylaw Amendments contemplated by the Investment Agreement (Proposal No. 2).

FOR	251,797,486
AGAINST	14,749,579
ABSTAIN	2,258,916

The following votes were cast by the common stock, voting as a separate class, with respect to the proposal to approve and adopt the Charter Amendments and the Bylaw Amendments contemplated by the Investment Agreement (Proposal No. 2).

FOR	251,666,480
AGAINST	14,747,104
ABSTAIN	2,249,151

The following votes were cast with respect to the proposal to approve and adopt the Control Share Acquisitions Plan and to accord to the shares acquired pursuant to such plan full voting rights (Proposal No. 3).

FOR	257,433,764
AGAINST	6,447,938
ABSTAIN	4,924,279

The following votes were cast with respect to the proposal to approve and adopt the Control Share Acquisitions Plan and to accord to the shares acquired pursuant to such plan full voting rights, excluding shares held by (i) FT, DT or any member of a group with FT and DT that makes or proposes to make a "control share acquisition" (as defined in the Kansas Control Share Acquisitions Statute), (ii) officers of Sprint and (iii) employees of Sprint who are also directors of Sprint (Proposal No. 3).

FOR	256,780,521
AGAINST	6,449,252
ABSTAIN	4,924,777

Item 10(b). Executive Officers of the Registrant

Office	Name		Age
Chairman and Chief Executive Officer	William T. Esrey	(1)	56
President and Chief Operating Officer	Ronald T. LeMay	(2)	50
President and Chief Operating Officer - Long Distance Division	Gary D. Forsee	(3)	45
President and Chief Operating Officer - Local Communications Division	D. Wayne Peterson	(4)	60
Executive Vice President - Law and External Affairs	J. Richard Devlin	(5)	45
Executive Vice President - Chief Financial Officer	Arthur B. Krause	(6)	54
Senior Vice President - Corporate Finance	Gene M. Betts	(7)	43
Senior Vice President - External Affairs	John R. Hoffman	(8)	50
Senior Vice President and Controller	John P. Meyer	(9)	45
Senior Vice President - Strategic Planning and Corporate Development	Theodore H. Schell	(10)	51
Senior Vice President - Quality Development and Public Relations	Richard C. Smith, Jr.	(11)	54
Senior Vice President and Treasurer	M. Jeannine Strandjord	(12)	50
Senior Vice President - Human Resources	I. Benjamin Watson	(13)	47
Vice President and Secretary	Don A. Jensen	(14)	60

(1) Mr. Esrey was elected Chairman in 1990. He was elected Chief Executive Officer and a member of the Board of Directors in 1985. In addition, he has served as Chief Executive Officer of the Limited Partnership since 1988.

(2) Mr. LeMay was elected President and Chief Operating Officer in February 1996. He had served as Vice Chairman since April 1995. From 1989 to 1995, he had served as President - Long Distance Division. He was elected to the Board of Directors of Sprint in 1993. Mr. LeMay also serves as the Chief Executive Officer of Sprint Spectrum.

(3) Mr. Forsee was elected President - Long Distance Division in April 1995. He also serves as President and Chief Operating Officer of the Limited Partnership. Mr. Forsee had served as Senior Vice President - Staff Operations of the Limited Partnership since 1993. From 1991 to 1993, he was President of the Limited Partnership's Business Service Group. Prior to that time he served as President of the Limited Partnership's Government Services Division.

(4) Mr. Peterson was elected President - Local Communications Division in 1993. From 1980 to 1993, he served as President of Carolina Telephone and Telegraph Company, a subsidiary of Sprint.

(5) Mr. Devlin was elected Executive Vice President - Law and External Affairs in 1989.

(6) Mr. Krause was elected Executive Vice President - Chief Financial Officer in 1988. During 1990 and 1991, he also served as Chief Information Officer.

(7) Mr. Betts was elected Senior Vice President in 1990.

(8) Mr. Hoffman was elected Senior Vice President - External Affairs in 1990.

(9) Mr. Meyer was elected Senior Vice President and Controller in 1993. He had served as Vice President and Controller of Centel since 1989.

(10) Mr. Schell was elected Senior Vice President - Strategic Planning and Corporate Development in 1990.

(11) Mr. Smith was elected Senior Vice President - Quality Development and Public Relations in 1991. He had served as President of the Limited Partnership's National Markets since 1989.

(12) Ms. Strandjord was elected Senior Vice President and Treasurer in 1990.

(13) Mr. Watson was elected Senior Vice President - Human Resources in 1993. He had served as Vice President - Finance and Administration of United Telephone - Eastern Group, an operating group of subsidiaries of Sprint, since 1990.

(14) Mr. Jensen was elected Vice President and Secretary in 1975.

There are no known family relationships between any of the persons named above or between any such persons and any outside directors of Sprint. Officers are elected annually.

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

	Market Price Per Share					
	1995			1994		
	High	Low	End of Period	High	Low	End of Period
First Quarter	$ 31 7/8	$ 25 7/8	$ 30 1/4	$ 38 1/8	$ 32 1/2	$ 34 1/4
Second Quarter	35 7/8	30 3/8	33 5/8	40 1/8	33 1/4	34 7/8
Third Quarter	36 7/8	32 5/8	35	40 1/8	34 1/8	38 1/8
Fourth Quarter	41 1/8	33 1/4	39 5/8	38 7/8	26 1/8	27 5/8

As of March 1, 1996, there were approximately 100,000 record holders of Sprint's common stock. The principal trading market for Sprint's common stock is the New York Stock Exchange. The common stock is also listed and traded on the Chicago and Pacific Stock Exchanges. Sprint has declared dividends of $0.25 per quarter during each of the years ended December 31, 1995 and 1994.

Item 6. Selected Financial Data

For information required by Item 6, refer to the "Selected Financial Data" section of the Financial Statements, Financial Statement Schedule and Supplementary Data filed as part of this report (page F-2).

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

For information required by Item 7, refer to the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of the Financial Statements, Financial Statement Schedule and Supplementary Data filed as part of this report (pages F-3 through F-15).

Item 8. Financial Statements and Supplementary Data

For information required by Item 8, refer to the "Consolidated Financial Statements and Schedule" and "Quarterly Financial Data" sections of the Financial Statements, Financial Statement Schedule and Supplementary Data filed as part of this report (pages F-18 through F-44).

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Part III

Item 10. Directors and Executive Officers of the Registrant

Pursuant to Instruction G(3) to Form 10-K, the information relating to Directors of Sprint required by Item 10 is incorporated by reference from Sprint's definitive proxy statement filed pursuant to Regulation 14A.

For information pertaining to Executive Officers of Sprint, as required by Instruction 3 of Paragraph (b) of Item 401 of Regulation S-K, refer to the "Executive Officers of the Registrant" section of Part I of this report (pages 8 and 9).

Item 11. Executive Compensation

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 11 is incorporated by reference from Sprint's definitive proxy statement filed pursuant to Regulation 14A.

Item 12. Security Ownership of Certain Beneficial Owners and Management

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 12 is incorporated by reference from Sprint's definitive proxy statement filed pursuant to Regulation 14A.

Item 13. Certain Relationships and Related Transactions

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 13 is incorporated by reference from Sprint's definitive proxy statement filed pursuant to Regulation 14A.

Item 14. Exhibits, Financial Statement Schedule, and Reports on Form 8-K

(a) 1. The consolidated financial statements of Sprint and supplementary financial information filed as part of this report are listed in the Index to Financial Statements, Financial Statement Schedule and Supplementary Data (page F-1).

2. The consolidated financial statement schedule of Sprint filed as part of this report is listed in the Index to Financial Statements, Financial Statement Schedule and Supplementary Data (page F-1).

3. The following exhibits are filed as part of this report:

EXHIBITS

(3) Articles of Incorporation and Bylaws:

(a) Articles of Incorporation, as amended (filed as Exhibit 4A to Sprint Corporation Current Report on Form 8-K dated January 31, 1996 and incorporated herein by reference).

(b) Bylaws, as amended (filed as Exhibit 4B to Sprint Corporation Current Report on Form 8-K for the year ended January 31, 1996 and incorporated herein by reference).

(4) Instruments defining the Rights of Sprint's Equity Security Holders:

(a) The rights of Sprint's equity security holders are defined in the Fifth, Sixth, Seventh and Eighth Articles of Sprint's Articles of Incorporation. See Exhibit 3(a).

(b) Rights Agreement dated as of August 8, 1989, between Sprint Corporation (formerly United Telecommunications, Inc.) and UMB Bank, n.a. (formerly United Missouri Bank of Kansas City, N.A.), as Rights Agent (filed as Exhibit 2(b) to Sprint Corporation Registration Statement on Form 8-A dated August 11, 1989 (File No. 1-4721), and incorporated herein by reference).

(c) Amendment and supplement dated June 4, 1992 to Rights Agreement dated as of August 8, 1989 (filed as Exhibit 2(c) to Amendment No. 1 on Form 8 dated June 8, 1992 to Sprint Corporation Registration Statement on Form 8-A dated August 11, 1989 (File No. 1-4721), and incorporated herein by reference).

(d) Second Amendment to Rights Agreement dated as of July 31, 1995 between Sprint Corporation and UMB Bank, n.a. (filed as Exhibit 2(d) to Form 8-A/A-2 dated October 20, 1995 amending Sprint Corporation Registration Statement on Form 8-A dated August 11, 1989 (File No. 1-4721) and incorporated herein by reference).

(e) Standstill Agreement dated as of July 31, 1995, by and among Sprint Corporation, France Telecom and Deutsche Telekom AG (filed as Exhibit (10)(c) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended June 30, 1995 and incorporated herein by reference).

(10) Material Agreements - Joint Ventures:

(a) Joint Venture Agreement dated as of June 22, 1995 among Sprint Corporation, Sprint Global Venture, Inc., France Telecom and Deutsche Telekom AG (filed as Exhibit (10)(a) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended June 30, 1995 and incorporated herein by reference).

(b) Amendment No. 1 to Joint Venture Agreement, dated as of January 31, 1996, among Sprint Corporation, Sprint Global Venture, Inc., France Telecom, Deutsche Telekom AG and Atlas Telecommunications, S.A. (filed as Exhibit 99A to Sprint Corporation Current Report on Form 8-K dated January 31, 1996 and incorporated herein by reference).

(c) Investment Agreement dated as of July 31, 1995 among Sprint Corporation, France Telecom and Deutsche Telekom AG (including as an exhibit the Stockholders' Agreement among France Telecom, Deutsche Telekom AG and Sprint Corporation) (filed as Exhibit (10)(b) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended June 30, 1995 and incorporated herein by reference).

(d) Amended and Restated Agreement of Limited Partnership of MajorCo., L.P., dated as of January 31, 1996, among Sprint Spectrum, L.P., TCI Network Services, Comcast Telephony Services and Cox Telephony Partnership (filed as Exhibit 99C to Sprint Corporation Current Report on Form 8-K dated January 31, 1996 and incorporated herein by reference).

(e) Parents Agreement dated as of January 31, 1996, between Sprint Corporation and Tele-Communications, Inc. (filed as Exhibit 99D to Sprint Corporation Current Report on Form 8-K dated January 31, 1996 and incorporated herein by reference).

(f) Parents Agreement dated as of January 31, 1996, between Sprint Corporation and Comcast Corporation (filed as Exhibit 99E to Sprint Corporation Current Report on Form 8-K dated January 31, 1996 and incorporated herein by reference).

(g) Parents Agreement dated as of January 31, 1996, between Sprint Corporation and Cox Communications, Inc. (filed as Exhibit 99F to Sprint Corporation Current Report on Form 8-K dated January 31, 1996 and incorporated herein by reference).

(10) Executive Compensation Plans and Arrangements

(h) 1985 Stock Option Plan, as amended (filed as Exhibit (10)(c) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended September 30, 1995 and incorporated herein by reference). Appendix to Stock Option Plans.

(i) 1990 Stock Option Plan, as amended (filed as Exhibit (10)(d) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended September 30, 1995 and incorporated herein by reference). Appendix to Stock Option Plans. See Exhibit (10)(h).

(j) 1990 Restricted Stock Plan, as amended (filed as Exhibit 99 to Sprint Corporation Registration Statement No. 33-65147 and incorporated herein by reference).

(k) Executive Deferred Compensation Plan, as amended.

(l) Management Incentive Stock Option Plan, as amended (filed as Exhibit (10)(g) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended September 30, 1995 and incorporated herein by reference). Appendix to Stock Option Plans. See Exhibit (10)(h).

(m) Long-Term Stock Incentive Program, as amended (filed as Exhibit (10)(h) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended September 30, 1995 and incorporated herein by reference).

(n) Sprint Supplemental Executive Retirement Plan (filed as Exhibit (10)(i) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended September 30, 1995 and incorporated herein by reference).

(o) Amended and Restated Centel Directors Deferred Compensation Plan (filed as Exhibit (10)(j) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended September 30, 1995 and incorporated herein by reference).

(p) Restated Memorandum Agreements Respecting Supplemental Pension Benefits between Sprint Corporation (formerly United Telecommunications, Inc.) and two of its current and former executive officers (filed as Exhibit 10(i) to Sprint Corporation Annual Report on Form 10-K for the year ended December 31, 1992, and incorporated herein by reference).

(q) Executive Long-Term Incentive Plan (filed as Exhibit 10(j) to Sprint Corporation Annual Report on Form 10-K for the year ended December 31, 1993 and incorporated herein by reference).

(r) Executive Management Incentive Plan (filed as Exhibit 10(k) to Sprint Corporation Annual Report on Form 10-K for the year ended December 31, 1993 and incorporated herein by reference).

(s) Long-Term Incentive Compensation Plan (filed as Exhibit 10(j) to United Telecommunications, Inc. Annual Report on Form 10-K for the year ended December 31, 1989, and incorporated herein by reference).

(t) Short-Term Incentive Compensation Plan (filed as Exhibit 10(k) to United Telecommunications, Inc. Annual Report on Form 10-K for the year ended December 31, 1989, and incorporated herein by reference).

(u) Retirement Plan for Directors, as amended (filed as Exhibit 10(b) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended March 31, 1994 and incorporated herein by reference).

(v) Key Management Benefit Plan, as amended (filed as Exhibit 10(o) to Sprint Corporation Annual Report on Form 10-K for the year ended December 31, 1993 and incorporated herein by reference).

(w) Agreement Regarding Special Compensation and Post Employment Restrictive Covenants between Sprint Corporation and one of its Executive Officers.

(x) Director's Deferred Fee Plan, as amended.

(y) Form of Contingency Employment Agreements between Sprint Corporation and certain of its executive officers (filed as Exhibit 10(b) to Sprint Corporation Quarterly Report on Form 10-Q for the year ended March 31, 1995, and incorporated herein by reference).

(z) Form of Indemnification Agreements between Sprint Corporation (formerly United Telecommunications, Inc.) and its Directors and Officers (filed as Exhibit 10(s) to Sprint Corporation Annual Report on Form 10-K for the year ended December 31, 1991, and incorporated herein by reference).

(aa) Summary of Executive Officer and Board of Directors Benefits.

(bb) Agreements Regarding Special Compensation and Post Employment Restrictive Covenants between Sprint Corporation and four of its executive officers (filed as Exhibit 10(d) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended September 30, 1994 and incorporated herein by reference).

(cc) Amended and Restated Centel Stock Option Plan (filed as Exhibit 10(w) to Sprint Corporation Annual Report on Form 10-K for the year ended December 31, 1994 and incorporated herein by reference). Appendix to Stock Option Plans. See Exhibit (10)(h).

(dd) Agreements Regarding Special Compensation and Post Employment Restrictive Covenants between Sprint Corporation and three of its executive officers (filed as Exhibit 10(x) to Sprint Corporation Annual Report on Form 10-K for the year ended December 31, 1993, and incorporated herein by reference).

(ee) Description of agreement regarding Supplemental Pension Benefits between Sprint Corporation and one of its executive officers (filed as Exhibit 10(e) to Sprint Corporation Quarterly Report on Form 10-Q for the quarter ended September 30, 1994, and incorporated herein by reference).

(ff) Amended and Restated Centel Director Stock Option Plan (filed as Exhibit 10(aa) to Sprint Corporation Annual Report on Form 10-K for the year ended December 31, 1993, and incorporated herein by reference).

(11) Computation of Earnings Per Common Share.

(12) Computation of Ratio of Earnings to Fixed Charges.

(21) Subsidiaries of Registrant.

(23) Consent of Ernst & Young LLP.

Sprint will furnish to the Securities and Exchange Commission, upon request, a copy of the instruments defining the rights of holders of its long-term debt and the long-term debt of its subsidiaries. The total amount of securities authorized under any of said instruments does not exceed 10 percent of the total assets of Sprint and its subsidiaries on a consolidated basis.

(b) Reports on Form 8-K

Sprint filed a Current Report on Form 8-K dated January 31, 1996 in which it reported the investment of $3.0 billion in Sprint by FT and DT and the consummation of the global venture with FT and DT (see "Management's Discussion and Analysis of Financial Condition and Results of Operations - Strategic Developments - Global One" (pages F-3 and F-4) for further discussion). It also reported that Sprint, TCI, Comcast and Cox had entered into a series of agreements amending in certain respects their previously announced joint venture to engage in the communications business (see "Management's Discussion and Analysis of Financial Condition and Results of Operations - Strategic Developments - Sprint Spectrum LP" (pages F-4 and F-5) for further discussion).

(c) Exhibits are listed in Item 14(a).

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SPRINT CORPORATION
(Registrant)

By /s/ W. T. Esrey
William T. Esrey
Chairman and Chief Executive Officer

Date: March 11, 1996

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on the 11th day of March, 1996.

/s/ W. T. Esrey
William T. Esrey
Chairman and Chief Executive Officer

/s/ Arthur B. Krause
Arthur B. Krause
Executive Vice President and
Chief Financial Officer

/s/ John P. Meyer
John P. Meyer
Senior Vice President and Controller
Principal Accounting Officer

SIGNATURES

SPRINT CORPORATION
(Registrant)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on the 11th day of March, 1996.

/s/ DuBose Ausley
DuBose Ausley, Director

/s/ Harold S. Hook
Harold S. Hook, Director

/s/ Warren L. Batts
Warren L. Batts, Director

/s/ Ronald T. LeMay
Ronald T. LeMay, Director

/s/ Michel Bon
Michel Bon, Director

/s/ Linda K. Lorimer
Linda Koch Lorimer, Director

/s/ Ruth M. Davis
Ruth M. Davis, Director

/s/ Charles E. Rice
Charles E. Rice, Director

/s/ W. T. Esrey
William T. Esrey, Director

/s/ Ron Sommer
Ron Sommer, Director

/s/ Donald J. Hall
Donald J. Hall, Director

/s/ Stewart Turley
Stewart Turley, Director

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SELECTED FINANCIAL DATA

	As of or For the Years Ended December 31,				
	1995	1994 (1)	1993 (1)	1992 (1)	1991 (1)
	(In Millions, Except Per Share Data)				
Results of Operations					
Net operating revenues	$ 12,765.1	$ 11,986.6	$ 10,914.7	$ 10,105.7	$ 9,697.2
Operating income (2)	1,834.3	1,690.7	1,214.1	1,199.8	1,186.1
Income from continuing operations (2), (3)	946.1	899.2	517.1	550.6	530.8
Earnings per common share from continuing operations (2), (3)	2.69	2.57	1.50	1.62	1.58
Dividends per common share	1.00	1.00	1.00	1.00	1.00
Financial Position					
Total assets	$ 15,195.9	$ 14,547.5	$ 13,898.1	$ 13,431.7	$ 13,785.9
Property, plant and equipment, net	9,715.8	10,258.8	9,883.1	9,895.6	10,072.7
Total debt (including short-term borrowings)	5,677.4	4,937.2	5,094.4	5,442.7	5,571.2
Redeemable preferred stock	32.5	37.1	38.6	40.2	56.6
Common stock and other shareholders' equity	4,642.6	4,524.8	3,918.3	3,971.6	3,671.9
Cash Flow Data					
Cash from operating activities - continuing operations	$ 2,566.4	$ 2,346.0	$ 2,007.8	$ 2,397.3	$ 1,808.1
Capital expenditures	1,857.3	1,751.6	1,429.8	1,342.4	1,431.4
Free cash flow (4)	357.6	245.0	230.9	454.8	80.9

(1) The accompanying Selected Financial Data have been restated to reflect the spin-off of Sprint's cellular and wireless division (Cellular) to Sprint shareholders. Accordingly, Cellular's operating results have been excluded from income from continuing operations and are reported as discontinued operations.

(2) During 1995, nonrecurring charges of $88 million were recorded related to a restructuring within the local division. Such charges reduced consolidated 1995 income from continuing operations by $55 million ($0.16 per share).

During 1993, nonrecurring charges of $293 million were recorded related to (a) transaction costs associated with the merger with Centel and the expenses of integrating and restructuring the operations of the two companies and (b) a realignment and restructuring within the long distance division. Such charges reduced consolidated 1993 income from continuing operations by $193 million ($0.56 per share).

(3) During 1994, Sprint sold an investment in equity securities, realizing a gain of $35 million, which increased consolidated 1994 income from continuing operations by $22 million ($0.06 per share).

During 1993, as a result of the enactment of the Revenue Reconciliation Act of 1993, Sprint was required to adjust its deferred income tax assets and liabilities to reflect the increased tax rate. Such adjustment reduced consolidated 1993 income from continuing operations by $11 million ($0.03 per share).

During 1992 and 1991, gains were recognized related to the sales of certain local telephone properties, which increased consolidated 1992 income from continuing operations by $44 million ($0.13 per share) and consolidated 1991 income from continuing operations by $64 million ($0.19 per share).

(4) Free cash flow is an internal measurement utilized by Sprint to assess the coverage of capital expenditures and dividends paid by cash provided from operating activities of continuing operations. This measurement is not an alternative to operating income determined in accordance with generally accepted accounting principles as an indicator of operating performance. Such amount for 1992 excludes the additional proceeds from the sale of accounts receivable of $300 million.

Strategic Developments

Telecommunications Law

In February 1996, the Telecommunications Act of 1996 (the Act) was signed into law. The purpose of the Act is to promote competition in all aspects of telecommunications. The Act requires telecommunications carriers to interconnect with other carriers and to provide for resale, number portability, dialing parity, access to rights-of-way and compensation for reciprocal traffic. Additionally, incumbent local telephone companies are required to provide nondiscriminatory unbundled access, resale at wholesale rates and notice of changes that would affect interoperability of facilities and networks. The Federal Communications Commission (FCC) is to adopt mechanisms to ensure that essential telecommunications services are affordable.

The Act also provides that regional Bell Operating Companies (RBOCs) may provide long distance service upon enactment that is out-of-region or incidental to: (1) audio/video programming; (2) Internet for schools; (3) mobile services; (4) information or alarm services; and (5) telecommunications signaling. In order for an RBOC to provide in-region long distance service, the Act requires the RBOC to comply with a comprehensive competitive checklist and expands the role of the U.S. Department of Justice in the FCC's determination of whether the entry of an RBOC into the competitive long distance market is in the public interest. Additionally, there must be a real facilities-based competitor for residential and business local telephone service (or the failure of potential providers to request access) prior to an RBOC providing in-region long distance service. RBOCs must provide long distance services through a separate subsidiary for at least three years. Until the RBOCs are allowed into long distance or three years have passed, long distance carriers with more than 5 percent of the nation's access lines may not jointly market RBOC resold local telephone service, and states may not require RBOCs to provide intraLATA dialing parity.

Telecommunications companies may also provide video programming and cable operators may provide telephone service in the same service area. The Act prohibits telecommunications carriers and cable operators from acquiring more than 10 percent of each other, except in rural and other specified areas.

The impact of the Act on Sprint is unknown because a number of important implementation issues (such as the nature and extent of continued subsidies for local rates) still need to be decided by state or federal regulators. However, the Act offers opportunities as well as risks. Sprint should benefit from the opportunity to enter local telephone markets. The new competitive environment should lead to a reduction in local access fees, the largest single cost in providing long distance service today. The risk aspect of local competition is that historical prices and market shares of Sprint's local telephone companies (approximately 4 percent of the nation's local telephone access lines) are likely to decline.

The removal of the long distance restrictions on the RBOCs is not anticipated to have an immediate significant adverse impact on Sprint because of the substantial preconditions that must be met before RBOCs can provide most in-region long distance services. In addition, Sprint could potentially offset some losses of long distance customers at the retail level if it were successful in becoming the underlying carrier for resellers (including the RBOCs) entering the long distance market.

Global One

On January 31, 1996, Sprint, along with Deutsche Telekom (DT) and France Telecom (FT), consummated their joint venture, operating as Global One, which will provide seamless global telecommunications services to business, consumer and carrier markets worldwide. The interests of DT and FT in the venture are held by their own joint venture, referred to as Atlas. The operating group

serving Europe (excluding Germany and France) will be owned one-third by Sprint and two-thirds by Atlas. The operating group for the worldwide activities outside the United States and Europe will be owned 50 percent by Sprint and 50 percent by Atlas. Home country markets will be served by DT in Germany, FT in France and Sprint in the United States.

