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type: Regional Deployment Directive

date: March 26, 1999

related letters: RL 97-12-013 BT, "DWDM Deployment Directives"
RL 99-04-002 BT, "DWDM Product Announcement Letter"
BSP: 855-355-101 BT, "DWDM Transmission Engineering Practices"

other:

to: Attached Distribution List

entities: BellSouth Telecommunications, Inc.

from: D. A. Kettler, Executive Director/NVP – Science & Technology

description: Provides current deployment directives for the CIENA MultiWave 1600 DWDM system in the interoffice network.

* * *

The evaluation and approval of a dense wavelength division multiplexer (DWDM) product will soon be complete for the initial product and supplier in BellSouth. With the introduction of this initial long-haul DWDM product, new deployment strategies have been developed to support planning efforts when considering DWDM alternatives to fiber cable construction. This Regional Letter replaces previous directives issued regarding placement of DWDM in the interoffice network.

The initial supplier for long haul DWDM products will be CIENA Corporation. Their MultiWave 1600 (MW 1600) product is a 16 channel (wavelength) system configured in a point-to-point architecture, transporting up to 16 individual optical inputs over two fibers. This system has finished the first office application field trial and product evaluation has been completed. Methods and procedures for operations acceptance testing are planned to be available in April. A general product announcement and approval letter will be issued at that time. However, one-time approvals will now be supported to insure that we do not miss any opportunities to capture the substantial capital savings through deployment of DWDM in a route.

If deployed in accordance with the situations documented in these directives, DWDM technology can offer an economical alternative to placement of long fiber cable routes to provide capacity relief for exhausting fiber spans. This fiber relief alternative will produce significant capital savings over fiber cable construction, as well as provisioning the capacity relief timing within weeks of fiber exhaust identification.

The following deployment directives are provided supporting the placement of the DWDM technology, including some directives specific to the CIENA product.

1. With placement of this point-to-point DWDM system, only fully diversified transport rings, or diversely routed point-to-point systems, are to be deployed over the DWDM channels. Protection switching at the SONET ring or asynchronous system level is required to insure network reliability. Planners must continue to take proactive steps to ensure we continue to focus on the overall reliability of the BST network.

2. The economical deployment of this initial system will generally be spans where the construction of a fiber cable relief alternative is 15 miles or greater, **OR** in a span where the equivalent cost to construct a shorter fiber facility exceeds that of a 15 mile cable placement. Using a typical regional estimate for fiber construction costs developed by Technology Directives, this cable in-plant construction cost approximates $480,000.

3. Initial deployment of a DWDM system is recommended to be equipped with 2 channels. Channel 1 will be a "hot" spare while the 2 channel will be the first "working" channel. As growth of additional channels occurs, the hot spare channel will be used to move traffic to in the event a channel interface remodulator fails.

4. An optical add/drop multiplexer (OADM) terminal is also available for the MultiWave 1600 system. It can add/drop from 1 to 4 channels in each direction, east to west and west to east utilizing various filters. It is recommended to deploy either the 2 channel or 4 channel add/drop filter depending upon planning requirements. (Note, at this time the OADM has not been in field trial. Therefore, the initial application for add/drop of optical channels will need to allow for the time to include field trial activities of the OADM.)

5. The deployment of an OADM is currently economical where the fiber construction alternative costs exceed the equivalent of 30 miles. Generally, express ring systems will be deployed over the DWDM system, while local rings needing to add/drop at intermediate nodes would remain on local fiber facilities.

6. When an OADM is deployed at an office, a ring terminal serving as the only transport node in that office may not be routed over both east to west and west to east directions of the DWDM system. There are some unit failure scenarios identified by CIENA that could isolate both directions of the DWDM path at the OADM. We must insure that we do not allow DWDM to introduce single points of failure in the network.

7. Optical line amplifiers may be deployed to extend the DWDM system to a maximum distance of 150 dB loss between two terminal end points. Assuming good fiber conditions exist, this can equate to a distance of nearly 600 Km, or 350 miles. BellSouth will standardize on the 30 dB amplifiers in the MultiWave 1600 system. A single span without line amplifiers may have a maximum reach of 34 dB. Configurations may have up to 4 amplifiers and 5 segments between terminals. Refer to details in Section 2.0 of Attachment 1.