Upon closing of the agreement, DT and FT acquired shares of a new class of preference stock for a total of $3.0 billion, which resulted in DT and FT each holding approximately 7.5 percent of the Sprint voting power. DT and FT will make the remainder of their investment in Sprint following the spin-off of Sprint's Cellular and Wireless Division (Cellular) to shareholders of Sprint common stock. Following their full investment, DT and FT will each own shares of Class A common stock with approximately 10 percent of Sprint's voting power. Depending on the price of Cellular shares at the time of the spin-off, the total amount of the investment is expected to be between $3.5 billion and $3.7 billion.

DT and FT, as the holders of the Class A Stock, will have the right in most circumstances to proportionate representation on Sprint's board of directors and to purchase additional shares of Class A Stock from Sprint to enable them to maintain their ownership level at 20 percent. In addition, the holders of Class A Stock will have disapproval rights with respect to Sprint's undertaking certain types of transactions. DT and FT have also entered into a standstill agreement with Sprint that contains restrictions on their ability to acquire voting securities of Sprint other than as contemplated by the investment agreement and related agreements, as well as customary provisions restricting DT and FT from initiating or participating in any proposal with respect to the control of Sprint.

In connection with the closing of the Global One joint venture, the long distance division contributed certain assets and the related operations of its international business unit to Global One.

Sprint Spectrum

Sprint, along with Tele-Communications Inc. (TCI), Comcast Corporation (Comcast) and Cox Communications, Inc. (Cox), have formed a joint venture, Sprint Spectrum LP, formerly known as Sprint Telecommunications Venture to provide wireless communications services on a broad geographic basis within the United States. In March 1995, Sprint Spectrum took a critical first step to a national wireless capabilities. In the first round of broadband Personal Communications Services (PCS) license auctions by the FCC, Sprint Spectrum and its affiliates won the rights to PCS licenses in 30 major trading areas (MTAs) at a cost of $2.2 billion. Sprint Spectrum's wireless presence, including Sprint Spectrum wireless affiliates, covers a population of more than 182 million in the United States.

In March 1995, Sprint, TCI, Comcast and Cox signed a definitive joint venture agreement to provide competitive local telecommunications services on a national basis using the facilities of the cable partners. In February 1996, the four partners announced a change in their approach to providing such services. The previous agreement called for the conversion of cable systems passing 10 million homes by the end of 1997 and had a fixed compensation formula between Sprint Spectrum and the cable companies. Under the revised agreements, competitive local telephone services will be the subject of individual joint ventures to be negotiated between Sprint and each cable partner, rather than through Sprint Spectrum. This approach will allow greater flexibility to decide specific terms and timing for entry into local telephone markets. However, there can be no assurance that any such joint ventures will be formed.

In conjunction with the approval of a business plan for Sprint Spectrum to build out a national wireless network, the four partners have committed to make cash capital contributions to Sprint Spectrum of approximately $4.2 billion through the end of 1997, of which Sprint's portion is estimated to be approximately $1.7 billion. Approximately $960 million of this commitment has already been contributed by Sprint to Sprint Spectrum, primarily to fund amounts paid to the FCC in connection with licenses won in the PCS auction.

In November 1995, American Personal Communications (APC), an affiliate of Sprint Spectrum, launched Sprint Spectrum, the nation's first broadband PCS system. Sprint Spectrum will serve a large geographic area encompassing Washington, D.C., all of Maryland and more than half of Virginia. It is Sprint Spectrum's objective to begin offering personal communications service in as many as 20 to 25 major metropolitan areas by December 1996, covering over 100 million people, and to substantially

complete construction of the remainder of its system by December 1998. Sprint Spectrum has executed contracts with two vendors of Code Division Multiple Access (CDMA) to deploy this new developing technology across the venture's nationwide wireless communications network.

Spin-off of Cellular Division

Due in part to divestiture requirements imposed by the FCC with respect to PCS licenses awarded to Sprint Spectrum, the Sprint board of directors has approved the spin-off of Cellular to the holders of Sprint common stock. Sprint has received a favorable ruling from the Internal Revenue Service regarding the tax-free nature of the spin-off. After the spin-off, Cellular will market its wireless service under the 360º Communications Company brand name and will no longer be included under the umbrella of the Sprint brand name.

The spin-off will be effected by distributing to all holders of Sprint common stock all shares of Cellular common stock at a rate of 1 share of Cellular common stock for every 3 shares of Sprint common stock held. In connection with the closing, Cellular will repay approximately $1.4 billion of intercompany debt owed by Cellular to Sprint and its subsidiaries, and Sprint will contribute to the equity capital of Cellular any debt owed by Cellular in excess of the intercompany debt being repaid.

Prior years' consolidated financial statements have been restated to reflect the spin-off of Cellular. Accordingly, the operating results, net assets and cash flows of Cellular are separately classified as discontinued operations.

Results of Operations

Consolidated

Sprint's two primary divisions -- long distance and local exchange -- generated record levels of net operating revenues and improved operating results in 1995. The long distance division generated a 7 percent growth in traffic volumes in 1995, and the number of access lines served by the local division grew 4.7 percent.

Total net operating revenues for the year ended December 31, 1995 were $12.8 billion, a 6 percent increase over net operating revenues of $12.0 billion for 1994. Total net operating revenues for the year ended December 31, 1993 were $10.9 billion. For the year ended December 31, 1995, income from continuing operations was $946 million, or $2.69 per share, compared with $899 million, or $2.57 per share, for 1994 and $517 million, or $1.50 per share, for 1993. Income from continuing operations for the year ended December 31, 1995 included a charge related to the restructuring of Sprint's local division ($0.16 per share). Income from continuing operations for the year ended December 31, 1994 included a gain related to the sale of an investment in equity securities ($0.06 per share). Income from continuing operations for the year ended December 31, 1993 included charges related to the merger and integration costs associated with the Centel merger and the realignment and restructuring of Sprint's long distance division ($0.56 per share) and a charge associated with the enactment of the Revenue Reconciliation Act of 1993 ($0.03 per share).

Segmental Results of Operations

Long Distance Communications Services

	As of or for the Years Ended December 31,		
	1995	1994	1993
	(In Millions)		
Net operating revenues	$ 7,277.4	$ 6,805.1	$ 6,139.2
Operating expenses			
Interconnection	3,102.7	2,994.5	2,710.7
Operations	1,046.6	925.4	857.7
Selling, general and administrative	1,839.7	1,737.0	1,548.1
Depreciation and amortization	581.6	550.5	523.5
Merger, integration and restructuring costs	--	--	45.9
Total operating expenses	6,570.6	6,207.4	5,685.9
Operating income	$ 706.8	$ 597.7	$ 453.3 (1)
Operating margin	9.7%	8.8%	7.4%(1)
Capital expenditures	$ 861.7	$ 774.1	$ 529.4
Identifiable assets	$ 4,912.2	$ 4,546.0	$ 4,195.8

(1) Excluding the merger, integration and restructuring costs of $45.9 million, operating income and margin for 1993 would have been $499.2 million and 8.1 percent, respectively.

Sprint's long distance division provides domestic and international voice, video and data communications services. The terms under which the division offers its services to the public are subject to different levels of state and federal regulation, but rates are not subject to rate-base regulation except nominally in some states.

Net operating revenues increased 7 percent in 1995, following an 11 percent increase in 1994. Traffic volume increased 7 percent and 11 percent over the same periods. Revenue growth was primarily driven by strong performance in the data services market, which includes sales to consumer on-line services and Internet connectivity, transaction processing such as credit card authorizations and check guarantees, data communication for multinational corporations and data-intensive applications such as image transfer and client/server exchange. Also contributing to this growth was the business market which continued to experience growth in "800" services and private line services, the international market which reflects the division's continuing efforts to target new geographic markets, and the residential market which reflects the success of the Sprint Sense (sm) calling plan.

Interconnection costs consist of amounts paid to local exchange carriers, other domestic service providers and foreign telephone companies for the completion of calls made by the division's customers. Interconnection costs increased in 1995 and 1994 primarily as a result of traffic volume growth. Also contributing to these increases were increases in access costs associated with the growth in data products and international interconnection costs. These increases were partially offset by reduced costs of connecting to networks domestically as a result of lower interstate access rates. As a percentage of net operating revenues, interconnection costs were 42.6 percent in 1995 compared to 44.0 percent and 44.2 percent in 1994 and 1993, respectively.

Operations expense consists of costs related to operating and maintaining the long distance network; costs of providing various services such as operator services, public payphones, telecommunications services for the hearing impaired, and video teleconferencing; and costs of data systems sales. Operations expense increased $121 million in 1995 and $68 million in 1994. The 1995 increase was

primarily due to increased costs associated with growth within the data products market and increased international network operations costs reflecting growth in overseas products and foreign operations. The 1994 increase was primarily due to expanded product offerings as well as providing services to new customers.

Selling, general and administrative (SG&A) expense increased $103 million and $189 million in 1995 and 1994, respectively, generally reflecting the overall growth in the division's operating activities. These increases were generally due to increased advertising expenses resulting from the ongoing sales and marketing efforts which are important in the intensely competitive long distance marketplace. The division has continued to focus on cost containment of SG&A expenses in an effort to further enhance the division's profitability. As a result, SG&A expense as a percentage of net operating revenues decreased from 25.5 percent for 1994 to 25.3 percent for 1995.

Depreciation and amortization increased $31 million in 1995 and $27 million in 1994, generally due to an increase in the asset base. The increase in 1995 was generally due to an increase in the asset base in support of data revenue growth and synchronous optical network (SONET) deployment. SONET provides significantly improved transport capacity.

Local Communications Services

	As of or for the Years Ended December 31,		
	1995	1994	1993
	(In Millions)		
Net operating revenues			
Local service	$ 1,875.7	$ 1,752.3	$ 1,624.3
Network access	1,705.8	1,598.4	1,530.4
Toll service	485.4	529.3	505.3
Other	652.5	532.8	466.0
Total net operating revenues	4,719.4	4,412.8	4,126.0
Operating expenses			
Plant operations	1,360.6	1,298.3	1,206.7
Depreciation and amortization	835.6	794.6	733.0
Customer operations	601.0	549.3	532.4
Other	793.8	752.4	710.6
Merger, integration and restructuring costs	87.6	--	190.1
Total operating expenses	3,678.6	3,394.6	3,372.8
Operating income	$ 1,040.8 (1)	$ 1,018.2	$ 753.2 (2)
Operating margin	22.1% (1)	23.1%	18.3% (2)
Capital expenditures	$ 950.8	$ 914.2	$ 845.3
Identifiable assets	$ 6,970.4	$ 7,821.3	$ 7,603.9

(1) Excluding the restructuring costs of $87.6 million, operating income and margin for 1995 would have been $1,128.4 million and 23.9 percent, respectively.

(2) Excluding the merger and integration costs of $190.1 million, operating income and margin for 1993 would have been $943.3 million and 22.9 percent, respectively.

The local division consists principally of Sprint's regulated telephone companies which provide local exchange services, access by telephone customers and other carriers to local exchange facilities, and long distance services within specified geographic areas.

Net operating revenues increased 7 percent in both 1995 and 1994. Increased local service revenues reflect a 4.7 percent and 4.8 percent increase in the number of access lines served for 1995 and 1994, respectively, as well as growth in add-on services, such as custom calling features.

Network access revenues, derived from interexchange long distance carriers' use of the local network to complete calls, increased during 1995 and 1994 as a result of increased traffic volumes, a portion of which is due to a migration of traffic related to toll service revenues as described below. The increase was partially offset by periodic reductions in network access rates charged. The FCC announced a new interim interstate price caps plan during the first quarter of 1995. Under the new plan, which became effective August 1, 1995, the local division adopted a rate formula based on the maximum productivity factors that effectively removed the earnings cap on the division's interstate access revenues. Interstate access revenues comprise approximately 60 percent of the division's network access revenues.

Toll service revenues, related to the provision of long distance services within specified geographical areas and the reselling of interexchange long distance services, decreased 8 percent in 1995 following an increase of 5 percent in 1994. The 1995 decrease primarily reflects increased competition in the intrastate long distance markets as interexchange long distance carriers are now offering intraLATA long distance service in certain states. While toll service revenues have declined as a result of this increased competition, this reduction has been partially recovered through an increase in network access revenues resulting from additional use of the local network by interexchange long distance carriers.

Other revenues, including revenues from directory publishing fees, billing and collection services, and sales of telecommunications equipment, increased 22 percent in 1995 and 14 percent in 1994 generally due to growth in equipment sales and increases in nonregulated revenues.

Plant operations expense includes network operations costs; repair and maintenance costs of property, plant and equipment; and other costs associated with the provision of local exchange services. The 5 percent and 8 percent increases in such costs in 1995 and 1994, respectively, were primarily related to increases in the costs of providing services resulting from access line growth. Additionally, certain states have implemented revised toll plans requiring payment of access charges for calls terminating in the service areas of other local exchange carriers, resulting in increased plant operations expense. The 1995 increase also reflects increases in repair and maintenance costs in the division's Florida and Mid-Atlantic regions related to bad weather conditions, including the flooding rains and hurricanes which occurred in 1995. Increased expenditures related to switching system software associated with advanced calling features contributed to the higher level of plant operations expense in 1994.

Depreciation and amortization expense increased $41 million in 1995, following a $62 million increase in 1994. These increases generally reflect system-wide plant additions and also include the effects of depreciation rate changes, special short-term amortizations and nonrecurring charges approved by state regulatory commissions.

Customer operations expense includes costs associated with business office operations and billing services, marketing costs, and expenses related to providing operator and directory assistance and other customer services. These costs increased 9 percent and 3 percent in 1995 and 1994, respectively. The increases in 1995 and 1994 were related to increased costs associated with the overall growth in access lines. Expense levels in 1995 were also affected by marketing costs to promote new products and services, increased business office operations costs resulting from longer office hours for greater customer accessibility and customer costs related to increased nonregulated activities.

Other operating expenses increased $41 million and $42 million in 1995 and 1994, respectively, primarily due to costs associated with the growth in equipment sales.

In November 1995, Sprint initiated a realignment and restructuring of its local communications division, including the elimination of approximately 1,600 positions primarily in the network and finance functions. This restructuring is intended to streamline current processes in order to reduce costs in an increasingly competitive marketplace. These actions resulted in a nonrecurring charge of $88 million.

The accrued liability associated with this charge specifically relates to the benefits that affected employees will receive upon termination.

Sprint adopted accounting principles for a competitive marketplace effective December 31, 1995 and discontinued applying Statement of Financial Accounting Standards (SFAS) No. 71, "Accounting for the Effects of Certain Types of Regulation," to its local division. The accounting impact to Sprint was a noncash, extraordinary charge of $565 million, net of related income tax benefits. See Note 2 of Notes to Consolidated Financial Statements for additional discussion.

Sprint does not expect the discontinued application of SFAS No. 71 to have a significant impact on 1996 depreciation expense. Additionally, future business transactions of the local division will be recorded following their economic substance, and regulatory assets and liabilities pursuant to SFAS No. 71 will no longer be recognized. Furthermore, revenues and related net income of nonregulated operations attributable to transactions with Sprint's regulated local exchange carriers, which were previously not eliminated in the accompanying Consolidated Financial Statements in accordance with SFAS No. 71, will be eliminated. Intercompany revenues of such entities amounted to $262 million, $285 million and $225 million in 1995, 1994 and 1993, respectively.

Product Distribution and Directory Publishing

	As of or for the Years Ended December 31,		
	1995	1994	1993
	(In Millions)		
Net operating revenues	$ 1,148.0	$ 1,108.7	$ 945.2
Operating expenses			
Costs of services and products	965.8	938.2	801.0
Selling, general and administrative	88.1	88.8	74.7
Depreciation and amortization	7.4	6.9	5.4
Merger and integration costs	--	--	2.5
Total operating expenses	1,061.3	1,033.9	883.6
Operating income	$ 86.7	$ 74.8	$ 61.6 (1)
Operating margin	7.6%	6.7%	6.5%(1)
Capital expenditures	$ 7.8	$ 6.7	$ 9.0
Identifiable assets	$ 395.4	$ 376.2	$ 341.8

(1) Excluding the merger and integration costs of $2.5 million, operating income and margin for 1993 would have been $64.1 million and 6.8 percent, respectively.

North Supply, a wholesale distributor of telecommunications products, had 1995 net operating revenues of $854 million compared to $829 million in 1994 and $677 million in 1993. The increase in 1995 primarily reflects growth in sales to nonaffiliates as well as overall price increases. The increase in 1994 primarily reflects increased sales to the local division, partially as a result of sales to the merged Centel telephone operations. As a percentage of net operating revenues, operating expenses for 1995, 1994 and 1993 were 94.4 percent, 95.5 percent and 96.5 percent, respectively.

Sprint Publishing & Advertising, a publisher and marketer of telephone directories, had net operating revenues of $294 million in 1995 compared to $280 million in 1994 and $268 million in 1993. As a percentage of net operating revenues, operating expenses for 1995, 1994 and 1993 were 86.9 percent, 86.7 percent and 84.9 percent, respectively.

Nonoperating Items

Interest Expense

Interest expense related to continuing operations totaled $261 million in 1995 compared to $301 million in 1994 and $367 million in 1993. Interest expense related to the operations of Cellular totaled $124 million, $97 million and $85 million in 1995, 1994 and 1993, respectively, and is included in discontinued operations in the Consolidated Statements of Income. Sprint's average debt outstanding, including the debt incurred to fund intercompany advances to Cellular, increased by $668 million in 1995 compared to the prior year. The increase in average debt outstanding during 1995 was primarily from short-term borrowings incurred to fund investments in Sprint Spectrum. Because the interest costs on the borrowings associated with Sprint's investment in this venture are being capitalized until Sprint Spectrum commences operations, interest expense did not increase proportionately to the increase in average debt outstanding. Sprint's effective interest rate decreased 44 basis points from 1994 to 1995 primarily due to the increase in short-term borrowings as a percent of total borrowings. Sprint's average debt outstanding decreased by $334 million and $596 million in 1994 and 1993, respectively, and the effective interest rate decreased 52 and 15 basis points, respectively, due to debt refinancings which occurred during 1993 and 1992.

Other Expense, Net

The components of other income (expense) are as follows (in millions):

	For the Years Ended December 31,		
	1995	1994	1993
Loss on sales of accounts receivable	$ (38.6)	$ (28.7)	$ (22.0)
Equity in loss of Sprint Spectrum	(31.4)	(1.3)	--
Global One venture costs	(22.9)	(6.1)	--
Gain on sale of investment in equity securities	--	34.7	--
Other, net	(0.3)	(0.7)	(12.0)
Total other expense, net	$ (93.2)	$ (2.1)	$ (34.0)

Income Tax Provision

Sprint's income tax provisions for 1995, 1994 and 1993 resulted in effective tax rates of 36.1 percent, 35.2 percent and 36.4 percent, respectively. During 1993, the Revenue Reconciliation Act of 1993 was enacted which, among other changes, raised the federal income tax rate to 35 percent from 34 percent. As a result, Sprint adjusted its deferred income tax assets and liabilities to reflect the revised rate. See Note 5 of Notes to Consolidated Financial Statements for information regarding the differences which cause the effective income tax rates to vary from the statutory federal income tax rate.

As of December 31, 1995, Sprint had recorded deferred income tax assets of $501 million, net of a $17 million valuation allowance. See Note 5 of Notes to Consolidated Financial Statements for information regarding the sources which gave rise to these assets. Sprint's management has determined that it is more likely than not that these deferred income tax assets, net of the valuation allowance, will be realized based on current income tax laws and expectations of future taxable income stemming from the reversal of existing deferred tax liabilities or ordinary operations. Uncertainties surrounding income tax law changes, shifts in operations between state taxing jurisdictions, and future operating income levels may, however, affect the ultimate realization of all or some portion of these deferred income tax assets.

Discontinued Operations - Cellular Division

As a result of the tax-free spin-off of Cellular to shareholders of Sprint common stock, the operating results, net assets and cash flows of Cellular have been separately classified as discontinued operations and are excluded from amounts for the continuing operations of Sprint.

Cellular's operating results exclude its share of Sprint's corporate overhead expenses. These expenses have been reallocated to Sprint's continuing operations in the accompanying Consolidated Statements of Income as well as in the accompanying Segmental Results of Operations. Accordingly, Cellular's results of operations as reflected below may not be indicative of its futures operating results once the spin-off is completed. Such expenses were $13 million, $12 million and $12 million for each of the years ended December 31, 1995, 1994 and 1993, respectively. See Note 3 of Notes to Consolidated Financial Statements for further discussion.

Cellular's results of operations are summarized as follows:

	For the Years Ended December 31,		
	1995	1994	1993
	(In Millions)		
Net operating revenues	$ 834.4	$ 626.5	$ 410.5
Operating expenses	675.6	529.4	374.0
Operating income	158.8	97.1	36.5
Interest expense	(124.0)	(97.3)	(85.4)
Other income (expense), net	10.9	(5.6)	11.7
Income (Loss) before income taxes	45.7	(5.8)	(37.2)
Income tax provision (benefit)	31.2	9.7	(0.7)
Cumulative effect of change in accounting principle, net	--	--	(1.6)
Income (Loss) from cellular division	$ 14.5	$ (15.5)	$ (38.1)

Net operating revenues increased $208 million during 1995 and $216 million during 1994. These increases resulted principally from the growth in the number of cellular customers, which increased 44 percent in 1995 and 59 percent in 1994. The effect of this growth was partially offset by a decline in service revenue per customer.

Operating expenses increased $146 million for 1995 and $155 million for 1994. These increases resulted principally from the growth in the number of cellular customers and increased advertising costs.

Discontinued Operations - Other

For the year ended December 31, 1994, Sprint recognized $7 million of income associated with the settlement of matters related to a discontinued operation. Also, during 1993, Sprint incurred a loss from discontinued operations of $12 million, net of income tax benefits.

Extraordinary Items

As described in Note 2 of Notes to Consolidated Financial Statements, Sprint adopted accounting principles for a competitive marketplace and discontinued applying SFAS No. 71 to its local division effective December 31, 1995. The application of SFAS No. 71 requires the accounting recognition of the rate actions of regulators where appropriate. Sprint determined that the local division no longer met the criteria for application of SFAS No. 71 due to changes in the regulatory framework, which continues to evolve from rate-base regulation to price regulation, as the latter does not provide for the recovery of specific costs. In addition, the division operates in an evolving competitive environment in which the level and types of competition are increasing such that they may no longer allow for service and product pricing

that provides for the recovery of specific costs. As a result, Sprint recorded a noncash, extraordinary charge of $565 million ($1.61 per share), net of related income tax benefits.

In 1993, Sprint incurred extraordinary losses related to the early extinguishment of debt of $29 million, net of related income tax benefits.

Accounting Changes

Effective January 1, 1993, Sprint changed its method of accounting for postretirement and postemployment benefits by adopting SFAS No. 106 and No. 112 and effected another accounting change. The cumulative effect of these changes in accounting principles reduced 1993 net income by $383 million ($1.12 per share).

Financial Condition

Sprint's consolidated assets totaled $15.2 billion at December 31, 1995 compared to $14.5 billion at December 31, 1994. Accounts receivable increased $136 million from 1994 to 1995, generally due to a 6 percent increase in consolidated net operating revenues. Sprint's allowance for doubtful accounts as a percentage of gross accounts receivable increased from 8 percent at December 31, 1994 to 13 percent at December 31, 1995. The increased percentage generally reflects the timing of sales and customer payments as well as reserves established during 1995 relative to certain of the long distance division's reseller customers. The reseller market has experienced significant competition, which has had a negative impact on these customers' repayment patterns. This increase has not had a significant impact on the revenue growth for the long distance division. Property, plant and equipment, net of accumulated depreciation, decreased $543 million from 1994 to 1995. This decrease was primarily due to the discontinued application of SFAS No. 71, which resulted in a $979 million increase to accumulated depreciation. Exclusive of this write-off, net property, plant and equipment increased $436 million due to increased capital expenditures to enhance and upgrade Sprint's networks, to expand service capabilities and to increase productivity.

Current maturities of long-term debt decreased $52 million from 1994 to 1995 due to scheduled debt payments. As of December 31, 1995, Sprint's total capitalization aggregated $10.4 billion, consisting of short-term borrowings, long-term debt (including current maturities), redeemable preferred stock, and common stock and other shareholders' equity. Short-term borrowings and long-term debt (including current maturities) comprised 54.8 percent of total capitalization as of December 31, 1995 compared to 52.0 percent at year-end 1994. The increase in the debt-to-capital ratio is attributable to increased short-term borrowings to fund investments in Sprint Spectrum.

Liquidity and Capital Resources

Cash Flows - Operating Activities

Cash flows from operating activities, which are Sprint's primary source of liquidity, were $2.6 billion, $2.3 billion and $2.0 billion in 1995, 1994 and 1993, respectively, for continuing operations. The increased cash flows in 1995 reflect improved operating results and reduced working capital requirements. Operating cash flows for 1994 and 1993 reflect improved operating results, partially offset by expenditures of $86 million and $155 million for 1994 and 1993, respectively, related to the 1993 merger, integration and restructuring actions.

Cash Flows - Investing Activities

Investing activities of Sprint's continuing operations used cash of $2.8 billion, $1.8 billion and $1.5 billion in 1995, 1994 and 1993, respectively. Capital expenditures, which represent Sprint's most significant investing activity, were $1.9 billion, $1.8 billion and $1.4 billion in 1995, 1994 and 1993, respectively.

Long distance capital expenditures were incurred each year primarily to meet increased demand for data related services, to enhance network reliability and to upgrade capabilities for providing new products

and services. Capital expenditures for the local division were made to accommodate access line growth, to continue the conversion to digital technologies, and to expand the division's capabilities for providing enhanced telecommunications services.

During 1995 and 1994, Sprint contributed $911 million and $52 million, respectively, to Sprint Spectrum. In 1995, $840 million of this contribution was used to fund Sprint's share of payments to the FCC for licenses acquired in the PCS auction. The remainder was used to fund Sprint's share of the venture's acquisition of a limited partnership interest in APC, as well as related capital and operating requirements. The 1994 contribution funded Sprint's share of the initial payment to the FCC for the PCS auction. Investing activities for 1994 also included $118 million received in connection with the sale of an investment in equity securities.

Cash Flows - Financing Activities

Sprint's financing activities provided cash of $423 million in 1995 and used cash of $457 million and $615 million in 1994 and 1993, respectively. During 1995, Sprint issued $261 million of long-term debt and increased short-term borrowings $1.1 billion. The proceeds from these borrowings were primarily used to fund commitments associated with Sprint Spectrum. Proceeds were also used to repay scheduled long-term debt maturities and to repay $282 million of 9.875 percent notes prior to maturity. The redemption premiums associated with this early retirement were not significant.

Long-term debt retirements during 1994 included the redemption of $102 million of debt called, prior to scheduled maturity, in 1993.

During 1993, a significant level of debt refinancing occurred in order to take advantage of lower interest rates. Accordingly, a majority of the proceeds from long-term borrowings in 1993 was used to finance the redemption prior to scheduled maturities of $1.2 billion of debt.

During 1995, Sprint renewed its revolving credit agreement with a syndicate of domestic and international banks for five years, through October 2000. In addition to the extension, the revolving credit agreement was increased to $1.5 billion from $1.1 billion.

Sprint paid dividends to common and preferred shareholders of $352 million, $349 million and $347 million in 1995, 1994 and 1993, respectively. Sprint's indicated annual dividend rate on common stock is currently $1.00 per share.

Cash Flows - Discontinued Operations

Cellular's cash flows from operating activities were $163 million, $173 million and $198 million in 1995, 1994 and 1993, respectively. Cellular's investing activities used cash of $325 million, $272 million and $170 million in 1995, 1994 and 1993, respectively, primarily consisting of capital expenditures. The increases in capital expenditures reflect the significant increases in the number of cellular customers served.

Capital Requirements

On January 31, 1996, DT and FT invested $3.0 billion in Sprint and, upon the spin-off of Cellular, will make an additional aggregate investment of approximately $500 million to $700 million. Also in conjunction with the spin-off, Cellular will repay approximately $1.4 billion of intercompany debt payable to Sprint and its subsidiaries. Sprint does not expect to require any additional external financing during 1996.

Cash proceeds received from DT, FT and Cellular are expected to be used to repay approximately $2.1 billion in short-term borrowings and approximately $500 million in long-term borrowings. Approximately $600 million of the proceeds will also be required to fund the termination of an accounts receivable sales agreement. An additional $600 million will be used to fund commitments associated with Sprint Spectrum and its affiliates. Remaining cash proceeds will be invested on a temporary basis.

During 1996, Sprint anticipates funding capital expenditures of approximately $2.0 billion and dividends of approximately $426 million with cash flows from operating activities.

Liquidity

At year-end 1995, Sprint had the ability to borrow $880 million under revolving credit agreements with a syndicate of domestic and international banks and other bank commitments. Other available financing sources include a Medium-Term Note program, under which Sprint may offer for sale up to $175 million of unsecured senior debt securities. Additionally, pursuant to shelf registration statements filed with the Securities and Exchange Commission, up to $1.0 billion of debt securities could be offered for sale as of December 31, 1995.

The aggregate amount of additional borrowings which can be incurred is ultimately limited by certain covenants contained in existing debt agreements. As of December 31, 1995, Sprint had borrowing capacity of approximately $3.6 billion under the most restrictive of its debt covenants.

General Hedging Policies

Sprint, on a limited basis, utilizes certain derivative financial instruments in an effort to manage exposure to interest rate risk and foreign exchange risk. Sprint's utilization of such derivative financial instruments related to hedging activities is generally limited to interest rate swap agreements and forward contracts and options in foreign currencies. Sprint will in no circumstance take speculative positions and create an exposure to benefit from market fluctuations. All hedging activity is in accordance with board-approved policies. Any potential loss or exposure related to Sprint's use of derivative instruments is immaterial to its overall operations, financial condition and liquidity. See Note 11 of Notes to Consolidated Financial Statements for more information related to Sprint's portfolio of derivative instruments.

Interest Rate Risk Management

Sprint's interest rate risk management program focuses on minimizing vulnerability of net income to movements in interest rates, setting an optimal mixture of floating-rate and fixed-rate debt in the liability portfolio and preventing liquidity risk. Sprint primarily employs a gap methodology to measure interest rate exposure and utilizes simulation analysis to manage interest rate risk. Sprint takes an active stance in modifying hedge positions to benefit from the value of timing flexibility and fixed-rate/floating-rate adjustments.

Foreign Exchange Risk Management

Sprint's foreign exchange risk management program focuses on optimizing consolidated cash flows and stabilizing accounting results. Sprint does not hedge translation exposure because it believes that optimizing consolidated cash flows will, over time, maintain shareholder value. Sprint's primary transaction exposure in foreign currencies results from changes in foreign exchange rates between the dates Sprint incurs and settles liabilities (payable in a foreign currency) to overseas telephone companies for the costs of terminating international calls made by Sprint's domestic customers.

Impact of Recently Issued Accounting Pronouncements

In March 1995, the Financial Accounting Standards Board (FASB) issued SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of," which is effective for fiscal years beginning after December 15, 1995. SFAS No. 121 requires that assets to be held and used be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Sprint does not anticipate that the requirements of SFAS No. 121 will have a material effect on its 1996 operating results.

In October 1995, the FASB issued SFAS No. 123, "Accounting for Stock-Based Compensation," which is effective for fiscal years beginning after December 15, 1995. SFAS No. 123 encourages companies to account for stock compensation awards under a fair value based method, whereby compensation cost is measured at the grant date based on the value of the award and is recognized over

a service period. Companies may choose not to apply the new accounting method and may continue to apply current accounting requirements, which generally result in no recognition of compensation cost for most fixed stock option plans. Those that so choose, however, will be required to disclose in the notes to the financial statements what net income and earnings per share would have been if they had followed the FASB's new accounting method. Sprint has elected to continue to apply the current accounting requirements for stock-based compensation and will comply with the disclosure requirements in the notes to its 1996 consolidated financial statements.

MANAGEMENT REPORT

The management of Sprint Corporation has the responsibility for the integrity and objectivity of the information contained in this Annual Report. Management is responsible for the consistency of reporting such information and for ensuring that generally accepted accounting principles are used.

In discharging this responsibility, management maintains a comprehensive system of internal controls and supports an extensive program of internal audits, has made organizational arrangements providing appropriate divisions of responsibility and has established communication programs aimed at assuring that its policies, procedures and codes of conduct are understood and practiced by its employees.

The consolidated financial statements included in this Annual Report have been audited by Ernst & Young LLP, independent auditors. Their audit was conducted in accordance with generally accepted auditing standards and their report is included herein.

The responsibility of the Board of Directors for these financial statements is pursued primarily through its Audit Committee. The Audit Committee, composed entirely of directors who are not officers or employees of Sprint, meets periodically with the internal auditors and independent auditors, both with and without management present, to assure that their respective responsibilities are being fulfilled. The internal and independent auditors have full access to the Audit Committee to discuss auditing and financial reporting matters.

/s/ W. T. Esrey
William T. Esrey
Chairman and Chief Executive Officer

/s/ Arthur B. Krause
Arthur B. Krause
Executive Vice President and Chief Financial Officer

REPORT OF INDEPENDENT AUDITORS

The Board of Directors and Shareholders
Sprint Corporation

We have audited the accompanying consolidated balance sheets of Sprint Corporation (Sprint) as of December 31, 1995 and 1994, and the related consolidated statements of income, cash flows, and common stock and other shareholders' equity for each of the three years in the period ended December 31, 1995. Our audits also included the financial statement schedule listed in the Index to Financial Statements, Financial Statement Schedule and Supplementary Data. These financial statements and the schedule are the responsibility of the management of Sprint. Our responsibility is to express an opinion on these financial statements and the schedule based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Sprint at December 31, 1995 and 1994, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 1995, in conformity with generally accepted accounting principles. Also in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

As discussed in Notes 1 and 2 to the consolidated financial statements, Sprint discontinued accounting for the operations of its local telecommunications division in accordance with Statement of Financial Accounting Standards No. 71, "Accounting for the Effects of Certain Types of Regulation," in 1995. As discussed in Notes 1 and 4 to the consolidated financial statements, Sprint changed its method of accounting for postretirement benefits, postemployment benefits and circuit activity costs in 1993.

ERNST & YOUNG LLP

Kansas City, Missouri
February 14, 1996

CONSOLIDATED STATEMENTS OF INCOME

	For the Years Ended December 31,		
	1995	1994	1993
	(In Millions, Except Per Share Data)		
Net Operating Revenues	$ 12,765.1	$ 11,986.6	$ 10,914.7
Operating Expenses			
Costs of services and products	6,504.9	6,154.5	5,591.9
Selling, general and administrative	2,871.9	2,755.4	2,532.5
Depreciation and amortization	1,466.4	1,386.0	1,283.7
Merger, integration and restructuring costs	87.6	--	292.5
Total operating expenses	10,930.8	10,295.9	9,700.6
Operating Income	1,834.3	1,690.7	1,214.1
Interest expense	(260.7)	(300.7)	(367.0)
Other expense, net	(93.2)	(2.1)	(34.0)
Income from continuing operations before income taxes	1,480.4	1,387.9	813.1
Income tax provision	(534.3)	(488.7)	(296.0)
Income From Continuing Operations	946.1	899.2	517.1
Discontinued operations, net			
Cellular division	14.5	(15.5)	(38.1)
Other	--	7.0	(12.3)
Extraordinary items, net	(565.3)	--	(29.2)
Cumulative effect of changes in accounting principles, net	--	--	(382.6)
Net income	395.3	890.7	54.9
Preferred stock dividends	(2.6)	(2.7)	(2.8)
Earnings applicable to common stock	$ 392.7	$ 888.0	$ 52.1
Earnings Per Common Share			
Continuing operations	$ 2.69	$ 2.57	$ 1.50
Discontinued operations	0.04	(0.02)	(0.15)
Extraordinary items	(1.61)	--	(0.08)
Cumulative effect of changes in accounting principles	--	--	(1.12)
Total	$ 1.12	$ 2.55	$ 0.15
Weighted average number of common shares	350.1	348.7	343.7
Dividends per common share	$ 1.00	$ 1.00	$ 1.00

See accompanying Notes to Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEETS

	As of December 31, 1995	1994
	(In Millions)	
Assets		
Current assets		
Cash and equivalents	$ 124.2	$ 113.7
Accounts receivable, net of allowance for doubtful accounts of $222.5 million ($126.9 million in 1994)	1,523.7	1,387.9
Receivable from cellular division	1,400.0	--
Inventories	171.0	187.5
Deferred income taxes	45.5	54.2
Prepaid expenses	166.6	144.5
Other	188.4	155.4
Total current assets	3,619.4	2,043.2
Investments in equity securities	262.9	177.6
Property, plant and equipment		
Long distance communications services	6,773.7	6,056.3
Local communications services	12,603.1	11,827.4
Other	539.1	498.6
	19,915.9	18,382.3
Less accumulated depreciation	10,200.1	8,123.5
	9,715.8	10,258.8
Investments in affiliates	1,130.1	198.6
Receivable from cellular division	--	1,271.1
Net investment in cellular division	106.9	59.7
Other assets	360.8	538.5
	$ 15,195.9	$ 14,547.5

	As of December 31, 1995	1994
	(In Millions)	
Liabilities and Shareholders' Equity		
Current liabilities		
Current maturities of long-term debt	$ 280.4	$ 332.4
Short-term borrowings	2,144.0	--
Accounts payable	938.9	927.8
Accrued interconnection costs	617.7	527.6
Accrued taxes	235.5	237.9
Other	925.6	817.4
Total current liabilities	5,142.1	2,843.1
Long-term debt	3,253.0	4,604.8
Deferred credits and other liabilities		
Deferred income taxes and investment tax credits	843.4	1,197.5
Postretirement and other benefit obligations	889.3	845.9
Other	393.0	494.3
	2,125.7	2,537.7
Redeemable preferred stock	32.5	37.1
Common stock and other shareholders' equity		
Common stock, par value $2.50 per share, authorized 500.0 million shares, issued 349.2 million (348.6 million in 1994), and outstanding 349.2 million (348.3 million in 1994)	872.9	871.4
Capital in excess of par or stated value	960.0	942.9
Retained earnings	2,766.5	2,730.9
Other	43.2	(20.4)
	4,642.6	4,524.8
	$ 15,195.9	$ 14,547.5

See accompanying Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

Sprint Corporation

	For the Years Ended December 31,		
	1995	1994	1993
	(In Millions)		
Operating Activities			
Net income	$ 395.3	$ 890.7	$ 54.9
Adjustments to reconcile net income to net cash provided by operating activities:			
(Income) Loss from cellular division	(14.5)	15.5	38.1
Extraordinary items	565.3	--	20.4
Cumulative effect of changes in accounting principles	--	--	382.6
Depreciation and amortization	1,466.4	1,386.0	1,283.7
Deferred income taxes and investment tax credits	5.8	53.2	(39.1)
Changes in operating assets and liabilities			
Accounts receivable, net	(135.8)	(226.5)	(166.4)
Inventories and other current assets	(38.6)	(56.1)	(9.9)
Accounts payable and other current liabilities	178.5	120.2	315.3
Noncurrent assets and liabilities, net	124.0	128.5	33.3
Other, net	20.0	34.5	94.9
Net cash provided by continuing operations	2,566.4	2,346.0	2,007.8
Net cash provided by cellular division	162.5	172.9	197.7
Net cash provided by operating activities	2,728.9	2,518.9	2,205.5
Investing Activities			
Capital expenditures	(1,857.3)	(1,751.6)	(1,429.8)
Proceeds from sale of investment in equity securities	--	117.7	--
Investments in affiliates	(948.7)	(74.1)	(31.2)
Other, net	(10.4)	(44.4)	(9.3)
Net cash used by continuing operations	(2,816.4)	(1,752.4)	(1,470.3)
Net cash used by cellular division	(324.6)	(272.4)	(169.9)
Net cash used by investing activities	(3,141.0)	(2,024.8)	(1,640.2)
Financing Activities			
Proceeds from long-term debt	260.7	107.9	840.4
Retirements of long-term debt	(630.0)	(597.0)	(1,589.0)
Net increase in notes payable and commercial paper	1,109.5	321.5	393.5
Proceeds from common stock issued	16.9	42.7	70.8
Proceeds from employee stock purchase installments	38.8	33.1	28.3
Dividends paid	(351.5)	(349.4)	(347.1)
Other, net	(21.8)	(15.7)	(11.5)
Net cash provided (used) by financing activities	422.6	(456.9)	(614.6)
Increase (Decrease) in Cash and Equivalents	10.5	37.2	(49.3)
Cash and Equivalents at Beginning of Year	113.7	76.5	125.8
Cash and Equivalents at End of Year	$ 124.2	$ 113.7	$ 76.5
Supplemental Cash Flows Information			
Cash paid for interest - continuing operations	$ 263.5	$ 320.8	$ 368.2
Cash paid for interest - cellular division	$ 124.0	$ 97.3	$ 85.4
Cash paid for income taxes	$ 532.8	$ 435.1	$ 292.4
Noncash Activities			
Common stock contributed to employee savings plans, at market	$ --	$ 31.0	$ 39.0

See accompanying Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF COMMON STOCK AND OTHER SHAREHOLDERS' EQUITY

For the Years Ended December 31, 1995, 1994 and 1993

	Common Stock	Capital in Excess of Par or Stated Value	Retained Earnings	Other	Total
			(In Millions)		
Balance as of January 1, 1993 (338.9 million shares issued and outstanding)	$ 847.1	$ 717.5	$ 2,451.7	$ (44.7)	$ 3,971.6
Net income	--	--	54.9	--	54.9
Common stock dividends	--	--	(324.5)	--	(324.5)
Preferred stock dividends	--	--	(2.8)	--	(2.8)
Employee stock purchase and other installments received, net	--	--	--	30.8	30.8
Common stock issued	11.0	98.4	--	(2.4)	107.0
Change in unrealized holding gains on investments in equity securities, net	--	--	--	64.8	64.8
Other, net	0.4	11.5	4.9	(0.3)	16.5
Balance as of December 31, 1993 (343.4 million shares issued and outstanding)	858.5	827.4	2,184.2	48.2	3,918.3
Net income	--	--	890.7	--	890.7
Common stock dividends	--	--	(346.7)	--	(346.7)
Preferred stock dividends	--	--	(2.7)	--	(2.7)
Employee stock purchase and other installments received, net	--	--	--	15.0	15.0
Common stock issued	12.8	111.9	--	(53.4)	71.3
Change in unrealized holding gains on investments in equity securities, net	--	--	--	(20.5)	(20.5)
Other, net	0.1	3.6	5.4	(9.7)	(0.6)
Balance as of December 31, 1994 (348.6 million shares issued and 348.3 million shares outstanding)	871.4	942.9	2,730.9	(20.4)	4,524.8
Net income	--	--	395.3	--	395.3
Common stock dividends	--	--	(348.9)	--	(348.9)
Preferred stock dividends	--	--	(2.6)	--	(2.6)
Other installments received, net	--	--	--	3.0	3.0
Common stock issued	1.4	13.5	--	--	14.9
Change in unrealized holding gains on investments in equity securities, net	--	--	--	54.6	54.6
Other, net	0.1	3.6	(8.2)	6.0	1.5
Balance as of December 31, 1995 (349.2 million shares issued and outstanding)	$ 872.9	$ 960.0	$ 2,766.5	$ 43.2	$ 4,642.6

See accompanying Notes to Consolidated Financial Statements.

1. Summary of Significant Accounting Policies

This summary of significant accounting policies of Sprint Corporation is presented to assist in understanding the accompanying consolidated financial statements.

Basis of Consolidation and Presentation

The accompanying consolidated financial statements include the accounts of Sprint Corporation and its wholly-owned and majority-owned subsidiaries (Sprint). Investments in entities in which Sprint does not have a controlling interest are accounted for using the equity method.

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Prior years' financial statements have been restated to reflect Sprint's spin-off of its cellular and wireless communications services division (Cellular) (see Note 3). The operating results, net assets and cash flows of Cellular are separately classified as discontinued operations and are excluded from amounts reported for the continuing operations of Sprint. Intercompany transactions with Cellular and its subsidiaries, which were previously eliminated in consolidation, are now reflected in Sprint's consolidated financial statements.

Certain other amounts previously reported for prior periods have been reclassified to conform to the current period presentation in the accompanying consolidated financial statements. Such reclassifications had no effect on the results of operations or shareholders' equity as previously reported.

In accordance with Statement of Financial Accounting Standards (SFAS) No. 71, "Accounting for the Effects of Certain Types of Regulation," revenues and related net income of nonregulated operations attributable to intercompany transactions with Sprint's regulated telephone companies have not been eliminated in the accompanying consolidated financial statements. Intercompany revenues of such entities amounted to $262 million, $285 million and $225 million in 1995, 1994 and 1993, respectively. In conjunction with the adoption of accounting principles for a competitive marketplace (see Note 2), such intercompany amounts will be eliminated beginning in 1996. All other significant intercompany transactions have been eliminated.

Classification of Operations

The long distance communications services division provides domestic and international voice, video and data communications services. The terms under which the division offers its services to the public are subject to different levels of state and federal regulation, but rates are generally not subject to rate-base regulation.

The local communications services division consists principally of the operations of Sprint's regulated telephone companies. These operations provide local exchange services, access by telephone customers and other carriers to local exchange facilities and long distance services within specified geographical areas.

The product distribution and directory publishing businesses include the wholesale distribution of telecommunications products and the publishing and marketing of white and yellow page telephone directories.

1. Summary of Significant Accounting Policies (continued)

Revenue Recognition

Operating revenues for the long distance and local communications services divisions are recognized as communications services are rendered. Operating revenues for the long distance communications services division are recorded net of an estimate for uncollectible accounts. Operating revenues for Sprint's product distribution business are recognized upon delivery of products to customers.

Cash and Equivalents

Cash equivalents generally include highly liquid investments with original maturities of three months or less and are stated at cost, which approximates market value. As part of its cash management program, Sprint utilizes controlled disbursement banking arrangements. As of December 31, 1995 and 1994, outstanding checks in excess of cash balances of $131 million and $126 million, respectively, are included in accounts payable. Sprint had sufficient funds available to fund these outstanding checks when they were presented for payment.

Investments in Equity Securities

Investments in equity securities are classified as available for sale and are reported at fair value (estimated based on quoted market prices) as of December 31, 1995 and 1994. As of December 31, 1995 and 1994, the cost of such investments was $109 million each year. These investments had gross unrealized holding gains of $154 million and $69 million for 1995 and 1994, respectively, which are reflected as an addition to other shareholders' equity, net of related income taxes.

During 1994, Sprint sold an investment in equity securities, realizing a gain of $35 million.

Inventories

Inventories, consisting principally of those related to Sprint's product distribution business, are stated at the lower of cost (principally first-in, first-out method) or market.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Generally, ordinary asset retirements and disposals are charged against accumulated depreciation with no gain or loss recognized. Repairs and maintenance costs are expensed as incurred.

Effective January 1, 1993, Sprint's long distance communications services division changed its method of accounting for certain costs related to connecting new customers to its network. The change was made to conform Sprint's accounting to the predominant industry practice for such costs. Under the new method, such costs (which were previously capitalized) are being expensed when incurred. The resulting nonrecurring, noncash charge of $32 million ($0.09 per share), net of related income tax benefits, is reflected in the 1993 Consolidated Statement of Income as a cumulative effect of change in accounting principle.

1. Summary of Significant Accounting Policies (continued)

Depreciation

The cost of property, plant and equipment for Sprint's local communications division was generally depreciated on a straight-line composite basis over the lives prescribed by regulatory commissions. In connection with the discontinuation of SFAS No. 71, Sprint will begin recording depreciation expense based on estimated economic useful lives rather than those prescribed by regulatory commissions (see Note 2).

The cost of property, plant and equipment of Sprint's other divisions is depreciated generally on a straight-line basis over the estimated economic useful lives.

Income Taxes

Deferred income taxes are provided for certain temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for tax purposes.

Investment tax credits related to regulated telephone property, plant and equipment have been deferred and are being amortized over the estimated useful lives of the related assets.

Capitalized Interest

Interest costs associated with the construction of capital assets, including interest costs on borrowings incurred to fund Sprint's investment in Sprint Spectrum, are capitalized. Total amounts capitalized during 1995, 1994 and 1993 were $57 million, $8 million and $7 million, respectively.

Earnings Per Share

Earnings per common share amounts are based on the weighted average number of shares both outstanding and issuable assuming exercise of all dilutive options, as applicable. See Note 12 for a discussion of the consummation of the Global One joint venture and the pro forma impact of the related issuance of shares on earnings per share.

2. Adoption of Accounting Principles for a Competitive Marketplace

Effective December 31, 1995, Sprint determined that its local communications services division no longer met the criteria necessary for the continued application of the provisions of SFAS No. 71. As a result of the decision to discontinue the application of SFAS No. 71, Sprint recorded a noncash, extraordinary charge of $565 million, net of income tax benefits of $437 million.

Sprint's determination that it was no longer eligible for the continued application of the accounting required by SFAS No. 71 was based on changes in the regulatory framework, which continues to evolve from rate-base regulation to price regulation and the convergence of competition in the telecommunications industry. Based on these occurrences, Sprint no longer believes that it can be assured that prices will be maintained at levels which will provide for the recovery of specific costs.