8. The CIENA MultiWave 1600 can support optical interfaces from 50Mb/s to 2.4Gb/s, including SONET, Asynchronous systems, LAN, ATM or other optical input in this range. There are two remodulator interfaces to deploy, one for OC-48 only and one for all other bit rates. BellSouth has evaluated both remodulators. However, testing has not occurred for some of the non-SONET rate systems at this time, planning to do so as test systems become available in the Technical Analysis Lab.

9. Transmission Engineering support documentation may be found in BSP: 855-355-101 BT.

Details of these directives and recommendations are found in Attachment 1. Planners should begin to consider the MultiWave 1600 system as an alternative to placing longer fiber routes to capture the significant capital expenditure savings through deployment of optical networking technology. In addition, optical networking components have a very high level of variable cost structure while fiber cable placements are nearly all fixed costs in nature. This supports the network migration strategies toward a more variable cost infrastructure in the IOF networks. Attachment 1 provides details of the deployment recommendations and strategies.

With this introduction of a long-haul DWDM system, it is also recognized that there is a similar need for a metropolitan DWDM product that addresses exhausting fiber spans less than 15 miles. While metro DWDM products were not economical at the time we began evaluation of this technology and the CIENA product, we are actively reviewing short-haul products through a recent Request For Information from suppliers. In addition, meetings are currently being held with metro suppliers leading toward the development of a Request for Proposal and possible product selection in the second half of 1999.

Should you have questions concerning these recommendations, please call me at (404) 529-8821. Questions from your organization may be directed to Jim Jackson at (205) 977-5032, or Ken Cook at (205) 977-7153.

Original signed by D. A. Kettler

D. A. Kettler
Executive Director/ NVP – Science & Technology

Attachments

Long-Haul DWDM IOF Deployment Strategies

FIGURE 1
General Deployment Criteria
(Refer to Attachment 1, Section 2)