2. Adoption of Accounting Principles for a Competitive Marketplace (continued)

The components of the extraordinary charge recognized as a result of the discontinued application of SFAS No. 71 are as follows (in millions):

	Pre-Tax	After-Tax
Increase to the accumulated depreciation balance	$ 979.1	$ 607.9
Recognition of switch software asset	(99.5)	(61.7)
Elimination of other net regulatory assets	123.1	76.3
Total	$ 1,002.7	622.5
Tax-related net regulatory liabilities		(43.9)
Accelerated amortization of investment tax credits		(13.3)
Extraordinary charge		$ 565.3

The adjustment to the accumulated depreciation balance was determined by the completion of depreciation reserve and impairment studies. The depreciation reserve study analyzed, by individual plant asset categories, the impacts of regulator-prescribed depreciable asset lives compared to Sprint's estimated economic lives. The results identified the cumulative under depreciation of certain asset categories. The impairment study, which validated the results of the depreciation study, estimated the impact on future revenues caused by price changes and developing industry competition, and the resulting effects on cash flows.

The following is a summary of the telecommunications plant in service asset balances and corresponding reserve adjustment (in millions).

	Pre-Change				Post-Change
Category of Plant Asset	Plant in Service	Reserve	Net Plant	Reserve Adjustment	Revised Net Plant
Cable	$ 5,006.4	$ 2,553.3	$ 2,453.1	$ 633.4	$ 1,819.7
Circuit	1,699.7	916.8	782.9	118.3	664.6
Switching	2,989.1	1,223.3	1,765.8	143.9	1,621.9
Other	2,441.5	1,070.2	1,371.3	83.5	1,287.8
Total plant	$ 12,136.7	$ 5,763.6	$ 6,373.1	$ 979.1	$ 5,394.0

The following is a summary of lives before and after the discontinued application of SFAS No. 71.

Category of Plant Asset	Pre-Change Composite of Regulator-Approved Asset Lives	Post-Change Estimated Economic Asset Lives
Cable	17 - 43	15 - 20
Circuit	9 - 13	7 - 11
Digital switching	12 - 20	11 - 12

2. Adoption of Accounting Principles for a Competitive Marketplace (continued)

The discontinued application of SFAS No. 71 also required Sprint to eliminate from its consolidated balance sheet the effects of any actions of regulators that had been recognized as assets and liabilities pursuant to SFAS No. 71, but would not have been recognized as assets and liabilities by enterprises in general. The elimination of other net regulatory assets primarily related to deferred postretirement benefit obligations and deferred debt financing costs. Additionally, revenues and related net income of nonregulated operations attributable to transactions with Sprint's regulated local exchange carriers, which were previously not eliminated in the accompanying consolidated financial statements in accordance with SFAS No. 71, will be eliminated beginning in 1996. Intercompany revenues of such entities amounted to $262 million, $285 million and $225 million in 1995, 1994 and 1993, respectively.

The tax-related adjustments were required to adjust deferred income tax amounts to the currently enacted statutory rates and to eliminate tax-related regulatory assets and liabilities. Sprint's local division uses the deferral method of accounting for investment tax credits and amortizes the credits as a reduction to tax expense over the life of the asset that gave rise to the tax credit. Since plant asset lives were shortened, the related investment tax credits were adjusted to reduce the unamortized balance by a corresponding amount.

3. Spin-off of Cellular Division

Due in part to divestiture requirements imposed by the Federal Communications Commission (FCC) with respect to Personal Communications Services (PCS) licenses awarded to Sprint Spectrum, the Sprint board of directors has approved the spin-off of Cellular to the holders of Sprint common stock. Sprint has received a favorable ruling from the Internal Revenue Service regarding the tax-free nature of the spin-off.

The spin-off will be effected by distributing to all holders of Sprint common stock all shares of Cellular common stock at a rate of 1 share of Cellular common stock for every 3 shares of Sprint common stock held. In connection with the closing, Cellular will repay approximately $1.4 billion of intercompany debt owed by Cellular to Sprint and its subsidiaries, and Sprint will contribute to the equity capital of Cellular any debt owed by Cellular in excess of the intercompany debt being repaid.

The net operating results of Cellular have been separately classified as discontinued operations in the Consolidated Statements of Income as summarized below. Interest expense has been allocated to Cellular based on the assumed repayment of intercompany debt to Sprint by Cellular. The operating expenses as presented below do not include Cellular's share of general corporate overhead expenses. These expenses have been reallocated to Sprint's other operating segments. Accordingly, Cellular's results of operations as reflected below may not be indicative of its future operating results once the spin-off is completed. Such expenses were $13 million, $12 million and $12 million for each of the years ended December 31, 1995, 1994 and 1993, respectively.

(in millions)	1995	1994	1993
Net operating revenues	$ 834.4	$ 626.5	$ 410.5
Operating expenses	675.6	529.4	374.0
Operating income	158.8	97.1	36.5
Interest expense	(124.0)	(97.3)	(85.4)
Other income (expense), net	10.9	(5.6)	11.7
Income (Loss) before income taxes	45.7	(5.8)	(37.2)
Income tax provision (benefit)	31.2	9.7	(0.7)
Cumulative effect of change in accounting principle, net	--	--	(1.6)
Income (Loss) from cellular division	$ 14.5	$ (15.5)	$ (38.1)

3. Spin-off of Cellular Division (continued)

The net assets and liabilities of Cellular have been separately classified as net investment in cellular division in the Consolidated Balance Sheets as summarized below (in millions):

	1995	1994
Current assets	$ 153.9	$ 145.9
Noncurrent assets	1,799.0	1,581.7
Advance payable	(1,433.0)	(1,271.1)
Other current liabilities	(166.6)	(212.1)
Noncurrent liabilities	(246.4)	(184.7)
Investment in cellular division	$ 106.9	$ 59.7

4. Employee Benefit Plans

Defined Benefit Pension Plan

Substantially all Sprint employees are covered by a noncontributory defined benefit pension plan. For participants of the plan represented by collective bargaining units, benefits are based upon schedules of defined amounts as negotiated by the respective parties. For participants not covered by collective bargaining agreements, the plan provides pension benefits based upon years of service and participants' compensation.

Sprint's policy is to make contributions to the plan each year equal to an actuarially determined amount consistent with applicable federal tax regulations. The funding objective is to accumulate funds at a relatively stable rate over the participants' working lives so that benefits are fully funded at retirement. As of December 31, 1995, the plan's assets consisted principally of investments in corporate equity securities and U.S. government and corporate debt securities.

The components of the net pension costs (credits) and related weighted average assumptions are as follows (in millions):

	1995	1994	1993
Service cost -- benefits earned during the period	$ 51.8	$ 61.6	$ 58.2
Interest cost on projected benefit obligation	129.7	121.6	103.9
Actual return on plan assets	(472.1)	(1.1)	(241.2)
Net amortization and deferral	287.9	(176.6)	62.5
Net pension cost (credit)	$ (2.7)	$ 5.5	$ (16.6)
Discount rate	8.5%	7.5%	8.0%
Expected long-term rate of return on plan assets	9.5%	9.5%	9.5%
Anticipated composite rate of future increases in compensation	5.0%	4.5%	5.5%

4. Employee Benefit Plans (continued)

The funded status and amounts recognized in the Consolidated Balance Sheets for the plan, as of December 31, are as follows (in millions):

	1995	1994
Actuarial present value of benefit obligations		
Vested benefit obligation	$ (1,705.1)	$ (1,338.1)
Accumulated benefit obligation	$ (1,866.0)	$ (1,459.5)
Projected benefit obligation	$ (1,962.7)	$ (1,547.3)
Plan assets at fair value	2,331.3	1,950.2
Plan assets in excess of the projected benefit obligation	368.6	402.9
Unrecognized net gains	(199.2)	(203.8)
Unrecognized prior service cost	101.3	107.4
Unamortized portion of transition asset	(170.9)	(197.0)
Prepaid pension cost	$ 99.8	$ 109.5

The projected benefit obligations as of December 31, 1995 and 1994 were determined using discount rates of 7.25 percent and 8.5 percent, respectively, and anticipated composite rates of future increases in compensation of 4.25 percent and 5.0 percent, respectively.

Defined Contribution Plans

Sprint sponsors defined contribution employee savings plans covering substantially all employees. Participants may contribute portions of their compensation to the plans. Contributions of participants represented by collective bargaining units are matched by Sprint based upon defined amounts as negotiated by the respective parties. Contributions of participants not covered by collective bargaining agreements are also matched by Sprint. For these participants, Sprint provides matching contributions in common stock equal to 50 percent of participants' contributions up to 6 percent of their compensation and may, at the discretion of the Board of Directors, provide additional matching contributions based upon the performance of Sprint's common stock in comparison to other telecommunications companies. Sprint's matching contributions aggregated $51 million, $47 million and $49 million in 1995, 1994 and 1993, respectively.

Postretirement Benefits

Sprint sponsors postretirement benefit (principally health care benefits) arrangements covering substantially all employees. Employees who retired before specified dates are eligible for these benefits at no cost or a reduced cost. Employees retiring after specified dates are eligible for these benefits on a shared cost basis. Sprint funds the accrued costs as benefits are paid.

Effective January 1, 1993, Sprint changed or modified its method of accounting for postretirement benefits by adopting SFAS No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions." The resulting nonrecurring, noncash charge of $339 million ($1.00 per share), net of related income tax benefits, is reflected in the 1993 Consolidated Statement of Income as a cumulative effect of change in accounting principle.

4. Employee Benefit Plans (continued)

The components of the net postretirement benefits cost are as follows (in millions):

	1995	1994	1993
Service cost -- benefits earned during the period	$ 22.2	$ 23.2	$ 21.7
Interest on accumulated benefit obligation	58.7	53.2	56.3
Net amortization and deferral	(9.4)	(1.9)	--
Net postretirement benefits cost	$ 71.5	$ 74.5	$ 78.0

For measurement purposes, a weighted average annual health care cost trend rate of 12 percent was assumed for 1995, gradually decreasing to 6 percent by 2001 and remaining constant thereafter. The effect of a 1 percent increase in the assumed trend rates would have increased the 1995 net postretirement benefits cost by approximately $14 million. The discount rates for 1995, 1994 and 1993 were 8.5 percent, 7.5 percent and 8.0 percent, respectively.

The amounts recognized in the Consolidated Balance Sheets, as of December 31, are as follows (in millions):

	1995	1994
Accumulated postretirement benefits obligation		
Retirees	$ 312.4	$ 298.8
Active plan participants -- fully eligible	118.3	130.4
Active plan participants -- other	328.6	244.5
	759.3	673.7
Unrecognized prior service benefit	5.6	5.9
Unrecognized net gains	115.3	154.1
Accrued postretirement benefits cost	$ 880.2	$ 833.7

The accumulated benefits obligations as of December 31, 1995 and 1994 were determined using discount rates of 7.25 percent and 8.5 percent, respectively. A weighted average annual health care trend rate of 9.6 percent was assumed for 1996, gradually decreasing to 5 percent by 2001 and remaining constant thereafter. The effect of a 1 percent annual increase in the assumed health care cost trend rates would have increased the accumulated benefits obligation as of December 31, 1995 by approximately $100 million.

Postemployment Benefits

Effective January 1, 1993, Sprint adopted SFAS No. 112, "Employers' Accounting for Postemployment Benefits." Upon adoption, Sprint recognized certain previously unrecorded obligations for benefits being provided to former or inactive employees and their dependents after employment, but before retirement. The resulting nonrecurring, noncash charge of $11 million ($0.03 per share), net of related income tax benefits, is reflected in the 1993 Consolidated Statement of Income as a cumulative effect of change in accounting principle. Such postemployment benefits offered by Sprint include severance, disability and workers compensation benefits, including the continuation of other benefits such as health care and life insurance coverage.

5. Income Taxes

The components of the income tax provisions allocated to continuing operations are as follows (in millions):

	1995	1994	1993
Current income tax provision			
Federal	$ 437.4	$ 355.7	$ 283.8
State	91.1	79.8	51.3
	528.5	435.5	335.1
Deferred income tax provision (benefit)			
Federal	45.9	81.6	11.8
State	(23.6)	(6.4)	(26.2)
Amortization of deferred investment tax credits	(16.5)	(22.0)	(24.7)
	5.8	53.2	(39.1)
Total income tax provision	$ 534.3	$ 488.7	$ 296.0

On August 10, 1993, the Revenue Reconciliation Act of 1993 was enacted which, among other changes, raised the federal income tax rate for corporations to 35 percent from 34 percent, retroactive to January 1, 1993. Accordingly, Sprint adjusted its deferred income tax assets and liabilities to reflect the revised rate. The resulting adjustment related to Sprint's nonregulated subsidiaries increased the 1993 deferred income tax provision by $11 million ($0.03 per share). Adjustments to the net deferred income tax liabilities associated with the regulated telephone companies were generally recorded as reductions to regulatory liabilities and have been subsequently eliminated in connection with Sprint's discontinued application of SFAS No. 71 (see Note 2).

The differences which cause the effective income tax rate to vary from the statutory federal income tax rate of 35 percent in 1995, 1994 and 1993 are as follows (in millions):

	1995	1994	1993
Income tax provision at the statutory rate	$ 518.1	$ 485.8	$ 284.6
Less investment tax credits included in income	16.5	22.0	24.7
Expected federal income tax provision after investment tax credits	501.6	463.8	259.9
Effect of			
State income taxes, net of federal income tax effect	43.9	47.7	16.3
Differences required to be flowed through by regulatory commissions	4.9	4.8	6.0
Reversal of rate differentials	(8.6)	(9.7)	(13.0)
Merger related costs	--	--	18.0
Other, net	(7.5)	(17.9)	8.8
Income tax provision, including investment tax credits	$ 534.3	$ 488.7	$ 296.0
Effective income tax rate	36.1%	35.2%	36.4%

5. Income Taxes (continued)

The income tax provisions (benefits) allocated to other items are as follows (in millions):

	1995	1994	1993
Discontinued operations:			
Cellular division	$ 31.2	$ 9.7	$ (0.7)
Other	--	(9.0)	(6.6)
Extraordinary loss on discontinuance of SFAS No. 71	(437.4)	--	--
Extraordinary losses on early extinguishments of debt	--	--	(20.3)
Cumulative effect of changes in accounting principles			
Postretirement benefits	--	--	(216.0)
Postemployment benefits	--	--	(6.6)
Circuit activity costs	--	--	(21.5)
Unrealized holding gains on investments in equity securities (recorded directly to shareholders' equity)	30.7	(11.6)	36.5
Stock ownership, purchase and options arrangements (recorded directly to shareholders' equity)	(7.5)	(8.1)	(10.6)

Deferred income taxes are provided for the temporary differences between the carrying amounts of Sprint's assets and liabilities for financial statement purposes and their tax bases. The sources of the differences that give rise to the deferred income tax assets and liabilities as of December 31, 1995 and 1994, along with the income tax effect of each, are as follows (in millions):

	1995 Deferred Income Tax		1994 Deferred Income Tax	
	Assets	Liabilities	Assets	Liabilities
Property, plant and equipment	$ --	$ 1,276.7	$ --	$ 1,525.3
Postretirement and other benefits	347.0	--	298.0	--
Alternative minimum tax credit carryforwards	8.6	--	93.0	--
Operating loss carryforwards	26.9	--	45.8	--
Integration and restructuring costs	32.7	--	12.2	--
Revenue reserves	33.3	--	33.4	--
Other, net	69.8	--	--	5.3
	518.3	1,276.7	482.4	1,530.6
Less valuation allowance	17.4	--	21.1	--
Total	$ 500.9	$ 1,276.7	$ 461.3	$ 1,530.6

During 1995, 1994 and 1993, the valuation allowance related to deferred income tax assets decreased $4 million, $1 million and $7 million, respectively.

As of December 31, 1995, Sprint has available, for income tax purposes, $9 million of alternative minimum tax credit carryforwards to offset regular income tax payable in future years, and tax benefits of $27 million associated with state operating loss carryforwards. The loss carryforwards expire in varying amounts annually from 1996 through 2010.

6. Borrowings

Long-term debt, as of December 31, is as follows (in millions):

	Maturing	1995	1994
Corporate			
Senior notes			
9.45%	1995	$ --	$ 50.0
9.88%	1995	--	80.0
10.45%	1996	100.0	200.0
9.19% to 9.60%	1998	43.0	43.0
8.25% (1)	2000	138.4	--
8.13% to 9.80%	2000 to 2003	632.3	632.3
Debentures			
9.25%	2022	200.0	200.0
Notes payable and commercial paper, classified as long-term debt	1995	--	934.0
Long Distance Communications Services			
Vendor financing agreements			
6.19% to 10.17%	1996 to 1999	177.6	223.1
Local Communications Services			
First mortgage bonds			
2.00% to 9.37%	1996 to 2000	342.9	355.3
6.25% to 7.88%	2001 to 2005	510.7	511.5
4.00% to 9.79%	2006 to 2010	151.9	151.9
6.88% to 7.46%	2011 to 2015	90.0	90.0
8.77% to 9.68%	2016 to 2020	278.5	279.1
7.13% to 9.89%	2021 to 2025	193.0	123.5
Debentures and notes			
2.00% to 9.61%	1996 to 2016	415.6	424.0
Notes payable and commercial paper, classified as long-term debt	1996	42.8	143.4
Other			
2.00% to 19.45%	1996 to 2009	9.8	20.0
Other			
Senior notes			
9.88%	1995	--	250.0
Debentures			
9.00%	2019	150.0	150.0
Other			
5.39% to 12.50%	1996 to 1999	56.9	76.1
		3,533.4	4,937.2
Less current maturities		280.4	332.4
Long-term debt		$ 3,253.0	$ 4,604.8

(1) Notes are exchangeable for 4.4 million shares of Southern New England Telecommunications Corporation common stock owned by Sprint and included in investments in equity securities at December 31, 1995.

6. Borrowings (continued)

Long-term debt maturities during each of the next five years are as follows (in millions):

1996	$ 280.4
1997	123.0
1998	160.9
1999	28.9
2000	682.9

Property, plant and equipment with an aggregate cost of approximately $11.2 billion is either pledged as security for first mortgage bonds and certain notes or is restricted for use as mortgaged property.

Notes payable and commercial paper outstanding and related weighted average interest rates, as of December 31, are as follows (in millions):

	1995	1994
Bank notes, 5.90% (5.85% in 1994)	$ 1,551.8	$ 263.0
Master Trust notes (6.33% in 1994)	--	248.7
Commercial paper, 6.31% (5.08% in 1994)	635.0	565.7
Total notes payable and commercial paper	$ 2,186.8	$ 1,077.4

As of December 31, 1995, $2.1 billion of notes payable and commercial paper was classified as short-term borrowings. As of December 31, 1995 and 1994, $43 million and $1.1 billion, respectively, of notes payable and commercial paper were classified as long-term debt. Such classifications were based on Sprint's ability and intent to refinance such borrowings on a long-term basis.

The bank notes are renewable at various dates throughout the year. Sprint pays a fee to certain commercial banks to support current and future credit requirements based upon loan commitments. Lines of credit may be withdrawn by the banks if there is a material adverse change in Sprint's financial condition.

At December 31, 1995, Sprint had aggregate credit arrangements which provided $2.8 billion. Of the $2.2 billion of notes payable and commercial paper outstanding at December 31, 1995, $2.0 billion had been specifically borrowed under such credit arrangements, resulting in $790 million of availability.

Sprint is in compliance with all restrictive or financial covenants relating to its debt arrangements at December 31, 1995.

During 1993, Sprint redeemed or called for redemption prior to scheduled maturities $1.3 billion of first mortgage bonds, senior notes and debentures. Excluding amounts deferred by the rate-regulated telephone companies as required by certain regulatory commissions, the prepayment penalties incurred in connection with early extinguishments of debt and the write-off of related debt issuance costs aggregated $29 million, net of related income tax benefits, and is reflected as an extraordinary loss in the Consolidated Statements of Income.

7. Redeemable Preferred Stock

Sprint has 20 million authorized shares and subsidiaries have approximately 5 million authorized shares of preferred stock, including nonredeemable preferred stock. The redeemable preferred stock outstanding, as of December 31, is as follows (in millions):

	1995	1994
Third series -- stated value $100 per share, shares - 184,000 in 1995 and 196,000 in 1994, nonparticipating, nonvoting, cumulative 7.75% annual dividend rate	$ 18.4	$ 19.6
Fifth series -- stated value $100,000 per share, shares - 95 in 1995 and 1994, voting, cumulative 6% annual dividend rate	9.5	9.5
Subsidiaries -- stated value ranging from $10 to $100 per share, shares - 110,675 in 1995 and 364,345 in 1994, annual dividend rates ranging from 4.7% to 5.0%	4.6	8.0
Total redeemable preferred stock	$ 32.5	$ 37.1

Sprint's third series preferred stock was called in January 1996. In March 1996, 24,000 shares will be redeemed at a price of $100.00 per share and the remaining shares will be redeemed at a price of $101.77 per share.

Sprint's fifth series preferred stock must be redeemed in full in 2003. If less than full dividends have been paid for four consecutive dividend periods or if the total amount of dividends in arrears exceeds an amount equal to the dividend payment for six dividend periods, the holders of the fifth series preferred stock are entitled to elect a majority of directors standing for election until all arrears in dividend payments have been paid.

8. Common Stock

Common stock activity during 1995 and shares reserved for future grants under stock option plans or for future issuances under various arrangements are as follows (in millions):

	Number of Shares	
	1995 Activity	Reserved as of December 31, 1995
Employees Stock Purchase Plan	0.1	7.1
Employee savings plans	--	3.4
Automatic Dividend Reinvestment Plan	--	1.1
Officer and key employees' and directors' stock options	0.4	16.9
Conversion of preferred stock and other	0.1	1.3
Total	0.6	29.8

As of December 31, 1995, elections to purchase 2 million of Sprint's common shares were outstanding under the 1994 offering of the Employees Stock Purchase Plan (ESPP). The purchase price under the offering cannot exceed $32.35 per share, such price representing 85 percent of the average market price on the offering date, or fall below $12.00 per share. The 1994 offering terminates on June 30, 1996. Upon the spin-off of Cellular, the number of shares underlying elections by non-Cellular employees and the related per share purchase price will be adjusted to maintain both the aggregate fair market value of stock underlying the elections and the relationship between the per share purchase price

8. Common Stock (continued)

and the related per share market value. At the option of Cellular employees, elections made by Cellular employees are expected to be terminated under the terms and conditions of Sprint's ESPP, or to be replaced by elections to purchase shares of the common stock of Cellular. As of December 31, 1995, Cellular employees held elections to purchase approximately 58,000 shares of Sprint common stock under the ESPP.

Under various stock option plans, shares of common stock are reserved for issuance to officers, outside directors and certain employees. All options are granted at 100 percent of the market price at date of grant. Approximately 1 percent of all options outstanding as of December 31, 1995 provide for the granting of stock appreciation rights as an alternate method of settlement upon exercise. A summary of stock option activity under the plans is as follows (in millions, except per share data):

	Number of Shares	Per Share Exercise Price		Aggregate Exercise Amount
		Low	High	
Shares under option as of January 1, 1993 (5.5 million shares exercisable)	7.5	$ 9.44	$ 39.31	$ 170.2
Granted	1.6	27.50	38.44	50.3
Exercised				
Options without stock appreciation rights	(2.1)	9.44	33.75	(41.0)
Options with stock appreciation rights	(0.3)	11.09	29.68	(5.5)
Terminated and expired	(0.1)	18.16	33.75	(3.2)
Shares under option as of December 31, 1993 (4.5 million shares exercisable)	6.6	9.44	39.31	170.8
Granted	2.8	30.81	39.50	100.3
Exercised				
Options without stock appreciation rights	(0.8)	9.44	33.75	(17.4)
Options with stock appreciation rights	(0.2)	11.09	29.68	(3.8)
Terminated and expired	(0.6)	22.13	36.69	(16.7)
Shares under option as of December 31, 1994 (3.7 million shares exercisable)	7.8	11.09	39.50	233.2
Granted	3.3	28.69	40.75	97.8
Exercised				
Options without stock appreciation rights	(0.6)	11.09	36.69	(13.9)
Options with stock appreciation rights	(0.1)	11.09	29.68	(1.1)
Terminated and expired	(0.4)	14.03	39.31	(14.3)
Shares under option as of December 31, 1995 (5.3 million shares exercisable)	10.0	$ 14.03	$ 40.75	$ 301.7

Upon the spin-off of Cellular, the number of shares underlying options held by non-Cellular employees and the related per share purchase price will be adjusted to maintain both the aggregate fair market value of stock underlying the options and the relationship between the per share purchase price and the related per share market value. Options held by Cellular employees are expected to be converted into options to purchase shares of Cellular common stock. As of December 31, 1995, Cellular employees held options to purchase approximately 320,000 shares of Sprint common stock.