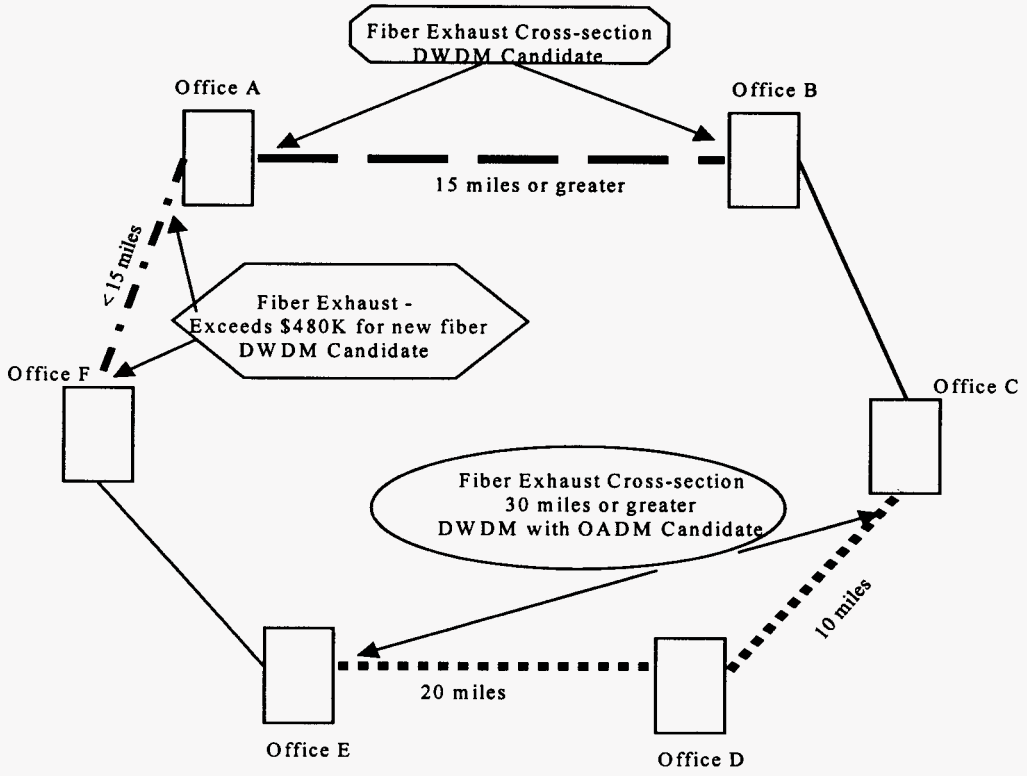


FIGURE 2
Using DWDM to Expand Relief Beyond Fiber Exhaust Section At NO Additional Costs
(Refer to Attachment 1, Section 2.1)

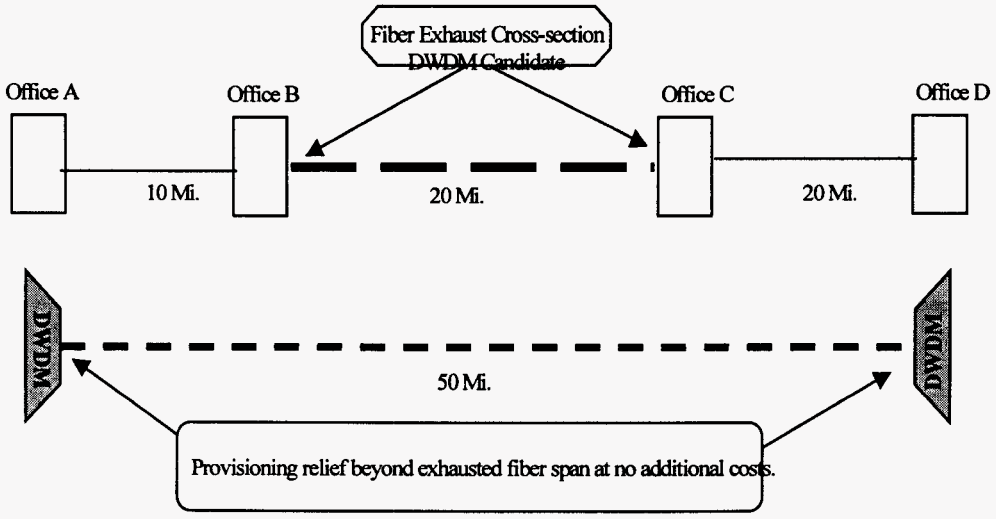
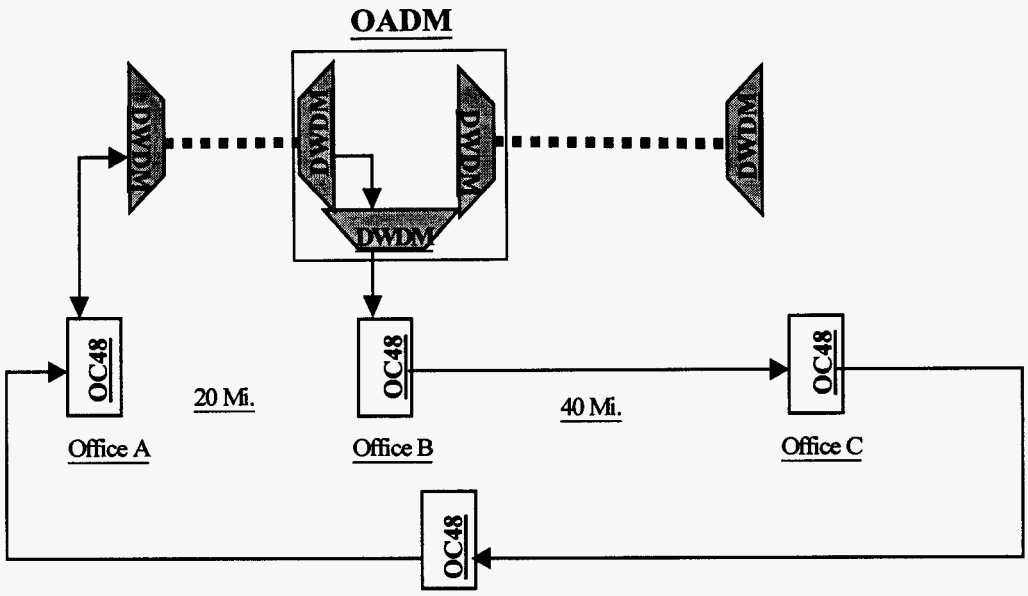
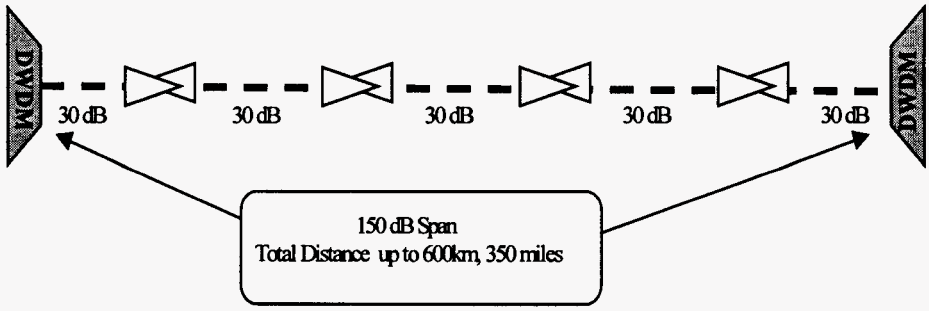