8. Common Stock (continued)

During 1990, the Savings Plan Trust, an employee savings plan, acquired shares of common stock from Sprint in exchange for a $75 million promissory note payable to Sprint. The note bears an interest rate of 9 percent and is to be repaid from the common stock dividends received by the plan and the contributions made to the plan by Sprint in accordance with plan provisions. The remaining balance of the note receivable of $55 million as of December 31, 1995 is reflected as a reduction to other shareholders' equity. At December 31, 1995 the Savings Plan Trust held approximately 18 million shares of Sprint common stock.

Under a Shareholder Rights plan, one-half of a Preferred Stock Purchase Right is attached to each share of common stock. Each Right, which is exercisable and detachable only upon the occurrence of certain takeover events, entitles shareholders to buy units consisting of one one-hundredth of a newly issued share of Preferred Stock-Fourth Series, Junior Participating at a price of $235.00 per unit or, in certain circumstances, common stock. Under certain circumstances, Rights beneficially owned by an acquiring person become null and void. Sprint's Preferred Stock-Fourth Series is without par value. It is voting, cumulative and accrues dividends equal generally to the greater of $10.00 per share or 200 times the aggregate per share amount of all common stock dividends. No shares of Preferred Stock-Fourth Series were issued or outstanding at December 31, 1995. The Rights may be redeemed by Sprint at a price of $0.01 per Right and will expire on September 8, 1999.

During 1995, 1994 and 1993, Sprint declared and paid annual dividends on common stock of $1.00 per share, and Centel declared pre-merger (see Note 10) common stock dividends of $0.15 per share during 1993. The most restrictive covenant applicable to dividends on common stock results from the $1.5 billion revolving credit agreement. Among other restrictions, this agreement requires Sprint to maintain specified levels of consolidated net worth, as defined. As a result of this requirement, $1.9 billion of Sprint's $2.8 billion consolidated retained earnings were effectively restricted from the payment of dividends as of December 31, 1995. The indentures and financing agreements of certain of Sprint's subsidiaries contain various provisions restricting the payment of cash dividends on subsidiary common stock held by Sprint. In connection with these restrictions, $192 million of the related subsidiaries' $653 million total retained earnings is restricted as of December 31, 1995. The flow of cash in the form of advances from the subsidiaries to Sprint is generally not restricted.

9. Commitments and Contingencies

Litigation, Claims and Assessments

Following announcement in 1992 of Sprint's merger agreement with Centel (see Note 10), class action suits were filed against Centel and certain of its officers and directors in federal and state courts. The state suits have been dismissed, while the federal suits have been consolidated into a single action which seeks damages for alleged violations of securities laws. On October 12, 1995, the New York trial court granted the motion of Centel's financial advisors to dismiss a purported class action suit filed against them in connection with their representation of Centel in the merger. The plaintiffs have appealed from the order dismissing their claims. Sprint may have indemnification obligations to the financial advisors in connection with this suit. Various other suits arising in the ordinary course of business are pending against Sprint. Management cannot predict the ultimate outcome of these actions but believes they will not result in a material effect on Sprint's consolidated financial statements.

Accounts Receivable Sold with Recourse

Under an agreement available through December 1996, Sprint could sell on a continuous basis, with recourse, up to $600 million of undivided interests in a designated pool of its accounts receivable. Subsequent collections of receivables sold to investors were typically reinvested in the pool. Sprint was required to repurchase the designated pool of accounts receivable only upon the occurrence of specified events involving non-collectibility of accounts. As of December 31, 1995, Sprint had not been required to

9. Commitments and Contingencies (continued)

repurchase receivables under this recourse provision. Because Sprint retained credit losses associated with its accounts receivable, any exposure related to this retention was estimated in conjunction with Sprint's calculation of its reserve for uncollectible accounts. Receivables sold that remained uncollected as of December 31, 1995 and 1994 aggregated $600 million. In January 1996, Sprint elected to terminate this agreement.

Commitments

See "Liquidity and Capital Resources" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" for a discussion of cash commitments associated with Sprint Spectrum.

Operating Leases

Minimum rental commitments as of December 31, 1995 for all noncancelable operating leases, consisting principally of leases for data processing equipment and real estate, are as follows (in millions):

1996	$ 237.4
1997	186.4
1998	137.7
1999	108.6
2000	76.8
Thereafter	270.7

Gross rental expense aggregated $402 million in 1995, $379 million in 1994 and $382 million in 1993. The amount of rental commitments applicable to subleases, contingent rentals and executory costs is not significant.

10. Sprint / Centel Merger

Effective March 9, 1993, Sprint consummated its merger with Centel, a telecommunications company with local exchange and cellular and wireless communications services operations. Pursuant to the merger agreement dated May 27, 1992, Sprint issued 1.37 shares of its common stock in exchange for each outstanding share of Centel common stock, or approximately 119 million shares. The transaction costs associated with the merger (consisting primarily of investment banking and legal fees) and the expenses of integrating and restructuring the operations of the two companies (consisting primarily of employee severance and relocation expenses and costs of eliminating duplicative facilities) resulted in nonrecurring charges of $259 million, which reduced 1993 income from continuing operations by $172 million ($0.50 per share). The merger was accounted for as a pooling of interests.

11. Additional Financial Information

Segment Information

Information related to Sprint's operating business segments is included in the tables in "Segmental Results of Operations" of "Management's Discussion and Analysis of Financial Condition and Results of Operations." The net operating revenues and operating expenses shown in such tables include revenues and expenses eliminated in consolidation totaling $ 380 million, $340 million and $296 million for the years ended December 31, 1995, 1994 and 1993, respectively. Sprint incurred capital expenditures of $37 million, $57 million and $46 million for the years ended December 31, 1995, 1994 and 1993, respectively, and had assets, including the net assets of the discontinued cellular division, of $2.9 billion, $1.8 billion and $1.8 billion at December 31, 1995, 1994 and 1993, respectively, not attributable to operating segments. Additionally, Sprint incurred $54 million of merger, integration and restructuring costs not attributable to its segmental operations for the year ended December 31, 1993.

Realignment and Restructuring Charge

During 1995, Sprint initiated a realignment and restructuring of its local communications services division, including the elimination of approximately 1,600 positions primarily in the network and finance functions. These actions resulted in a nonrecurring charge of $88 million, which reduced income from continuing operations by $55 million ($0.16 per share). The accrued liability associated with this charge specifically relates to the benefits that affected employees will receive upon termination.

During 1993, Sprint initiated a realignment and restructuring of its long distance communications services division, including the elimination of approximately 1,000 positions and the closure of two facilities. These actions resulted in a nonrecurring charge of $34 million, which reduced income from continuing operations by $21 million ($0.06 per share).

Concentrations of Credit Risk

Sprint's accounts receivable are not subject to any concentration of credit risk. Interest rate swap agreements and foreign currency contracts involve the risk of dealing with counterparties and their ability to meet the terms of the contracts. Notional principal amounts often are used to express the volume of these transactions, but the amounts subject to credit risk are significantly smaller. In the event of nonperformance by the counterparties, Sprint's accounting loss would be limited to the net amount that it would be entitled to receive under the terms of the applicable interest rate swap agreement or foreign currency contract. However, Sprint does not anticipate nonperformance by any of the counterparties with which it has such agreements. Sprint controls the amount of credit risk as well as the concentration of credit risk of its interest rate swap agreements and foreign currency contracts through credit approvals, dollar exposure limits and internal monitoring procedures.

11. Additional Financial Information (continued)

Financial Instruments

Sprint estimates the fair value of its financial instruments using available market information and appropriate valuation methodologies. Accordingly, the estimates presented herein are not necessarily indicative of the values Sprint could realize in a current market exchange. Although management is not aware of any factors that would affect the estimated fair value amounts presented as of December 31, 1995, such amounts have not been comprehensively revalued for purposes of these financial statements since that date and, therefore, estimates of fair value subsequent to that date may differ significantly from the amounts presented herein. The carrying amounts and estimated fair values of Sprint's financial instruments, as of December 31, are as follows (in millions):

	1995		1994	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
Financial assets				
Cash and cash equivalents	$ 124.2	$ 124.2	$ 113.7	$ 113.7
Investments in equity securities	262.9	262.9	177.6	177.6
Financial liabilities				
Short-term borrowings	2,144.0	2,144.0	--	--
Long-term debt				
Corporate	1,113.7	1,282.9	2,139.3	2,170.5
Long distance communications services	177.6	184.5	223.1	222.1
Local communications services	2,035.2	2,237.5	2,098.7	1,966.4
Other	206.9	242.8	476.1	488.2
Off-balance sheet instruments				
Interest rate swap agreements	--	(3.4)	--	2.6
Foreign currency contracts	0.5	0.4	--	(0.4)

The carrying values of Sprint's cash equivalents approximate fair value as of December 31, 1995 and 1994. The fair value of Sprint's investments in equity securities are estimated by reference to quoted market prices. The fair values of Sprint's long-term debt are estimated based on quoted market prices for publicly traded issues, and the present value of estimated future cash flows using a discount rate commensurate with the risks involved for all other issues. The fair value of interest rate swap agreements is estimated as the cost that Sprint would receive (pay) to terminate the swap agreements at December 31, 1995 and 1994, taking into account the then-current interest rates. The fair value of foreign currency contracts is estimated as the replacement cost of the contracts at December 31, 1995 and 1994, taking into account the then-current foreign currency exchange rates.

Interest Rate Swap Agreements

Interest rate swap agreements are utilized by Sprint as part of its interest rate risk management program. Net interest paid or received related to such agreements is recorded using the accrual method and is recorded as an adjustment to interest expense. Sprint had interest rate swap agreements with notional amounts of $275 million and $125 million outstanding at December 31, 1995 and 1994, respectively. Net interest (income) expense related to interest rate swap agreements was ($400,000), $1 million and $2 million for the years ended December 31, 1995, 1994 and 1993, respectively. There were no deferred gains or losses relating to any terminated interest rate swap agreements at December 31, 1995, 1994 and 1993.

11. Additional Financial Information (continued)

Foreign Currency Contracts

As part of its foreign currency exchange risk management program, Sprint purchases and sells over-the-counter forward contracts and options in various foreign currencies. Sprint had outstanding approximately $13 million of open forward contracts to buy various foreign currencies at both December 31, 1995 and 1994. Sprint had no outstanding open forward contracts to sell various foreign currencies at December 31, 1995 and $1 million outstanding at December 31, 1994. Sprint had approximately $24 million of outstanding open purchase option contracts to call various foreign currencies at December 31, 1995. The premium paid for an option is amortized over the life of the option. The unamortized premiums paid for options outstanding at December 31, 1995 were $300,000. There were no foreign currency option contracts outstanding at December 31, 1994. The forward contracts open at December 31, 1995 all had an original maturity of six months or less. The net gain or loss recorded to reflect the fair value of such contracts is recorded in the period incurred. Total net losses of $1 million, $2 million and $1 million were recorded related to foreign currency transactions and contracts for the years ended December 31, 1995, 1994 and 1993, respectively.

At December 31, 1995, 1994 and 1993, Sprint had foreign currency translation gains (losses) of ($10) million, $1 million and $2 million, respectively, included in "Other, net" in the Consolidated Statements of Common Stock and Other Shareholders' Equity.

12. Subsequent Event

On January 31, 1996, Sprint, along with Deutsche Telekom (DT) and France Telecom (FT), consummated their joint venture, operating as Global One, which will provide seamless global telecommunications services to business, consumer and carrier markets worldwide. Upon closing of the agreement, DT and FT acquired shares of a new class of preference stock for a total of $3.0 billion, which resulted in DT and FT each holding approximately 7.5 percent of the Sprint voting power. DT and FT will make the remainder of their investment in Sprint following the spin-off of Cellular. Following their full investment, DT and FT will each own shares of Class A common stock with approximately 10 percent of Sprint's voting power. Depending on the price of Cellular shares at the time of the spin-off, the total amount of the investment is expected to be between $3.5 billion and $3.7 billion.

Assuming the $3.0 billion of proceeds from the issuance of the Class A preference stock was initially used to the extent possible to repay debt outstanding at December 31, 1995, and such issuance and repayment is assumed to have taken place as of January 1, 1995, Sprint's earnings per share from continuing operations would have decreased from $2.69 per share to $2.52 per share for the year ended December 31, 1995.

SPRINT CORPORATION
SCHEDULE II – CONSOLIDATED VALUATION AND QUALIFYING ACCOUNTS
Years Ended December 31, 1995, 1994 and 1993
(In Millions)

	Balance beginning of year	Additions: Charged to income	Additions: Charged to other accounts	Other deductions	Balance end of year
1995					
Allowance for doubtful accounts	$ 126.9	$ 415.3	$ 7.0	$ (326.7) (1)	$ 222.5
Valuation allowance - deferred income tax assets	$ 21.1	$ 4.3	--	$ (8.0)	$ 17.4
1994					
Allowance for doubtful accounts	$ 120.3	$ 299.9	$ 4.5	$ (297.8) (1)	$ 126.9
Valuation allowance - deferred income tax assets	$ 22.1	$ 2.2	--	$ (3.2)	$ 21.1
1993					
Allowance for doubtful accounts	$ 116.7	$ 263.7	$ 2.6	$ (262.7) (1)	$ 120.3
Valuation allowance - deferred income tax assets	$ 28.7	$ 0.7	--	$ (7.3)	$ 22.1

(1) Accounts written off, net of recoveries.

QUARTERLY FINANCIAL DATA

(Unaudited)

	First Quarter		Second Quarter		Third Quarter	
	1995 (1)	1994 (1)	1995 (1)	1994 (1)	1995 (1)	1994 (1)
	(In Millions, Except Per Share Data)					
Net operating revenues	$ 3,079.1	$ 2,896.5	$ 3,142.1	$ 2,984.7	$ 3,205.3	$ 3,054.6
Operating expenses						
Costs of services and products	1,581.6	1,488.5	1,606.7	1,525.0	1,623.7	1,563.4
Selling, general and administrative	694.7	665.4	714.1	687.5	715.9	711.8
Depreciation and amortization	360.0	329.6	359.5	343.8	368.6	344.2
Merger, integration and restructuring costs (2)	--	--	--	--	--	--
Total operating expenses	2,636.3	2,483.5	2,680.3	2,556.3	2,708.2	2,619.4
Operating income	442.8	413.0	461.8	428.4	497.1	435.2
Interest expense	(68.2)	(81.1)	(69.0)	(76.2)	(64.7)	(73.3)
Other income (expense), net (3)	(20.5)	30.6	(13.9)	(9.2)	(20.3)	(5.8)
Income from continuing operations before income taxes	354.1	362.5	378.9	343.0	412.1	356.1
Income tax provision	(129.4)	(128.4)	(135.7)	(123.6)	(148.5)	(127.9)
Income from continuing operations	224.7	234.1	243.2	219.4	263.6	228.2
Discontinued operations, net						
Cellular division	(0.4)	(6.7)	2.5	0.2	4.9	1.9
Other	--	--	--	--	--	--
Extraordinary items, net (4)	--	--	--	--	--	--
Net income (loss)	224.3	227.4	245.7	219.6	268.5	230.1
Preferred stock dividends	(0.7)	(0.7)	(0.6)	(0.7)	(0.6)	(0.6)
Earnings (Loss) applicable to common stock	$ 223.6	$ 226.7	$ 245.1	$ 218.9	$ 267.9	$ 229.5
Earnings (Loss) per common share						
Continuing operations	$ 0.64	$ 0.67	$ 0.69	$ 0.63	$ 0.75	$ 0.65
Discontinued operations	--	(0.02)	0.01	--	0.01	0.01
Extraordinary items	--	--	--	--	--	--
Total	$ 0.64	$ 0.65	$ 0.70	$ 0.63	$ 0.76	$ 0.66

(1) The accompanying Quarterly Financial Data have been restated from previously reported amounts to reflect the spin-off of Sprint's cellular and wireless division (Cellular) to shareholders of Sprint common stock. Accordingly, Cellular's operating results have been excluded from income from continuing operations and are reported as discontinued operations.

(2) During fourth quarter 1995, nonrecurring charges of $88 million were recorded related to a restructuring within the local communications division. Such charges reduced net income by $55 million ($0.16 per share). See Note 11 of Notes to Consolidated Financial Statements for additional information.

(3) During first quarter 1994, Sprint sold an investment in equity securities, realizing a gain of $35 million, which increased net income by $22 million ($0.06 per share).

(4) During fourth quarter 1995, Sprint adopted accounting principles for a competitive marketplace for its local communications division and discontinued the application of SFAS No. 71. As a result, Sprint recorded a noncash, after-tax extraordinary charge of $565 million ($1.61 per share). See Note 2 of Notes to Consolidated Financial Statements for additional information.

Fourth Quarter		Total Year	
1995	1994 (1)	1995	1994 (1)
$ 3,338.6	$ 3,050.8	$ 12,765.1	$ 11,986.6
1,692.9	1,577.6	6,504.9	6,154.5
747.2	690.7	2,871.9	2,755.4
378.3	368.4	1,466.4	1,386.0
87.6	--	87.6	--
2,906.0	2,636.7	10,930.8	10,295.9
432.6	414.1	1,834.3	1,690.7
(58.8)	(70.1)	(260.7)	(300.7)
(38.5)	(17.7)	(93.2)	(2.1)
335.3	326.3	1,480.4	1,387.9
(120.7)	(108.8)	(534.3)	(488.7)
214.6	217.5	946.1	899.2
7.5	(10.9)	14.5	(15.5)
--	7.0	--	7.0
(565.3)	--	(565.3)	--
(343.2)	213.6	395.3	890.7
(0.7)	(0.7)	(2.6)	(2.7)
$ (343.9)	$ 212.9	$ 392.7	$ 888.0
$ 0.61	$ 0.62	$ 2.69	$ 2.57
0.02	(0.01)	0.04	(0.02)
(1.61)	--	(1.61)	--
$ (0.98)	$ 0.61	$ 1.12	$ 2.55

EXHIBIT (11)

SPRINT CORPORATION
COMPUTATION OF EARNINGS PER COMMON SHARE
(In Millions, Except Per Share Data)

	For the Years Ended December 31,		
	1995	1994	1993
PRIMARY EARNINGS PER SHARE			
Income from continuing operations	$ 946.1	$ 899.2	$ 517.1
Preferred stock dividends	(2.6)	(2.7)	(2.8)
	943.5	896.5	514.3
Discontinued operations, net	14.5	(8.5)	(50.4)
Extraordinary items	(565.3)	--	(29.2)
Cumulative effect of changes in accounting principles, net	--	--	(382.6)
Earnings applicable to common stock	$ 392.7	$ 888.0	$ 52.1
Weighted average number of common shares (1)	350.1	348.7	343.7
Primary earnings per share			
Continuing operations	$ 2.69	$ 2.57	$ 1.50
Discontinued operations	0.04	(0.02)	(0.15)
Extraordinary items	(1.61)	--	(0.08)
Cumulative effect of changes in accounting principles	--	--	(1.12)
Total	$ 1.12	$ 2.55	$ 0.15
FULLY DILUTED EARNINGS PER SHARE			
Income from continuing operations, net of preferred stock dividends	$ 943.5	$ 896.5	$ 514.3
Convertible preferred stock dividends	0.5	0.6	0.6
	944.0	897.1	514.9
Discontinued operations, net	14.5	(8.5)	(50.4)
Extraordinary items	(565.3)	--	(29.2)
Cumulative effect of changes in accounting principles, net	--	--	(382.6)
Earnings as adjusted for purposes of computing fully diluted earnings per share	$ 393.2	$ 888.6	$ 52.7
Weighted average number of common shares	350.1	348.7	343.7
Additional dilution for common stock equivalents and dilutive securities	2.7	1.3	2.0
Total	352.8	350.0	345.7
Fully diluted earnings per share			
Continuing operations	$ 2.68	$ 2.56	$ 1.49
Discontinued operations	0.04	(0.02)	(0.15)
Extraordinary item	(1.61)	--	(0.08)
Cumulative effects of changes in accounting principles	--	--	(1.11)
Total	$ 1.11	$ 2.54	$ 0.15

(1) Weighted average number of common shares outstanding has been adjusted for dilutive common stock equivalents using the treasury stock method.

EXHIBIT (12)

SPRINT CORPORATION
COMPUTATION OF RATIO OF
EARNINGS TO FIXED CHARGES

(In Millions)

	1995	1994	1993	1992	1991
Earnings					
Income from continuing operations	$ 946.1	$ 899.2	$ 517.1	$ 550.6	$ 530.8
Capitalized interest	(57.0)	(7.5)	(7.3)	(10.4)	(14.2)
Income tax provision	534.3	488.7	296.0	292.1	257.2
Subtotal	1,423.4	1,380.4	805.8	832.3	773.8
Fixed charges					
Interest charges	317.7	308.2	374.3	434.8	461.8
Interest factor of operating rents	120.1	111.5	117.4	113.2	102.7
Pre-tax cost of preferred stock dividends of subsidiaries	0.7	0.9	1.6	2.1	2.4
Total fixed charges	438.5	420.6	493.3	550.1	566.9
Earnings, as adjusted	$ 1,861.9	$ 1,801.0	$ 1,299.1	$ 1,382.4	$ 1,340.7
Ratio of earnings to fixed charges	4.25 (1)	4.28	2.63 (2)	2.51	2.36

(1) Earnings as computed for the ratio of earnings to fixed charges includes the nonrecurring restructuring costs of $88 million recorded in 1995. In the absence of these nonrecurring costs, the ratio of earnings to fixed charges would have been 4.45 for 1995.

(2) Earnings as computed for the ratio of earnings to fixed charges includes the nonrecurring merger, integration and restructuring costs of $293 million recorded in 1993. In the absence of these nonrecurring costs, the ratios of earnings to fixed charges would have been 3.23 for 1993.

NOTE : The above ratios have been computed by dividing fixed charges into the sum of (a) income from continuing operations less capitalized interest included in income, (b) income taxes, and (c) fixed charges. Fixed charges consist of interest on all indebtedness (including amortization of debt issuance expenses), the interest component of operating rents and the pre-tax cost of preferred stock dividends of subsidiaries.

EXHIBIT (21)

SPRINT CORPORATION
SUBSIDIARIES OF REGISTRANT

Sprint Corporation is the parent. The subsidiaries of Sprint Corporation are as follows:

Name	Jurisdiction of Incorporation or Organization	*Ownership* Interest Held By Its Immediate Parent
Carolina Telephone and Telegraph Company	North Carolina	100
Subsidiaries:		
Carolina Telephone Long Distance, Inc.	North Carolina	100
SC One Company	Kansas	100
Centel Corporation	Kansas	100
Subsidiaries:		
Centel Capital Corporation	Delaware	100
Centel Cellular Company of Mexico	Delaware	100
Subsidiary:		
Telefonia Celular del Norte, S.A. de C.V.	Mexico	20
Centel Credit Company	Delaware	100
Centel Directory Company	Delaware	100
Subsidiary:		
The CenDon Partnership	Illinois Partnership	50
Centel-Texas, Inc.	Texas	100
Subsidiary:		
Central Telephone Company of Texas	Texas	100
Central Telephone Company	Delaware	94[1]
Subsidiaries:		
Central Telephone Company of Florida	Florida	100
Central Telephone Company of Illinois	Illinois	100
Central Telephone Company of Virginia	Virginia	100
New Centel Communications Company	Delaware	100
C FON Corporation	Delaware	100
DirectoriesAmerica, Inc.	Kansas	100
Subsidiary:		
Sprint Publishing & Advertising, Inc.	Kansas	100
Florida Telephone Corporation	Florida	100
Subsidiaries:		
Sprint Metropolitan Networks, Inc.	Florida	100
Sprint Payphone Services, Inc.	Florida	100
Vista-United Telecommunications	Florida	49

[1] Centel Corporation owns all of the common stock.

SUBSIDIARIES OF REGISTRANT (continued)

Name	Jurisdiction of Incorporation or Organization	Ownership Interest Held By Its Immediate Parent
Sprint Corporation Subsidiaries (continued)		
LD Corporation	Kansas	100
North Supply Company	Ohio	100
Subsidiaries:		
Northstar Transportation, Inc.	Kansas	100
North Supply Company of Lenexa	Delaware	100
North Supply International, Ltd.	Kansas	100
NSC Advertising, Inc.	Kansas	100
Sprint Products Group, Inc.	Kansas	100
S FON Corporation	Delaware	100
Sprint Asian American, Inc.	Kansas	100
Subsidiary:		
Asian American Communications, L.L.C.	Kansas	25
Sprint Capital Corporation	Delaware	100
Sprint Healthcare Systems, Inc.	Kansas	100
Sprint Mid-Atlantic Telecom, Inc.	North Carolina	100
Sprint/United Management Company	Kansas	100
UCOM, Inc.	Missouri	100
Subsidiaries:		
Sprint Communications Company L.P.	Delaware Partnership	34
Subsidiaries:		
Asian American Communications, L.L.C.	Kansas	24
Sprint Communications Company of New Hampshire, Inc.	New Hampshire	100
Sprint Communications Company of Virginia	Virginia	100
Sprint Licensing, Inc.	Kansas	100
USST of Texas, Inc.	Texas	100
Sprint Enterprises, L.P.	Delaware Partnership	32
Subsidiaries:		
Sprint Spectrum Holding Company, L.P.	Delaware Partnership	40
Subsidiaries:		
Sprint Spectrum L.P.	Delaware Partnership	99[2]
Subsidiary:		
WirelessCo, L.P.	Delaware Partnership	99[3]
Subsidiary:		
America PCS, L.P.	Delaware	49
NewTelco, L.P.	Delaware Partnership	99[2]

[2] Sprint Spectrum Holding Company, L.P. holds the general partnership interest of greater than 99 percent.

[3] Sprint Spectrum L.P. holds the general partnership interest of greater than 99 percent.

SUBSIDIARIES OF REGISTRANT (continued)

Name	Jurisdiction of Incorporation or Organization	Ownership Interest Held By Its Immediate Parent
Sprint Enterprises, L.P. Subsidiaries (Continued)		
MinorCo, L.P.	Delaware Partnership	40
Subsidiaries:		
Sprint Spectrum L.P.	Delaware Partnership	[4]
NewTelco, L.P.	Delaware Partnership	[4]
WirelessCo, L.P.	Delaware Partnership	[4]
PhillieCo, L.P.	Delaware Partnership	47
Sprint Global Venture, Inc.	Kansas	[5]
Subsidiaries:		
Global One Communications Europe, L.L.C.	Delaware	33
Global One Communications GBN Holding, Ltd.	Ireland	50
Global One Communications Holding, B.V.	Netherlands	33
Global One Communications, L.L.C.	Delaware	50
Global One Communications Operations, Ltd.	Ireland	33
Global One Communications Service, B.V.	Netherlands	33
Global One Communications World Holding, B.V.	Netherlands	50
Global One Communications World Operations, Ltd.	Ireland	50
Global One Communications World Service, B.V.	Netherlands	50
UC PhoneCo, Inc.	Kansas	100
Subsidiary:		
Sprint Enterprises, L.P.	Delaware Partnership	17
United Telephone Company of the Carolinas	South Carolina	100
Subsidiaries:		
SC Two Company	Kansas	100
United Telephone Long Distance, Inc.	South Carolina	100
United Telephone Company of Eastern Kansas	Delaware	100
Subsidiary:		
Sprint/United Midwest Management Services Company	Kansas	20
Subsidiary:		
United Teleservices, Inc.	Kansas	100
United Telephone Company of Florida	Florida	100
Subsidiaries:		
United Telephone Communications Systems, Incorporated	Florida	100
United Telephone Long Distance, Incorporated	Florida	100

[4] MinorCo, L.P. holds a limited and preferred partnership interest of less than 1 percent.
[5] UCOM, Inc., US Telecom, Inc., and Utelcom, Inc. each holds less than 1 percent of the common stock.

SUBSIDIARIES OF REGISTRANT (continued)

Name	Jurisdiction of Incorporation or Organization	Ownership Interest Held By Its Immediate Parent
Sprint Corporation Subsidiaries (continued)		
United Telephone Company of Indiana, Inc.	Indiana	100
Subsidiary:		
SC Four Company	Kansas	100
United Telephone Company of Kansas	Kansas	100
Subsidiary:		
Sprint/United Midwest Management Services Company	Kansas	80
United Telephone Company of Minnesota	Minnesota	100
United Telephone Company of Missouri	Missouri	100
Subsidiary:		
SC Eight Company	Kansas	100
United Telephone Company of New Jersey, Inc.	New Jersey	100
United Telephone Company of the Northwest	Oregon	100
United Telephone Company of Ohio	Ohio	100
Subsidiaries:		
SC Five Company	Kansas	100
United Telephone Communications Services of Ohio, Inc.	Ohio	100
United Telephone Long Distance, Inc.	Ohio	100
Subsidiary:		
Sprint Alarm Monitoring Services, Inc.	Ohio	100
United Telephone Long Distance of Indiana, Inc.	Indiana	100
United Telephone Company of Pennsylvania, The	Pennsylvania	100
Subsidiaries:		
Joint Underground Locating Services, Inc.	Pennsylvania	100
SC Six Company	Kansas	100
United Telephone Long Distance, Inc.	Pennsylvania	100
Valley Network Partnership	Virginia Partnership	20
United Telephone Company of Southcentral Kansas	Arkansas	100
United Telephone Company of Texas, Inc.	Texas	100
Subsidiary:		
SC Seven Company	Kansas	50
United Telephone Company of the West	Delaware	100
United Telephone-Southeast, Inc.	Virginia	100
Subsidiaries:		
SC Three Company	Kansas	100
United Telephone Long Distance, Inc.	Tennessee	100
UTLD, Inc.	Virginia	100
Valley Network Partnership	Virginia Partnership	20

SUBSIDIARIES OF REGISTRANT (continued)

Name	Jurisdiction of Incorporation or Organization	Ownership Interest Held By Its Immediate Parent
Sprint Corporation Subsidiaries (continued)		
US Telecom, Inc.	Kansas	100
Subsidiaries:		
ASC Telecom, Inc.	Kansas	100
LCF, Inc.	California	100
SC Seven Company	Kansas	50
Sprint Communications Company L.P.	Delaware Partnership	59
Sprint Enterprises, L.P.	Delaware Partnership	33
Sprint Global Venture, Inc.	Kansas	[5]
Sprint Iridium, Inc.	Kansas	100
Subsidiary:		
Iridium U.S., L.P.	Delaware Partnership	27
United Telecommunications, Inc.	Delaware	100
US Telecom of New Hampshire, Inc.	New Hampshire	100
UST PhoneCo, Inc.	Kansas	100
Subsidiary:		
Sprint Enterprises, L.P.	Delaware Partnership	18
Utelcom, Inc.	Kansas	100
Subsidiaries:		
Private TransAtlantic Telecommunications System, Inc.	Delaware	100
Subsidiary:		
Private Trans-Atlantic Telecommunications System (N.J.), Inc.	New Jersey	100
Sprint Communications Company L.P.	Delaware Partnership	5
Sprint Global Venture, Inc.	Kansas	[5]
Sprint International Incorporated	Delaware	100
Subsidiaries:		
Consortium Communications International, Inc.	New York	100
Sprint FON Inc.	Delaware	100
Sprint Global Venture, Inc.	Kansas	86
Sprint International Caribe, Inc.	Puerto Rico	100
Sprint International Communications Corporation	Delaware	100
Subsidiaries:		
Sprint Communications Company L.P.	Delaware Partnership	2
Sprint Global Venture, Inc.	Kansas	13
Sprint International France S.A.	France	100
Sprint Telecommunications France Inc.	Delaware	100
Sprint Telecommunications Services GmbH	Germany	100

[5] UCOM, Inc., US Telecom, Inc., and Utelcom, Inc. each holds less than 1 percent of the common stock.

EXHIBIT (23)

SPRINT CORPORATION
CONSENT OF INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statements (Form S-3, No. 33-34567; Form S-3, No. 33-48689; Form S-3, No. 33-58488; Form S-3, No. 33-59996; Form S-3, No. 33-64564; Form S-8, No. 33-35173; Form S-8, No. 33-44255; Form S-8, No. 33-38761; Form S-8, No. 33-21662; Form S-8, No. 33-28544; Form S-8, No. 33-31802; Form S-8, No. 2-97322; Form S-8, No. 33-50421; Form S-8, No. 2-71704; Form S-8, No. 2-62061; Form S-8, No. 33-59316; Form S-8, No. 33-59318; Form S-8, No. 33-59322; Form S-8, No. 33-59324; Form S-8, No. 33-59326; Form S-8, No. 33-59328; Form S-8, No. 33-53695; Form S-8, No. 33-57785; Form S-8, No. 33-57911; Form S-8, No. 33-59349; Form S-8, No. 33-65147; and Form S-8, No. 33-65149) of Sprint Corporation and in the related Prospectuses of our report dated February 14, 1996, with respect to the consolidated financial statements and schedule of Sprint Corporation included in this Annual Report (Form 10-K) for the year ended December 31, 1995.

/s/ERNST & YOUNG LLP
ERNST & YOUNG LLP

Kansas City, Missouri
March 7, 1996

TRS Customer Contact Summary
~ FLORIDA ~
MONTH YEAR

		CRS			
		CRS	AM	CS	
COMMENDATIONS					TOTALS
	Agent				0
	Service				0
	TOTAL	0	0	0	0
POLICY COMPLAINTS					
#00	Everything Relayed				0
#01	Problem Answer Machine				0
#02	Feelings Not Described				0
#03	Request Service Block				0
#04	Miscellaneous				0
SCOPE OF SERVICE COMPLAINTS					
#10	No 900 Number				0
#11	Limited LD Service				0
#12	Miscellaneous				0
MISC COMPLAINTS					
#20	Rates				0
#21	Improper Agent Protocol				0
#22	Typing Speed/Accuracy				0
#23	Answer Wait Time				0
#24	Line Disconnected				0
#25	Trouble Linking Up				0
	TOTAL	0	0	0	0
OTHER CALLS					
#30	Instructions (Explain Service)				0
#31	Send Information				0
#32	General Information				0
#33	Billing Question				0
#34	Purchase TDD				0
#35	Referred to LEC				0
#36	Wanted Sprint Cust Svc				0
#37	Employment Inquiry				0
#38	Computer Setting				0
#39	Other				0
	TOTAL	0	0	0	0
NON STATE REPORTED					
#40	Rate				0
#41	Request Relay Number				0
#42	Charged for Local Call				0
	TOTAL	0	0	0	0
	TOTAL CONTACT	0	0	0	0

CRS Contacts received from Relay
AM Contacts received from Account Manager
CS No contacts per Customer Service

REPORT: SGACB710
SPRINT

TELECOMMUNICATIONS RELAY SERVICE
OUTBOUND AVERAGE LENGTH OF CALL BY HOUR - FL

TRS DATE: 00-00-00

MTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TOTAL
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

REPORT: SGACB670
SPRINT

TELECOMMUNICATIONS RELAY SERVICE
DAILY OUTBOUND CALL PROFILE BY HOUR - FL

TRS DATE:00-00-00

MTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REPORT: SGACB680-3
SPRINT

TELECOMMUNICATIONS RELAY SERVICE
DELAYED CALL PROFILE REPORT - FL
TOTAL CALLS OFFERED - MONTH YEAR

TRS DATE: 00-00-00

ANSWER SECONDS	0	5	10	15	20	25	30	40	50	60	90	120	180	180+	TOTAL
CALLS HANDLED															
CALLS ABANDONED															
CALLS OFFERED															

THIS REPORT REFLECTS THE CALLERS TOLERANCE TO BEING HELD IN QUEUE, I.E.,
HOW LONG THEY WILL HOLD FOR AN OPERATOR TO ANSWER BEFORE THEY ABANDON THEIR CALL.

TELECOMMUNICATIONS RELAY SERVICE
DELAYED CALL PROFILE REPORT - FL
TOTAL CALLS OFFERED - MONTH YEAR

MTH	0	5	10	15	20	25	30	40	50	60	90	120	180	180+	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ATTACHMENT A

REPORT: SGACB680-2
SPRINT

TELECOMMUNICATIONS RELAY SERVICE
DELAYED CALL PROFILE REPORT - FL
TOTAL CALLS ABANDONED - MONTH YEAR

TRS DATE: 00-00-00

MTH	0	5	10	15	20	25	30	40	50	60	90	120	180	180+	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ATTACHMENT B

TELECOMMUNICATION RELAY SERVICES
MINUTES OF SERVICE -FL
MONTH, YEAR

DATE	INBOUND CALLS	MTD INBOUND CALLS	AVERAGE TALK TIME SECONDS	AVERAGE TALK TIME MINUTES	TOTAL ASSISTANT MINUTES
00-XXX-00	0	0	0	00:00	00:00

SPRINT TELECOMMUNICATIONS RELAY SERVICES (TRS)
BY STATE, 800 NUMBER AND DATE

STATE = NOONUM = 800

DATE	ATTEMPTS	COMPLETED	BLOCKED	BUSY HOUR	BUSY HOUR ATTEMPTS	BUSY HOUR COMPLETED	BUSY HOUR BLOCKED	GOS
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
00/00/00	0	0	0	0	0	0	0	0.00
NOONUM	0	0	0	0	0	0	0	0.00

REPORT: SGACB175-4
SPRINT

TELECOMMUNICATIONS RELAY SERVICE
CALL PROFILE NUMBER OF CALLS FOR FL

TRS DATE: 00-00-00

DATE	0 TO 5 MINUTES	5+ TO 10 MINUTES	10+ TO 20 MINUTES	20+ TO 30 MINUTES	30+ TO 40 MINUTES	40+ TO 50 MINUTES	50+ TO 60 MINUTES	60+ MINUTES	TOTALS
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
00/00/00	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

CENTER RELAY SERVICE RESULTS SUMMARY
MONTH, YEAR

DATE		12M - 6A				6A - 12N				12N - 6P				6P - 12M				Total Day			
		NCH	ATT	SVL	ASA	NCH	ATT	SVL	ASA	NCH	ATT	SVL	ASA	NCH	ATT	SVL	ASA	NCH	ATT	SVL	ASA
1	Sat																				
2	Sun																				
3	Mon																				
4	Tue																				
5	Wed																				
6	Thu																				
7	Fri																				
8	Sat																				
9	Sun																				
10	Mon																				
11	Tue																				
12	Wed																				
13	Thu																				
14	Fri																				
15	Sat																				
16	Sun																				
17	Mon																				
18	Tue																				
19	Wed																				
20	Thu																				
21	Fri																				
22	Sat																				
23	Sun																				
24	Mon																				
25	Tue																				
26	Wed																				
27	Thu																				
28	Fri																				
29	Sat																				
30	Sun																				
31	Mon																				
TOTAL																					

TELECOMMUNICATIONS RELAY SERVICES
INTRA/INTER DIRECTORY ASSISTANCE FL

MONTH	INTRASTATE	CONVERSATION	SESSION	INTERSTATE	CONVERSATION	SESSION	OTHER	CONVERSATION	SESSION
00-00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00

REPORT: SGACB700-1
SPRINT SERVICES

TELECOMMUNICATIONS RELAY SERVICE
CALL DETAIL REPORT - FL
INBOUND CALLS - MONTH YEAR

TRS DATE: 00-00-00

MTH	CA NCH	CA ATT	MD NCH	MD ATT	MO NCH	MO ATT	NC NCH	NC ATT	NM NCH	NM ATT	SD NCH	SD ATT	TX NCH	TX ATT	LB NCH	LB ATT	FR NCH	FR ATT	TOTAL NCH	TOTAL ATT
1	0	000			0	000					0	000							0	000
2	0	000			0	000					0	000							0	000
3	0	000			0	000					0	000							0	000
4	0	000			0	000					0	000							0	000
5	0	000			0	000					0	000							0	000
6	0	000			0	000					0	000							0	000
7	0	000			0	000					0	000							0	000
8	0	000			0	000					0	000							0	000
9	0	000			0	000					0	000							0	000
10	0	000			0	000					0	000							0	000
11	0	000			0	000					0	000							0	000
12	0	000			0	000					0	000							0	000
13	0	000			0	000					0	000							0	000
14	0	000			0	000					0	000							0	000
15	0	000			0	000					0	000							0	000
16	0	000			0	000					0	000							0	000
17	0	000			0	000					0	000							0	000
18	0	000			0	000					0	000							0	000
19	0	000			0	000					0	000							0	000
20	0	000			0	000					0	000							0	000
21	0	000			0	000					0	000							0	000
22	0	000			0	000					0	000							0	000
23	0	000			0	000					0	000							0	000
24	0	000			0	000					0	000							0	000
25	0	000			0	000					0	000							0	000
26	0	000			0	000					0	000							0	000
27	0	000			0	000					0	000							0	000
28	0	000			0	000					0	000							0	000
29	0	000			0	000					0	000							0	000
30	0	000			0	000					0	000							0	000
31	0	000			0	000					0	000							0	000
TOTAL	0	000			0	000					0	000							0	000

		CYCLE				MTD			
		TOTAL CONVERSATIONS	USAGE MINUTES	TOTAL CONVERSATIONS	ASSISTANT MINUTES	TOTAL CONVERSATIONS	USAGE MINUTES	TOTAL CONVERSATIONS	ASSISTANT MINUTES
INPUT RECORD (THIS CYCLE):	LOCAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTRA-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	INTER-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	NO-OUT-DIAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTERNATL	0	00:00	0	00:00	0	00:00	0	00:00
	MARINE	0	00:00	0	00:00	0	00:00	0	00:00
		0	00:00	0	00:00	0	00:00	0	00:00
(CURR SUSP):	LOCAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTRA-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	INTER-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	NO-OUT-DIAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTERNATL	0	00:00	0	00:00	0	00:00	0	00:00
	MARINE	0	00:00	0	00:00	0	00:00	0	00:00
		0	00:00	0	00:00	0	00:00	0	00:00
		0	00:00	0	00:00	0	00:00	0	00:00
SUSPENSE (THIS CYCLE):	LOCAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTRA-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	INTER-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	NO-OUT-DIAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTERNATL	0	00:00	0	00:00	0	00:00	0	00:00
	MARINE	0	00:00	0	00:00	0	00:00	0	00:00
		0	00:00	0	00:00	0	00:00	0	00:00
(CURR SUSP) (- RECYCLE):	LOCAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTRA-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	INTER-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	NO-OUT-DIAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTERNATL	0	00:00	0	00:00	0	00:00	0	00:00
	MARINE	0	00:00	0	00:00	0	00:00	0	00:00
		0	00:00	0	00:00	0	00:00	0	00:00
RECS DROPPED:	LOCAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTRA-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	INTER-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	NO-OUT-DIAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTERNATL	0	00:00	0	00:00	0	00:00	0	00:00
	MARINE	0	00:00	0	00:00	0	00:00	0	00:00
		0	00:00	0	00:00	0	00:00	0	00:00
		0	00:00	0	00:00	0	00:00	0	00:00
BILLABLE (THIS CYCLE):	LOCAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTRA-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	INTER-STATE	0	00:00	0	00:00	0	00:00	0	00:00
	NO-OUT-DIAL	0	00:00	0	00:00	0	00:00	0	00:00
	INTERNATL	0	00:00	0	00:00	0	00:00	0	00:00
	MARINE	0	00:00	0	00:00	0	00:00	0	00:00
		0	00:00	0	00:00	0	00:00	0	00:00

Number of Communication Assistants on Duty by Hour of Day and Day of Week

(Primary Center)

Date: Month Year

	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
800	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1800	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon
Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TELECOMMUNICATIONS RELAY SERVICE
INBOUND MTD INFORMATION FOR FL

NPA	TOTAL USAGE	AGENT WORK TIME	TOTAL INBOUND	TOTAL OUTBOUND	TOTAL COMPLETED
000	00:00	00:00	0	0	0

REPORT: SGACB300
SPRINT

TELECOMMUNICATIONS RELAY SERVICE
INBOUND SPECIFIC INFORMATION - FL

TRS DATE: 00-00-00

DATE	TOTAL CONVERSATION MINUTES	TOTAL SESSION MINUTES	TOTAL INBOUND	TOTAL TT CALLS	TOTAL TT MINUTES	TOTAL ASCII CALLS	TOTAL ASCII MINUTES	TOTAL VOICE CALLS	TOTAL VOICE MINUTES	TOTAL VCO CALLS	TOTAL VCO MINUTES	TOTAL HCO CALLS	TOTAL HCO MINUTES
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
00-00-00	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
MTD TOTALS	0:00	0:00	0	0	0:00	0	0:00	0	0:00	0	0:00	0	0:00
% of Total				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	

Number of Inbound Calls That Are General Assistance: 0

						********** TERMINATING ANSWER TYPE **********				
DATE	TOTAL CONVERSATION MINUTES	TOTAL SESSION MINUTES	TOTAL OUTBOUND	TOTAL COMPLETED	TOTAL INCOMPLETE	TOTAL TT	TOTAL ASCII	TOTAL VOICE	TOTAL VCO	TOTAL HCO
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
00-00-00	0:00	0:00	0	0	0	0	0	0	0	0
MTD TOTALS	0:00	0:00	0	0	0	0	0	0	0	0
% of Total						#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

REPORT: SGACB310-2
SPRINT

TELECOMMUNICATIONS RELAY SERVICE
COMPLETED OUTBOUND SPECIFIC INFORMATION - FL

TRS DATE: 00-00-00

DATE	TOTAL OUTBOUND	TOTAL COMPLETED	TOTAL INCOMPLETE	COMPLETED CALL ORIGINATING ANSWER TYPE: TOTAL TT CALLS	TOTAL TT AVG LGTH	TOTAL ASCII CALLS	TOTAL ASCII AVG LGTH	TOTAL VOICE CALLS	TOTAL VOICE AVG LGTH	TOTAL VCO CALLS	TOTAL VCO AVG LGTH	TOTAL HCO CALLS	TOTAL HCO AVG LGTH
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
00-00-00	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
MTD TOTALS	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
% of Total				#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	

TELECOMMUNICATIONS RELAY SERVICE
OUTBOUND CALL TYPE - FL

DATE	LOCAL	******INTRASTATE****** INTRALATA	INTERLATA	INTERSTATE	INTERNATL	TOLL FREE	DIRECTORY ASSISTANCE	OUTBOUND TOTAL	CARRIER OF CHOICE
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
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00-XXX-00	0	0	0	0	0	0	0	0	0
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00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
00-XXX-00	0	0	0	0	0	0	0	0	0
MTD TOTALS	0	0	0	0	0	0	0	0	0
% of Total	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Florida Weighted ASA: 0.0 ***Requirement:*** **% within 10 seconds**

Mth Year Date	Alburquerque			Austin			Baltimore			Charlotte			Independence			Lubbock			Sacramento			Sioux Falls			Minnesota			Total Call Secs	Total Calls	Daily ASA	MTD ASA
	Calls	ASA	Call Secs	Calls	ASA	Call Secs	Calls	ASA	Call Secs	Calls	ASA	Call Secs	Calls	ASA	Call Secs	Calls	ASA	Call Secs	Calls	ASA	Call Secs	Calls	ASA	Call Secs	Calls	ASA	Call Secs				
1																															
2																															
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Florida Weighted Service Level: % **Requirement:** % within 10 seconds

MM Year Date	Albuquerque Calls	Albuquerque SVL	Albuquerque SVL Pts	Austin Calls	Austin SVL	Austin SVL Pts	Baltimore Calls	Baltimore SVL	Baltimore SVL Pts	Charlotte Calls	Charlotte SVL	Charlotte SVL Pts	Independence Calls	Independence SVL	Independence SVL Pts	Lubbock Calls	Lubbock SVL	Lubbock SVL Pts	Sacramento Calls	Sacramento SVL	Sacramento SVL Pts	Sioux Falls Calls	Sioux Falls SVL	Sioux Falls SVL Pts	Minnesota Calls	Minnesota SVL	Minnesota SVL Pts	Total SVL Pts	Total Calls	Daily SVL	MTD SVL
1																															
2																															
3																															
4																															
5																															
6																															
7																															
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SAMPLE

AGREEMENT

FOR

RELAY AMBASSADOR PROGRAM OUTREACH

THIS AGREEMENT is made and entered into between _____with offices at _____ ("Subcontractor " hereinafter) and Sprint Communications Company Limited Partnership of Delaware, with offices at 13221 Woodland Park Road, Herndon, VA 22071 (Sprint hereinafter).

WHEREAS, Sprint wishes to engage the services of the Subcontractor in a field in which the Subcontractor has an expertise and the Subcontractor is willing to render such services for Sprint as hereinafter specified.

NOW THEREFORE, in consideration of the mutual covenants herein contained, the parties hereto agree as follows:

1. **SCOPE OF WORK**
Subcontractor shall render professional services to Sprint to perform Relay Ambassador Outreach Services in accordance with the requirements specified in the Scope of Work ("SOW"), Exhibit A, attached as part of this Agreement.

2. **DELIVERABLES/SCHEDULE**
Subcontractor must deliver quarterly reports, documenting the outreach efforts for Maryland Relay. Reports must be submitted May 30th, August 30th, November 30th, and February 30th. Subcontractor must submit 2 copies of each report, one copy to each of the Points of Contact, listed below in Article No. 4. Communications.

3. **PERIOD OF PERFORMANCE**
The period of performance of this Agreement shall begin on _____ and end on _____. Sprint and Subcontractor may extend the period of performance by mutual agreement.

4. **COMMUNICATIONS**
All contractual communications relating to this Agreement shall be identified by Contract Number and communicated by registered mail, telex, facsimile or cable to the following addresses:

_____
_____
_____
_____

Subcontractor's point of contact with Sprint with respect to the Relay Ambassador Outreach services to be provided hereunder is:

_____
_____
_____
_____

5. INVOICES

5.1 Subcontractor shall substantiate invoices and maintain appropriate time and expense record pertaining to the services performed under this Agreement. Subcontractors invoices shall be itemized on a form acceptable to Sprint and must be accompanied supporting documentation. All expenses in excess of $15.00 must be supported by credit card receipts. Invoices shall be submitted in accordance with Exhibit B, Fee Schedule.