FIGURE 3
Application Using Optical ADM Reliability Requirement
(Refer to Attachment 1, Section 2.3)



Requirement: If the OC48 at Node B is the only IOF transport node in that office, both sides of the OC48 ring path cannot route over the DWDM segments A-B and B-C.

FIGURE 4
Maximum System Configuration
(Refer to Attachment 1, Section 1.0)



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1.0 Introduction

In 1997, BellSouth introduced dense wavelength division multiplexing (DWDM) technology into the interoffice network through a network technology trial. The success of this trial reinforced previous studies that indicated DWDM could be supported by the imbedded planning and operations systems to provide an alternative to the construction of new fiber cables where existing fiber facilities had exhausted their spare fiber capacity. Long distance carriers have been deploying this technology over 3 years, but the implementation of DWDM in the local IOF networks needed to have operations support systems support in addition to being an economical alternative to fiber placement.

In 1998, a Request for Proposal was issued to several suppliers for product offerings of DWDM technology. As a result of the analyses of the RFP responses, the CIENA MultiWave 1600 DWDM product was selected to be the initial product for deployment in BellSouth. In November of 1998, a first office application field trial began in Montgomery, Al., to further evaluate the MultiWave 1600 system. This trial has been completed, providing the first optical networking product alternative for IOF fiber cable expansion.

Several benefits of DWDM are expected to be realized as these systems become a principal choice for capacity relief of longer interoffice fiber cable spans. One of these benefits will be potentially large capital cost savings, as much as $900,000 in one route forecasted to exhaust in 1999 alone. An additional benefit will be faster provisioning of capacity relief to meet short term demands. Where new fiber construction may take as much as 12-18 months for very long fiber routes, the DWDM alternative can be provisioned in less than 60 days if required. Also, lower maintenance costs are to be realized through fewer cable sheaths deployed that can be damaged over long routes in rural and independent company areas. Maintenance savings will also be derived from fewer remote SONET or asynchronous regenerators placed along fiber routes. A single optical line amplifier can replace 16 SONET regenerators at a site and up to 40 regenerators in the near future.

The deployment of DWDM in the interoffice routes will be a key alternative to building additional fiber cable facilities over very long routes. Significant capital cost savings will be realized in all applications meeting requirements provided in this region letter. Future product offerings will address shorter fiber exhaust routes through metro DWDM technology opportunities.

Purpose

This region letter introduces the CIENA MultiWave 1600 DWDM product and provides deployment directives for implementing this optical networking technology into the BellSouth interoffice networks. DWDM is an alternative tool to provide relief for exhausted longer fiber routes without construction of new fiber cable facilities. Included in this region letter are economical deployment parameters, architecture configurations and transmission engineering criterion to support this technology placements in the IOF networks.

1.2 Audience

Network Operations - Provisioning & Maintenance
Network Operations - Circuit Capacity Management
Network Operations - Common Systems Capacity Management
Infrastructure Planning - Site Specific Interoffice Planning

1.3 Target Area
All state interoffice networks where long fiber cable routes are approaching exhaust.

1.4 Time Frames
Deployment of DWDM technology is already underway with one-time approvals. This region letter supports the initial applications of DWDM technology until future metro products and price decreases are available that alter the economics for deployment

1.5 Capital/Expense Dollars
The recommendations in this deployment directive provide capacity relief at a capital cost that is less than the current present method of operation, placing additional fiber cable. Thus, there are no additional funding requirements to implement this new technology in the recommended routes.

1.6 Contacts
Jim Jackson, Research Director - Science & Technology (205) 977-5032
Ken Cook, Member Technical Staff - Science & Technology (205) 977-7153
Bob Todd, Senior Analyst - Network Operations Support (205) 977-7676
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2.0 Implementation Plan

2.1 Study Methodology
Analyses between the present method of operation placing new fiber cable versus deployment of DWDM involved first costs comparisons to provision new capacity in a route. In addition, long term studies were made using the Bellcore Economic Module Evaluator tool to include the impact of growth channel costs for adding client interface cards to the DWDM terminals. Recommendations are supported where the initial costs of the DWDM alternatives are significantly lower than the first cost of the fiber PMO alternatives.

2.2 Deployment Recommendations
As a result of the studies made for the deployment of DWDM technology, along with the selection of the CIENA MultiWave 1600 product as the initial system to deploy in BellSouth, the following deployment directives and recommendations are provided for planners evaluating interoffice fiber exhaust situations.

2.2.1
With placement of the CIENA point-to-point DWDM system, only fully diversified transport rings, or diversely routed point-to-point systems, are to be deployed over the DWDM channels. Protection switching at the SONET ring or asynchronous system level is required to insure network reliability. It is a necessity that we continue to insure the reliability of the network by maintaining the alternate routing architectures that the SONET and asynchronous fiber ring systems provide through self-healing capabilities.

2.2.2
The economical deployment of this initial DWDM system will generally be spans where the construction of a fiber cable relief alternative is 15 miles or greater, **OR** in a span where the equivalent cost to construct a shorter fiber facility exceeds that of a 15 mile cable placement. Using a regional factor for fiber construction developed by Technology Directives, this cable construction alternative cost approximates $480,000. An example may be shorter fiber exhaust spans that require major costs for new structures, such as underground conduit construction.

2.2.3
Initial deployment of a DWDM system is recommended to be equipped with 2 channels. Channel 1 will be a "hot" spare while the 2nd channel will be the first "working" channel. Future growth channels will also be supported by the first spare channel in the event a channel remodulator card fails. The input signal to the remodulator may be moved to the spare Channel 1 until a replacement remodulator unit is provided for the failed unit.

2.2.4
An optical add/drop multiplexer (OADM) terminal is also available for the MultiWave 1600 system. It can add/drop from 1 to 4 channels in each direction, east to west and west to east utilizing various filters. It is recommended to deploy either the 2-channel or 4-channel add/drop filter depending upon planning requirements. (Note, the OADM was deployed in the Technology Trial in Mississippi, but was not evaluated in the field trial. Therefore, the initial application for add/drop of optical channels will need to allow for the time to include field trial activities of the OADM. Please contact Ken Cook should this application be needed to initiate the support for an OADM trial site.)

2.2.5
The deployment of an OADM is economical where the fiber construction alternative costs exceed the equivalent of 30 miles. This is due to the OADM terminal cost being nearly twice the cost of an end terminal. Generally, express ring systems will be deployed over the DWDM system, while local rings needing to add/drop at intermediate nodes would remain on local fiber facilities.