Subcontractor's invoice(s) for services shall be rendered in triplicate on a monthly basis and shall include the subcontract number and shall be submitted to:

Submitted To:
Sprint Communications Company
901 East 104th Street
Kansas City, Missouri 64131
Attn: Accounts Payable

Copy To:
Sprint Communications Company
13221 Woodland Park
Herndon, Virginia 22071
Attn: Manager Government Subcontracts

Copy To:
_____
_____
_____
_____

6. PAYMENT

6.1 The payments payable under this Agreement include all local, state, or federal sales, use, excise, personal property, or other similar taxes or duties.

6.2 Subcontractor shall make time and expense records available for examination and audit by Sprint or a mutually acceptable accounting firm until the expiration of three (3) years after final payment hereunder.

6.3 Payment of Subcontractor's invoices will be made by Sprint within thirty (30) days after receipt of a valid invoice.

7. PERSONNEL

7.1 Subcontractor shall identify all personnel who will be performing the Relay Ambassador Outreach services. Personnel shall be approved in advance by Sprint. Subcontractor shall submit resumes of personnel if requested by Sprint.

It is recognized by the parties that following individuals employed by Subcontractor are key individuals:

_____
_____
_____

Subcontractor may not remove or replace any key individuals from the performance of this Agreement without the prior express written consent of Sprint. Any change of key personnel without the consent of Sprint shall be considered a material breach of this Agreement, and may be grounds for termination under Paragraph 12.

7.2 Subcontractor guarantees and agrees that no Subcontractor Employee shall be assigned to provide services to Sprint for more than 1,000 hours within any one (1) calendar year or

within a consecutive twelve (12)-month period beginning with the first day Subcontractor Employee provides services to Sprint; nor shall any Subcontractor Employee provide such services in excess of that number of hours. Subcontractor agrees to notify Sprint in writing when any Subcontractor Employee has performed 900 hours of service for Sprint. Subcontractor agrees to indemnify, defend, save and hold Sprint harmless from any and all claims of any nature or kind and demands by any person, government or agency as a result of Subcontractor's failure to comply with this, or any other provisions of this agreement.

8. PROPRIETARY INFORMATION

8.1 Subcontractor acknowledges that information concerning or related to the research, design, development, manufacture, and sale of Sprint products and services, the general business operation of Sprint (e.g., sales, costs, profits, pricing methods, organizations, customer lists, processes, equipment, etc.), are proprietary to Sprint and will be kept in strictest confidence by consultant. Additionally, the findings, reports, inventions, discoveries, developments and improvements disclosed to Subcontractor by Sprint or those written, invented, made, or conceived by Subcontractor under this Agreement is of a confidential and secret character and of great value to Sprint. The Subcontractor agrees to regard and preserve as confidential for a period of five (5) years all of the above information and any other confidential information pertaining to Sprint's business obtained by Subcontractor from whatever source during the term of this Agreement..

8.2 Any data or other material furnished by Sprint for use by Subcontractor in connection with the services performed under this Agreement shall remain the sole property of Sprint and will be held in confidence by Subcontractor in accordance with Paragraph 9.1. Such materials and all copies thereof will be returned to Sprint as required or upon termination of this Agreement.

8.3 Subcontractor agrees not to make any reproductions of any material supplied by Sprint without Sprint's prior written consent.

8.4 Notwithstanding provision 11 hereof, this Paragraph 8 shall survive the expiration or early termination of this Agreement.

8.5 Prior to the receipt or potential development of Proprietary Information, as determined by Sprint, by Subcontractor under the terms of this Agreement, Sprint may require signed Proprietary Information Agreements from Subcontractor's employees, agents and/or subcontractors.

9. OWNERSHIP

Any equipment items purchased by the Subcontractor from funds authorized by this Agreement, specifically for the performance of work under this agreement, shall become the property of the State of Texas, Public Utilities Commission and shall be relinquished to the State of Texas, Public Utilities Commission upon expiration or termination of this Agreement.

10. DISCOVERIES INVENTIONS, DEVELOPMENTS, AND IMPROVEMENTS

Reports, inventions, discoveries, developments, and improvements written, invented, made, or conceived by Subcontractor in the course of or arising out of or suggested by the services to be performed hereunder (hereafter "Inventions") shall become and remain the sole and exclusive property of Sprint. Subcontractor shall have no right to resell, publish, license or otherwise transfer or disseminate the information collected and reported hereunder.

Subcontractor shall promptly notify Sprint in writing of all Inventions so conceived or made by Subcontractor. Subcontractor hereby transfers and assigns to Sprint all rights, title, and interest in and to the same whether or not patent or copyright applications are filed thereon. Upon request, and at the expense of Sprint, Subcontractor will from time to time during and after the Term of this Agreement make applications upon such Invention through attorneys and representatives designated by Sprint for Letters Patent or Copyrights in the United States and in all other countries and shall assign such applications to Sprint. Subcontractor will give Sprint, Sprint's attorneys, and representatives all reasonable assistance in preparing said applications and, from time to time, upon request, execute all papers and do all things that may reasonably be required to protect the rights of Sprint and vest in Sprint the Inventions and Letters Patent, all as herein provided.

11. WARRANTY OF PERFORMANCE

Subcontractor warrants that its services and products will conform to the requirements of the Statement of Work and to generally accepted commercial practices. Subcontractor makes no other express or implied warranties and shall not be liable in any event for any special, incidental, or consequential damages except for actions based on Paragraph 7 and on breach of confidentiality in Paragraph 8.

12. TERMINATION

Sprint at its option may terminate this Agreement in whole or in part for any reason upon submitting to the Subcontractor written notice of termination and specifying the service(s) to be terminated and the effective date of termination. In the event of termination as provided herein, Sprint shall be obligated to pay for services performed and for any outstanding expenses incurred under this Agreement prior to the effective date of termination.

13. INSURANCE

Subcontractor shall provide Sprint with evidence of insurance coverage required in Exhibit C, attached as part of this Agreement.

14. INDEMNIFICATION

Subcontractor agrees to take all necessary precautions to prevent injury to any person (including employees of Sprint or damage to property including Sprint's property) during the Term of this Agreement and shall indemnify and save Sprint harmless against all loss and expense resulting in any way from any action or omission on the part of Subcontractor, its agents, employees or subcontractors, resulting directly or indirectly from Subcontractor's performance under this Agreement, except to the extent that any such loss is due to the sole negligence of Sprint. Should Sprint permit Subcontractor to use any of Sprint's equipment, tools, or facilities during the performance of this Agreement, such permission will be gratuitous and Subcontractor shall indemnify and save Sprint harmless from and against any claim for personal injuries including death, loss, or damage to personal property, or loss of use of personal property arising out of the use of any such equipment, tools, or facilities, whether or not such claim is based upon the condition thereof or on the alleged negligence of Sprint in permitting the use thereof.

15. WAIVER OF CLAIM

In consideration for the compensation paid under this Agreement as well as other good and valuable considerations the receipt of which is hereby acknowledged, Subcontractor hereby waives all claims which he/she, his/her heirs, estate, or successors in interest may have against Sprint, its employee, agents, directors, successors, or assigns, for Subcontractor's death, Subcontractor's performance under this Agreement or Subcontractor's use of Sprint's equipment or facilities.

16. **INDEPENDENT CONTRACTOR**
The Subcontractor shall not hold himself/herself [itself] out as an employee or agent of Sprint and is not authorized to act on behalf of Sprint. Subcontractor shall render his/her [its] services hereunder as an independent contractor and he/she [it] shall have no authority to obligate Sprint in any manner.

17.0 **RIGHT OF AUDIT**
Subcontractor shall maintain all records and accounts pertaining to Work performed for a period of at least three (3) years after final payment. Sprint shall have the right to audit, copy and inspect said records and accounts at all reasonable times during the course of such work and for the above three (3)-year period for the purpose of verifying costs incurred.

18. **ASSIGNMENT**
This Agreement may not be assigned or transferred by either party without the written consent of the other. Sprint may assign or transfer the Agreement to a successor corporation, partnership, or other entity resulting from a merger, consolidation, sale of assets or other similar transaction.

198. **CHOICE OF LAW**
This agreement shall be deemed to have been made within the County of Johnson, State of Kansas and shall be interpreted and enforced in accordance with the laws of the State of Kansas. The parties hereby agree that the District Court of Johnson County, Kansas, shall be the exclusive forum for the resolution of all disputes relating to this contract.

20. **PUBLICITY**
Subcontractor shall not issue or release for publication any articles, advertising, or publicity matter relating to the Services performed hereunder or mention or imply the name of Sprint or any of its personnel without prior written consent of Sprint. Nothing in this clause shall be interpreted to restrict the Subcontractor from providing information regarding relay services which are provided by vendors other than Sprint.

21. **COMPLETE AGREEMENT AND COMPLIANCE**
The parties to this Agreement mutually agree that this Agreement contains the entire Agreement between the parties and neither they nor their agents shall be bound by any terms, conditions, statements, warranties, or representations, oral or written, not contained herein. This Agreement shall not be varied in its terms by any oral agreement or representation or otherwise than by an instrument in writing of subsequent date executed by both parties hereto.

Subcontractor agrees to comply with all applicable laws and regulations in the performance of this Agreement.

22. **ENFORCEABILITY**
In the event any provision of this Agreement is found to be legally unenforceable, such unenforceability shall not prevent enforcement of any other provision of the Agreement.

23. **SAFETY AND SECURITY REGULATIONS**
Subcontractor shall comply with all applicable U.S. Government and Sprint's safety and security regulations. If Subcontractor renders services at Sprint's facility, Subcontractor shall not remove any classified material or proprietary information therefrom.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the date set forth at the beginning of this Agreement.

_____	Sprint Communications Company Company Limited Partnership
_____	_____
By:	By:
_____	_____
Printed or Typed Name	Printed or Typed Name
_____	_____
Title	Title
_____	_____
Date	Date

SAMPLE

EXHIBIT A

SCOPE OF WORK

(BIDDER'S PROPOSAL TO BE INCORPORATED)

EXHIBIT B

FEE SCHEDULE

Sprint will pay Subcontractor for the Maryland Relay Ambassador outreach efforts as outlined in the SOW (Exhibit A) $ _____ per month not to exceed a total fixed price of $ _____.

All fees submitted for reimbursement must be documented as outlined in the Statement of Work.

The total price of this agreement for all Maryland Relay Ambassador Outreach services shall not exceed $ _____.

SAMPLE

EXHIBIT C

INSURANCE

The Subcontractor represents and warrants that is has secured and shall keep in force, at its sole cost and expense, for itself and for its subcontractors, the following insurance coverages each with limits of $1 million per occurrence (except as otherwise stated):

a. Worker's Compensation - Statutory Limits.

b. Employer's Liability

c. Comprehensive General Combined Bodily Injury and Property Damage Liability, including riders or extensions for:

   1. Contractual Liability (to cover Bodily Injury and Property Damage Liability under the indemnification provisions in this Agreement.)

   2. Independent Contract's Liability, and

   3. Broad Form Property Damage Liability.

d. Automobile, Bodily Injury and Property Damage Liability Insurance covering all owned (and, if available, non-owned and hired) vehicles, that are (or may be) used by Subcontractor and its personnel or employees hereunder.

The Subcontractor represents and warrants that is has arranged for each policy to name Sprint a an additional insured and to provide that it may not be canceled without thirty (30) days prior written notice to Sprint. Each policy shall be primary and with out right of contribution from any insurance maintained by Sprint. The Subcontractor shall provide, to the Sprint official to whom notices are to be given, hereunder, copies of such policies or certificates evidencing such coverage.

Maryland TRS employee cited for Error Correction Device

A problem that Telecommunication Relay Service agents often have to grapple with is that customers speak a lot faster than many agents can type. Most agents type accurately at 45 words per minute, but most adults speak at least double that rate. Errors in typing can obviously become a problem.

Ken Ryan, one of the original agents at the Maryland Relay Center, came up with a software solution that is now used by all relay centers. For that achievement and others, Ryan was recently presented an Extraordinary Achievement Award.

Ryan's Error Correction Device is made up of two components, according to **Anthony Bartlett**, TRS training administrator.

The Single Word Edit feature buffers the word in the terminal memory until the agent presses the space bar. The agent has the ability to correct the spelling of a word before transmitting the word to the TTY user.

In the Word Substitution component, the agent terminal contains a list of the most commonly misspelled words, based on agents' experience. When the agent types a word and presses the space bar, the system checks the word to be transmitted against the misspelled word list. If a match is found between the typed word and a word on the list, the system will correct the spelling.

Agents continually submit words to be added to the misspelled words list, and the submissions are checked to make sure the word is not a commonly used abbreviation or a word used in Spanish language.



Ken Ryan at the TRS center in Baltimore, Md.

In accepting his award, Ryan said he is already working on another invention, and he praised Sprint for being a company that listens to its employees' suggestions.

Chris Smith, location manager, presented the award. Attending the ceremony from Kansas City were **Scott Mummaw**, staff director, Systems Maintenance; **Mary Cole**, training administrator; and **Karma Dorman**, manager, Curriculum and Field Support. Supervisors and several agents at the Maryland Center also attended the presentation.

Ryan joined Sprint in March 1992 after retiring as an engineer at the Westinghouse Corp.

The Extraordinary Achievement Award program is designed to give management the opportunity to reward employees, individually or in teams, for the exceptional completion of a task; exercising initiative and creativity above normal responsibilities in attaining business objectives; and for superior performance in areas where targets, deadlines and other constraints are critical to business success.

*Nominations are made by supervi*sors or managers. The awards range in value up to $2,500. □

RELAY TODAY

Volume 4, Number 3 July, 1996

A HISTORY OF SERVICE TO OUR CUSTOMERS

Established in 1986, Sprint employs approximately 50,000 people, and serves eight million long distance and nearly seven million local customers worldwide. We developed the first nationwide 100 percent, all digital, fiber-optic network, designed for clear-channel voice and error-free, high-speed data transmission. Sprint is continually improving our services by implementing technology such as SONET (Synchronous Optical Network), the virtually instantaneous restoration service network. Customers continue to benefit from Sprint's superior technology and quality-focused product and services.

Sprint applied that expertise when we entered the Telecommunications Relay Service market in 1990 after winning the State of Texas contract. Since then, Sprint has developed a reputation for bringing leading-edge technologies to TRS. As a result of our strong customer partnerships, we have introduced over 200 product enhancements to the marketplace.

Sprint was the:

- **First** with Automatic Number Identification (ANI) Stations
- **First** with Intelligent Computerized Agent Work
- **First** with Automatic Number Identification Database
- **First** with Automated Billing with Detailed Reporting
- **First** with Voice Carryover Enhancements (No Typing)
- **First** with Hearing Carryover Enhancements (Hearing Through on Call Set-up)
- **First** with Scroll Back for ASCII Users
- **First** with Identification of Agent Gender
- **First** with Identification of Customer Gender
- **First** with Identification of Background Noises
- **First** with Error Correction (Spell Check)
- **First** with Shortened Macros
- **First** with Customer Branding
- **First** with Identification of Local/Long Distance Calling
- **First** with Video Relay Interpreting Trials
- **First** with Speech-to-Speech Service Trials

During the first few years with TRS, Sprint introduced several other services available for relay users:

- TTY- to-TTY Discount Program
- TTY Operator Services
- Video Relay Interpreting (VRI)
- 24-hour TRS Customer Service
- TRS Outreach Education Program

Sprint TRS looks forward to continuing our successful partnership with the deaf, hard-of-hearing, late deafened adults, speech disabled and hearing communities by continuing to add products and services designed to meet our customers' needs.

See Sprint at SHHH and NAD This Summer!

Service

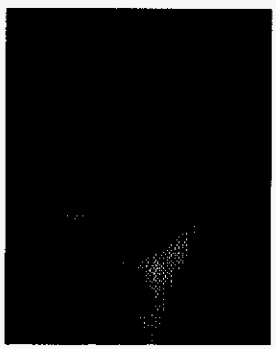
Service is the Key to Sprint Relay's Success

This is a very special issue of *Relay Today*, and I hope you will take a few moments to review the information provided. Sprint is proud of our track record in the Telecommunications Relay Service arena, and we are committed to providing the best possible TRS to our customers.

The articles provided here are designed to give you a broad overview of the many services that Sprint offers to the deaf, hard-of-hearing and speech disabled communities. Since we entered the TRS market in 1990, we have continually enhanced our technological capabilities to help make our service meet your critical communications needs. Our new TTY Operator Service is just one example of the many quality services available to Sprint Relay users. We will continue to enhance our service to meet your functional equivalency needs.

Please use this issue of *Relay Today* as a reference guide for Sprint Relay services. Whether you need traditional TRS services, or if you need residential long distance service or business solutions, Sprint wants to be your communications partner. Remember that you, our valued customers, are our number-one priority. We look forward to continuing our service to TRS users for many years to come.

Don Teague
Vice President and General Manager
Sprint Government Systems Division



HOW TO REACH US

No matter where you are, if you need to make a relay call, Sprint's National Relay (NTRS) is available 24 hours a day, seven days a week to help you make the right connections. As the current TRS marketplace leader, Sprint has built a solid reputation in providing a quality relay service that you can always rely on.

Through NTRS, you can make interstate (state-to-state), international, out-of-state directory assistance, or "800/888" toll-free calls. To reach Sprint's NTRS, call **1-800-877-8973** (TTY/ASCII/Voice/Spanish).

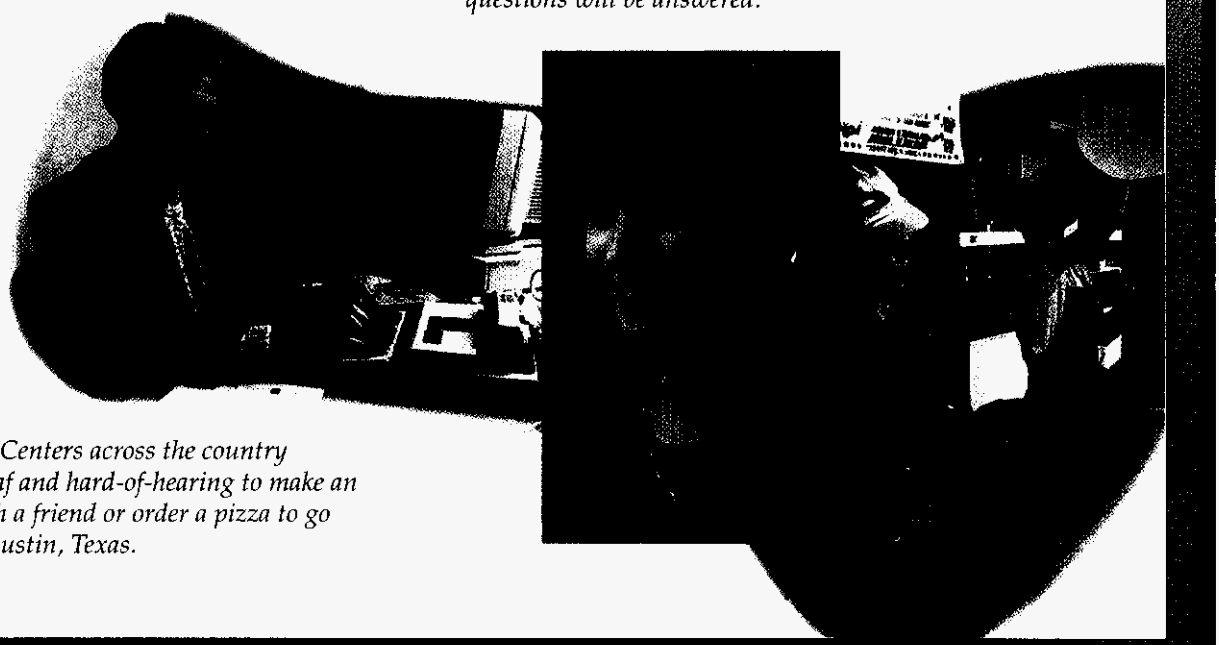
TRS Customer Service provides a variety of services, including:

- Research TTY and relay billing
- Call back to test equipment
- Set up 'branding' for VCO, HCO, TTY, Voice, ASCII and Spanish
- Set up new long distance accounts with Sprint (TTY to TTY or Sprint Sense®), and update account information
- Provide a variety of referral numbers, including TTY manufacturers, state equipment distribution programs, TRS community outreach, computer-TTY software companies and ADA inquiries

This service is available 24 hours a day, seven days a week.

Toll-Free: **1-800-676-3777** (TTY/ASCII/Voice)
Fax: (916) 928-3513
E-mail: sprint.trscustserv.sacramento@igate.sprint.com

Remember, Sprint TRS is accessible from anywhere in the United States. With one phone call or e-mail, your critical questions will be answered.



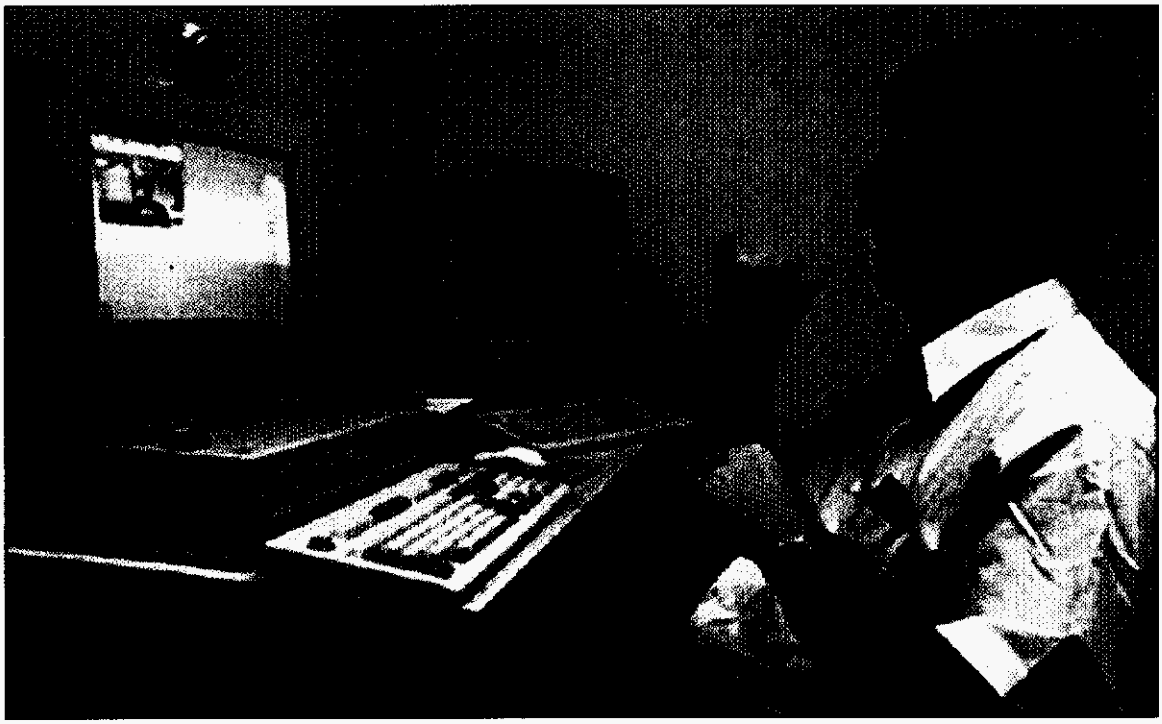
Sprint-operated Relay Centers across the country make it easy for the deaf and hard-of-hearing to make an appointment, chat with a friend or order a pizza to go like this customer in Austin, Texas.

SPRINT FIRST WITH VIDEO RELAY INTERPRETING

For those relay users who prefer to communicate using American Sign Language (ASL), Sprint has developed a unique solution. Video relay interpreting (VRI) allows users to communicate in ASL via a desktop computer with video capabilities.

With Sprint's VRI, an interpreter will relay telephone conversation between ASL users and standard (voice) telephone users in a visual format. This format allows the participants to see expressions, emotions and gestures during the call.

Sprint was the first TRS provider in the country to provide VRI capabilities. In 1995, Sprint partnered with the State of Texas in a very successful four-week trial. A second, expanded trial is scheduled with the State of Texas for the Fall of 1996.

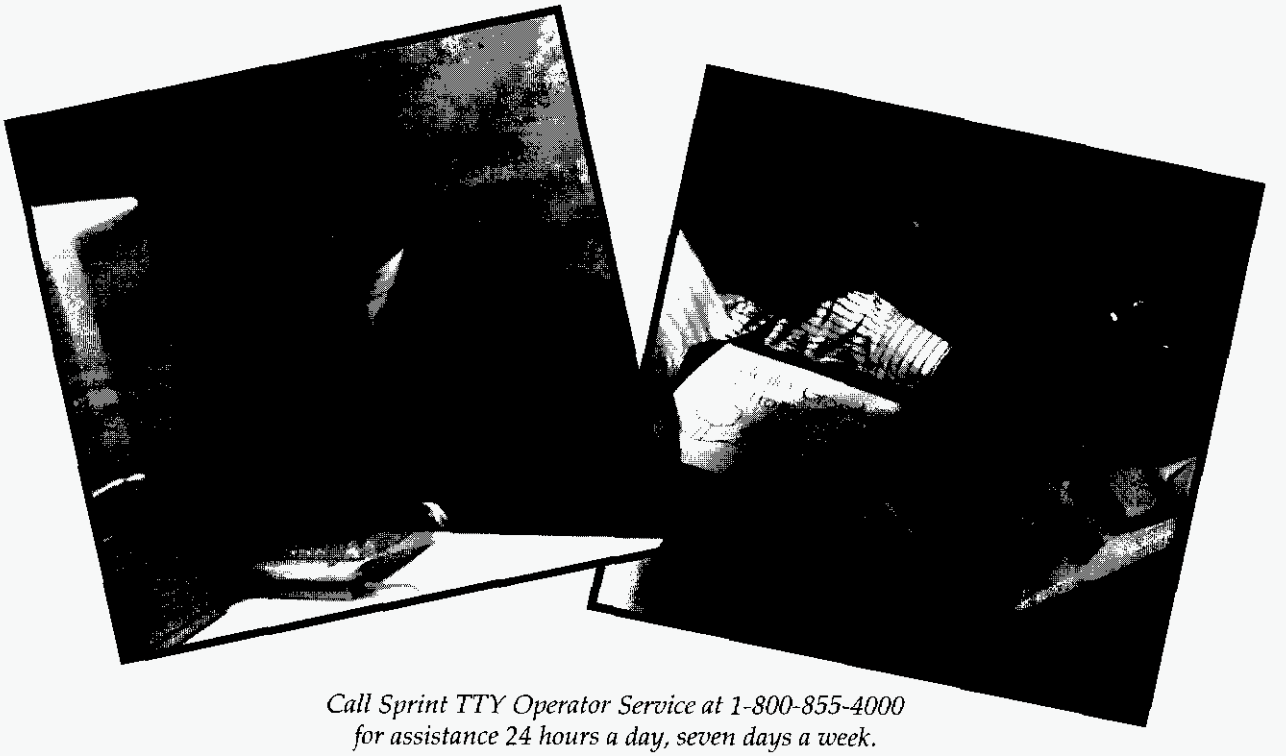


Ed Bosson of the Texas Public Utilities Commission demonstrates the use of Video Relay Interpreting.

SPRINT OFFERS TTY OPERATOR SERVICE

Sprint is pleased to offer a new operator service for our deaf, hard-of-hearing, late-deafened adult and speech disabled customers. You can now reach our operators 24 hours a day, seven days a week, by calling **1-800-855-4000** (TTY). We are committed to supporting all your calling needs—from your home, your office, or when you are on the road. Our operator service program will provide you support via TTY with:

- Operator-assisted calls to virtually anywhere, domestically or internationally. Operator-assisted rates are competitively priced, including time-of-day discounts with no additional surcharges
- Charge calls to a calling card, bill calls collect, third party or person-to-person, or charge calls to a major credit card
- Use directory assistance to receive phone numbers or information
- Place calls, arrange billing and provide immediate credit for wrong numbers dialed



Call Sprint TTY Operator Service at 1-800-855-4000 for assistance 24 hours a day, seven days a week.

REAL TIME RELAY—MOVING TO GREATER FUNCTIONAL EQUIVALENCY

Sprint's introduction of a second generation TRS product platform will allow you to maximize your calling capabilities by enhancing the interactive communications between the caller and the called party. The platform, called Real Time Relay, includes features in various stages of development and deployment.

Features include customer database capabilities which will allow Sprint TRS users to enter specific information into their customer profiles that will aid in more efficient call handling sessions. In addition, customer initiated dialing, machine recording capabilities, VCO (voice carry over) with privacy/no GA and network call distributor are all being developed to help users make their calls more quickly and efficiently. Look for more information in upcoming issues of *Relay Today* on when these Real Time Relay features will be available in your state. Call Sprint Customer Service at **1-800-676-3777** (TTY/ASCII/Voice) to sign up for Real Time Relay features.

Relay Today is published quarterly for deaf, hard-of-hearing and speech disabled customers by Sprint Government Systems Division. Please contact us with your letters and suggestions, address changes, or names and addresses of others who would like to receive *Relay Today*.

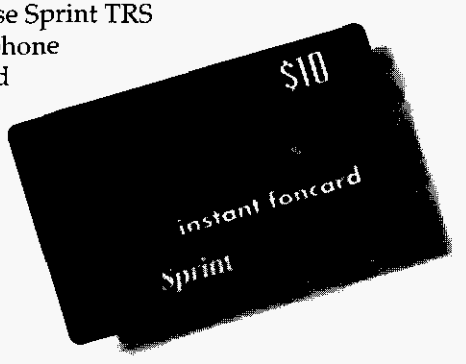
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COIN SENT PAID—SERVICE PROVIDES TRS USERS WITH PAY PHONE ACCESS

On August 25, 1995, the Federal Communication Commission (FCC) issued an order outlining an interim plan for access to coin sent paid (CSP) service through TRS. This order directs carriers and TRS providers to implement an interim plan to provide TRS users with pay phone access under the following guidelines:

- Local TRS pay phone calls are to be provided free of charge
- Toll TRS pay phone calls are to be chargeable to calling cards and prepaid cards
- The TRS industry will provide outreach and education to TRS users about these interim payment methods

Sprint TRS has met all of these requirements since 1990. Please call Sprint TRS Customer Service at **1-800-676-3777** (TTY/Voice) to obtain more information about signing up for a Sprint FONCARD℠ or SPREE℠ prepaid card to make it easier for you to use Sprint TRS at any pay phone in the United States.



Options

Billing Preferences

Sprint Relay gives you a number of billing options when you place intrastate, interstate or international calls. Please notify the communications assistant of your preferred billing option:

- Direct
- Collect
- Third party
- Sprint FONCARD℠
- Local exchange carrier (LEC) calling card
- Other interexchange carrier (long distance) calling card
- Sprint prepaid card (SPREE℠)

Discount Programs

TTY to TTY

At Sprint, we've listened to your call for TTY long distance savings. For TTY users, Sprint is offering the opportunity to get added savings—up to 39 percent—when placing long distance calls from your home. Call Sprint's TRS Customer Service at **1-800-676-3777** (TTY/Voice) for more information and a sign-up form.

NTRS Discounts

Sprint was the first relay service provider to offer a complete set of discounts to all relay users (TTY, ASCII, VCO, HCO, and Voice) to compensate for the additional time needed to place relay calls. Please contact TRS Customer Service at **1-800-676-3777** (TTY/Voice) for more information on specific discount rates.

Through NTRS, you can make interstate, international, out-of-state directory assistance, or toll-free calls.

Who to Call for Support

Contact your Sprint Relay account manager with questions or comments about your service. We love hearing from you!

Colorado, Iowa, New Mexico
Philip Gallant - 800-377-1190 (TTY)
philippe.gallant@sprinta1.sprint.com

Indiana, North Dakota, South Dakota, Wyoming
Greg Gantt - 800-377-1101 (TTY)
greg.gantt@sprint.sprint.com

Missouri
Matt Gwynn - 800-377-1180 (TTY)
matthew.gwynn.independence@igate.sprint.com

Northern California
John Moore - 800-377-1140 (TTY)
john.moore.sacramento@igate.sprint.com

Southern California
Randy Murbach - 800-720-3246 (TTY)
randy.g.murbach@sprint.sprint.com

Texas, Oklahoma
Brandi Rarus - 800-578-6275 (TTY)
brandi.rarus.austin@igate.sprint.com

New Hampshire, Connecticut, South Carolina
Angela Officer - 800-377-1160 (TTY)
angela.officer@sprint.sprint.com

Oregon, Nevada, Montana
Dot Johnson - 800-377-1150 (TTY)
dorothy.l.johnson@sprint.sprint.com

Maryland / Federal Information Relay Service (FIRS)
Andrew Brenneman - 800-597-9009 (TTY)
andrew.brenneman.baltimore@igate.sprint.com

Federal Information Relay Service (FIRS) / Maryland
Mary Ann Leon - 800-597-9009
maryann.leon.baltimore@igate.sprint.com

Sprint Relay Sales Management
Mike Ellis - 303-297-5268 (TTY/Voice)
mike.ellis@qm.sprintcorp.com

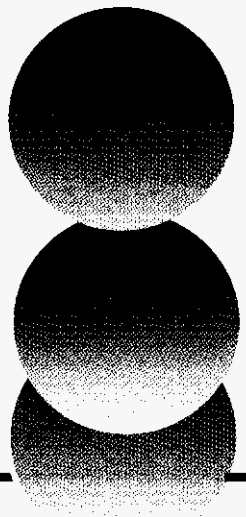
Sprint Relay Customer Service
800-676-3777 (TTY/ASCII/Voice)
sprint.trscustserv.sacramento@igate.sprint.com

Sprint's International Inbound Number
605-224-1837 (TTY/ASCII/Voice)

Sprint's National Relay Number
800-877-8973 (TTY/ASCII/Voice)

Sprint

8330 Ward Parkway
Mailstop: MOKCMY0202
Kansas City, MO 64114



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Sprint daily

Published daily via SprintFAX® for Sprint employees

Monday, September 23, 1996

Friday Stock Closing
Sprint 41 3/8, up 1 1/2

Dow Jones Industrials
5888.46, up 20.72

Deaf Awareness Week begins today

The World Federation of the Deaf (WFD) is an international organization composed of 102 national associations of the deaf. WFD, in collaboration with the United Nations, serves all countries in the enhancement of the social, economic and cultural lives of deaf and hard of hearing people.

The National Association of the Deaf (NAD) has joined the WFD in proclaming National Deaf Awareness Week, Sept. 22-28,1996. Initiated by the WFD, Deaf Awareness Week celebrates the culture, heritage, and language unique to deaf people around the world.

Sprint recognizes and respects cultural differences, and works hard to meet the diverse needs of the deaf community. The company is proud to recognize Deaf Awareness Week for the first time.

Deaf Awareness Week events will occur today in the following locations:

- **Northern California:** 1850 Gateway Drive, San Mateo, 9 a.m.-4 p.m. (TRS booth in the lobby area and workshop in the conference area); 3075 Prospect Park Drive, Bldg #2, Rancho Cordova, 9 a.m.-4 p.m. (TRS booth in the lobby area)
- **Southern California:** 1025 W. 190th Street, 4th floor Gardena, 9-4 p.m. (TRS booth in central location); 535 Anton Boulevard, Suite 1100/1200 Costa Mesta, 9 a.m.-4 p.m. (TRS booth in central location)
- **Iowa:** 7031 Vista Drive West, Des Moines, 9-11 a.m. (TRS booth in central location) ■

Sprint makes the Rollins College connection

By strengthening working relationships and creating a partnership atmosphere, the Sprint team recently won a contract to become the total communications provider for Rollins College in Winter Park.

This is a major win over AT&T. The extensive contract includes provisions for a campus-wide infrastructure of fiber and coaxial cable for data and video; rewiring of the dormitories for voice, video and data; and data networking equipment.

In essence, Sprint will wire the entire campus, connecting dorm rooms, administration and classrooms. It will also provide 1,400 students with access to cable TV and computer networks, both campuswide and on the Internet. The entire project should be up and running by the end of the year. ■

Spree/NFL contest winners announced

Winners of a recent Spree/NFL™ employee contest include **Sharon Feiser**, Kansas City, who won the grand prize of a complete set of 30 $20 Spree/NFL cards, and **Kay Woodson**, Charlottesville, Va., who won a complete set of $10 cards. In addition, 100 runners-up received $10 Spree/NFL cards. ■

Summers named AVP, Human Resources

Loretta Summers has been appointed assistant vice president, Corporate Center Human Resource Operations and Strategic Planning, according to **Ben Watson**, senior vice president, Human Resources. n

Sprint employee newsline

For a summary of the day's top *Sprint Daily* stories, call the Sprint Employee Newsline at (800)877-4453. ■

Sprint

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Sprint daily

Published daily via SprintFAX® for Sprint employees

Tuesday, September 24, 1996 | **Monday Stock Closing** Sprint 41 ½, up ⅛ | **Dow Jones Industrials** 5894.74, up 6.28

Sprint team playing the right cards in Las Vegas

Hard work has resulted in a winning streak for Las Vegas's four-person sales team. Led by branch manager **Jim Dickard**, the team of **Jill Entsminger, Carmen LaFrano, Jon Dembo** and **Michelle Lamberti** is boasting several big wins this year including MediMail, American Telegram, Legends in Concert, Players Express and Scenic Airlines. Several of these wins include new equipment sales provided by Sprint, Central Operations, the local service provider. Additionally, the small-business market continues to benefit from Fridays Free.

Lead sharing and teaming with Central Operations and 360° Communications has been one key to success. Additionally, Sprint is a major sponsor of the Las Vegas Chamber of Commerce, which is extremely active in driving new membership.

In addition, the Sprint Hospitality Group sales team, led by **Elliott Sackler**, has had great results in selling to many world-famous hotel casinos.

Sales reps in Las Vegas have been averaging 10-12 appointments per week to keep pace with the teaming, networking and lead generation. They have focused on the wealth of new business growth, with Business Sense and Fridays Free being extremely well received. Large businesses have responded positively to Frame Relay and enhanced toll-free services. ■

Did you know that Sprint is the largest provider of TRS?

When Alexander Graham Bell changed the course of the world 100 years ago with the invention of the telephone, he also created a telecommunications barrier for people with hearing and speech disabilities. Ironically, Bell's wife, who was deaf, was unable to use the telephone.

Thanks to Title IV of the Americans with Disabilities Act (ADA), Telecommuncations Relay Service (TRS) was made ubiquitously available. The ADA mandated that all common carriers provide relay service 24 hours a day, seven days a week, by July 1993.

As the largest provider of TRS, Sprint handles more than 31 million relay calls annually. Sprint provides TRS services in 18 states, and the federal government via the Federal Information Relay Service (FIRS) contract. In addition, Sprint is the TRS provider for five other common carrier/cellular companies.

On April 1, 1994, Sprint TRS joined the Government Systems Division family. **Don Teague**, vice president and general manager, looked at the move "as a natural fit with excellent synergies."

Sprint entered the TRS market in 1990 when Texas became its first official contract. Along with the FIRS contract and Texas, Sprint is the TRS provider in California, Colorado, Connecticut, Indiana, Iowa, Maryland, Missouri, Minnesota, Montana, New Hampshire, New Mexico, Nevada, North Dakota, Oklahoma, Oregon, South Carolina, South Dakota, and Wyoming.

For further information, please call **Kristina Langley**, in GSD's Strategic Marketing group, at (703) 904-2301. ■

Attention: Kansas City

Tradition of Excellence Ceremony to take place Sept. 26

Sprint's Local Telecommunications Division will hold its second-quarter Tradition of Excellence Ceremony on Thursday, Sept. 26, 8:30-10 a.m. at the 2330 Shawnee Mission Parkway cafeteria.

Nominees being recognized are **Jane McCray**, Sprint LTD Marketing; **Mike Maples**, Sprint LTD Revenues; and **Roger Neustifter**, Sprint LTD Network.

The Tradition of Excellence recognizes employees for their outstanding efforts in enhancing corporate goals through Quality performances. Eligible nominees come from Revenues, Marketing or Network departments in Sprint LTD Corporate. ■

Produced by Corporate Communications 913/624-3313, FAX 913/624-3496.

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Wednesday, September 25, 1996 | **Tuesday Stock Closing** Sprint 39 7/8, down 1 5/8 | **Dow Jones Industrials** 5874.03,

Saint Luke's-Shawnee Mission Health picks Sprint

The Saint Luke's-Shawnee Mission Health System has signed a letter of intent for a $15 million agreement with Sprint to bring the next generation of telemedicine and health data network services to patients and health care professionals throughout the Saint Luke's-Shawnee Mission System.

This agreement will bring together many Sprint resources, thus demonstrating how Sprint provides total communications solutions. Those resources include Sprint Healthcare Systems Inc., a business unit that markets to the health care industry, the local division's business markets organization (Western Operations); the Long Distance Division; and Sprint Spectrum.

At first, the ambitious effort will focus on development of a comprehensive health care information network to ensure that Saint Luke's-Shawnee Mission physicians, nurses and administrators have at their fingertips the full complement of patient information from various Saint Luke's-Shawnee Mission locations in Kansas City and throughout the Midwest.

The next step of the joint agreement will launch the health care system toward the very latest in telemedicine services, such as "video house calls." ■

Sprint continues to gain profitable market share

(Editor's note: In response to AT&T's announcement yesterday that its third and fourth quarters could be as much as 10 percent below analysts' estimates and that it was launching a new pricing strategy, Sprint issued the following statement.)

Sprint continues to gain profitable market share in the long distance marketplace and has not experienced the adverse impact that AT&T mentions in its statements.

The success of Sprint Sense has helped Sprint's consumer business grow at a rate three times faster than AT&T's consumer business in both the first and second quarters of 1996. Thus far through the third quarter, Sprint is seeing the simplicity of its message continue to drive record sales. Now with Sprint's dime-a-minute rate available 24-hours-a-day to the state-to-state number called the most, many long distance calls are a dime-a-minute for the typical consumer. As a result, Sprint does not see AT&T's new pricing efforts as attractive. ■

Deaf Awareness Week events include Gallaudet president

In recognition of Sprint's Telecommunications Relay Service and National Deaf Awareness Week, Sprint welcomes Dr. I. King Jordan, the first deaf president of Gallaudet University, as keynote speaker at 10:30 a.m. (EDT) at GSD headquarters today.

Sprint employees in Colorado and Kansas City will be able to see and hear Jordan's speech via VTC at the locations listed below. For further information, please contact **Kristina Langley**, in GSD's Strategic Marketing group, (703) 904-2301.

Events will occur today in the following locations:

- Colorado: 1099 18th Street, Suite 1400, Denver; 8 a.m. (MDT) – light refreshments; 8:30 a.m. – Jordan's presentation (VTC); 10 a.m. and 3 p.m. – presentation about TRS and deaf culture. TRS booth in the lunch room on 14th Floor from 9 a.m.-5 p.m.
- Missouri: **2330** Shawnee Mission Parkway, Westwood, Kan. 10:30-11:30 a.m. (CDT). TRS booth, presentation and light refreshments provided in the cafeteria. **8140** Ward Parkway, Kansas City. TRS Booth and Demo from 8-9:30 a.m. Jordan's presentation via VTC from 9:30-10:30 a.m. **8320** Ward Parkway, Kansas City. TRS Booth, demo and presentation in the Training room from 1-3 p.m.
- Virginia: 13221 Woodland Park Road, Herndon. 9:30-10:30 a.m. (EDT) – light refreshments; 10:30 -11 a.m. – Jordan's presentation; 11-11:30 a.m – TRS booth and cake-cutting ceremony in the cafeteria. ■

Sprint.

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Sprint daily

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Thursday, September 26, 1996 | **Wednesday Stock Closing** Sprint 39 7/8, no change | **Dow Jones Industrials** 5877.36, up 3.33

It's easy to make or receive a TRS call

Telephone Relay Service has trained relay operators who complete all calls and stay on-line to relay messages either electronically over a Text Telephone (TTY), or verbally to hearing parties. To make a call, simply dial the "800" number and give the operator the number you wish to call. The operator will relay the conversation between you and the party called, or you may leave your message on an answering machine. For TTY users, it is the same process. It's as simple as that.

For further information, contact **Kristina Langley** in GSD's Strategic Marketing group at 703/904-2301.

Deaf Awareness Week events will occur today in the following locations:

- **Texas:** Lincoln Center Building, 5420 LBJ Freeway, Dallas. TRS booth on the 17th floor near the receptionist area. 8 a.m.-5 p.m. (CDT).
- **Massachusetts:** 300 Unicorn Park Drive, Woburn. TRS booth on the first floor in the lobby, 9 a.m.-4 p.m. (EDT). ■

Sprint provides cutting-edge technology for ACS

When the Johnson County, Kan., chapter of the American Cancer Society held its annual Summer Gala, a fund-raising auction, last August, Sprint provided technological solutions that exceeded ACS expectations.

According to **Doug Folken**, Executive Services, who created the computer system solution for the auction, Sprint provided greater speed and accuracy than ever before.

"Three years ago," said Folken, "it took the ACS at least a week to close the books. This year, the books were closed the same night as the event. In addition, all figures were double-checked the same night. The Gala ended at midnight. All guests were checked out and payments made by 12:10 a.m., two hours earlier than last year."

The new computer system also accomplished the following firsts for the Gala:

- Distribution of silent auction results for each winning bidder before the live auction began;
- Individual cashier balancing;
- Real-time, overall, guest auction results throughout the evening via 12 Newton MessagePads using wireless network connections.

"There is no way we could have had the success we did without the dedication and commitment of Sprint's employees," said Bee Haley, income development specialist for the American Cancer Society. "Sprint's technology provided us with the expertise expected in the '90s of an event that raises this kind of money. Sprint's quality has always been excellent, but this year they provided record-breaking turn-around times as well."

The auction raised $577,000 for the American Cancer Society. Contributing to its success were **Nan Haren**, who handled Gala publicity; **Greg Harrison**, who supervised the Newton operators; **Cheryl Winkelbauer**, who managed the transportation process; **Ron Worley**, who headed the transportation committee; **Ben Ferrett**, who performed live-auction results entry; and volunteers from Sprint North Supply, who loaned and installed phones for the event. ■

Attention Kansas City: Can you come to our NFL party?

Football fans of all ages and abilities are invited to participate in the "NFL™ Experience on Tour," featuring the NFL Air-It-Out four-on-four flag football tournament, Oct. 12-13. The NFL Experience includes many interactive games such as the Quarterback Challenge, NFL Run to Daylight and the Strongest Man Contest. This is an event the whole family will love. If you are interested in participating in the tournament or attending this event, please call 624-2797 by Oct. 1 for more information. Your response will help enormously in planning for the event. Watch *Sprint Daily* for updates. ■

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Friday, September 27, 1996 | **Thursday Stock Closing** Sprint 39 5/8, down 1/4 | **Dow Jones Industrials** 5868.85, down 8.51

Sprint TRS handles more than 31 million calls a year for those with hearing loss

Sprint has developed a reputation for bringing leading-edge technologies to Telecommunications Relay Service (TRS). As a result of strong customer partnerships, the company has introduced more than 200 product enhancements to the marketplace, such as Video Relay Interpreting (VRI), Voice Carry-Over, Hearing Carry-Over, Intelligent Computerized Agent work stations, Automatic Number Identification (ANI) Database, and many other enhancements.

More than 28 million Americans have some kind of hearing loss. Sprint is aware that there is still an untapped market and is looking at ways to develop this market. Sprint currently handles more than 31 million calls per year.

For further information about any of these product enhancements, or about Deaf Awareness Week, please contact **Kristina Langley** in GSD's Strategic Marketing group at 703/904-2301. Deaf Awareness Week events will occur today in the following location:

•**Virginia**: Global One Conference Center, 12490 Sunrise Valley Drive, Reston. 9 a.m.-5 p.m. (EDT). Will provide TRS booth in the cafeteria. ■

Sprint Foundation awards $150,000 Grant to NTID

To promote advanced educational options for learning, the Sprint Foundation has awarded a $150,000 grant to the National Technical Institute for the Deaf, one of eight colleges belonging to the Rochester Institute of Technology (RIT) in New York.

The grant will support the purchase of high-technology computers and video communication equipment linked to NTID's new state-of-the art Learning Center. This facility is designed to support educational access and provide new-age technology for students.

NTID is the world's first and largest technological college for deaf students. Among RIT's 12,000 full- and part-time students are approximately 1,100 deaf students from the U.S. and other countries.

In addition to the academic programs at NTID, students also benefit from nearly 200 technical and professional courses of study offered through RIT.

Angela Officer, Sprint TRS account manager in New Hampshire, is one of a number of Sprint associates who are graduates of the Rochester Institute of Technology National Technical Institute for the Deaf. She was recently named Quota International Inc.'s 1996 International Deaf Woman of the Year. ■

Sept. 30 is address change deadline for FlexCare

The 1997 FlexCare Open Enrollment is just around the corner – November, 1996. Since there is a new Sprint drug program enhancement, you'll be seeing a series of articles over the next eight weeks. Look for these upcoming articles:

- 1997 FlexCare Annual Re-Enrollment Questions and Answers
- New Hire in 1996? Frequently Asked FlexCare Questions
- Questions and Answers on the new Prescription Drug Plan
- Who is Diversified and What is a Formulary, Anyway?
- Generic Versus Brand-Name; Why Should I Care?

Don't miss out on the opportunity to use your Sprint benefits to the fullest - update your address now. Please provide any home address changes to your local human resources department by Sept. 30. ■