2.2.6
When an OADM is deployed at an office, a ring terminal serving as the only interoffice transport node in that office may not be routed over both east to west and west to east directions of the DWDM system. There are some unit failure scenarios that could isolate both directions of the DWDM path at the OADM, thus taking out of service any working ring terminal that is dropped then added back onto the same DWDM system. In order to insure network reliability, planners must be sure that placement of an add/drop node will not be the only access that an office has for transporting its traffic to the remainder of the network.

2.2.7
Optical line amplifiers may be deployed to extend the DWDM system to a maximum distance of 150 dB loss between two terminal end points. BellSouth will standardize on the 30 dB amplifiers in the MultiWave 1600 system. A single span without line amplifiers may have a maximum reach of 34 dB. Refer to details in Section 2.2 in Attachment 1.

2.2.8

The CIENA MultiWave 1600 interface units, called remodulators, support optical inputs from 50Mb/s to 2.4Gb/s, including SONET, Asynchronous systems, LAN, ATM or other optical inputs in this range. There are two remodulator interfaces to deploy, one for OC-48 only and one for all other bit rates. The "hot spare" unit in the first channel slot should be the remodulator that will support the majority of the optical inputs planned to be transported over the DWDM span.

2.2.9

Transmission Engineering support documentation may be found in BSP: 855-355-101 BT. These are planned for release in March upon final system testing for NMA and synchronization impacts.

2.3 Critical Success Factors

The primary factors affecting the long term success of this technology being deployed in our networks have been successfully evaluated in the FOA trial application. Methods and procedures for BST technicians for turn-up, test, acceptance testing and ongoing provisioning of the CIENA systems are largely complete at this time, and are expected to be issued by the end of May. CIENA also provides full system turn-up and testing support as needed for near-term applications until internal M&Ps are provided. In addition, availability of the core CO-WAN transport facility for alarming and network element communications is needed to provide the enhanced capabilities that insure the operations groups gain maximum efficiencies offered by the products. CO-WAN applications for DWDM deployment is fully supported by the Information Technology groups to meet requirements of the systems expected to be deployed in the states.

3.0 Contingency Plan

Deployment of DWDM systems is an alternative to the construction of fiber cable routes to provide relief in exhausting IOF fiber networks. In the event that this new technology cannot be deployed in a cross-section, planners have the current alternative of fiber cable construction. This contingency will require a longer time frame for provisioning of the relief capacity. For customer service demands, such as SMARTRings®, that often require fiber relief over a short period of time, the cable placement solution may not be feasible. Thus, Marketing will have to continue to negotiate service dates with the planning groups to insure adequate time is allowed for new cable construction.

DWDM technology is not generally an economical alternative for shorter IOF fiber routes, those less than 15 miles. Planners should continue to forecast fiber exhausts in these sections and issue planning documents that will support building the replacement fiber cable facilities in a timely manner.

Attachment 1

1.0 Supplier and Product Information

BellSouth's evaluation of long haul DWDM suppliers' products has resulted in the selection of the CIENA Corporation MultiWave 1600 product as our initial system for deployment in the longer IOF routes. This is a 16 channel, point-to-point system using optical amplification to reach spans of up to 150 dB. Interfaces on the system will support either SONET or non-SONET optical inputs, including asynchronous, ATM, LAN and other rates from 50 Mb/s up to 2.4 Gb/s.

The MultiWave products include end terminals, optical line amplifiers and optical add/drop multiplexers. Erbium doped fiber amplifier technology is used to achieve the long spans of transmission. BellSouth will standardize on a 30dB amplifier in the systems, allowing for 5 spans of 30 dB between end terminals. Other configurations allow for a single span of up to 34 dB, reduced by 1 dB for each additional span added. These engineering parameters are identified in Transmission Engineering practices BSP: 855-355-101 BT.

MultiWave 1600 terminals are made up of a common amplifier shelf and two channel shelves. The first channel shelf supports channels 1-8 with the second shelf provisioning channels 9-16. Each channel represents a separate wavelength that is multiplexed into the amplifier. The inputs can be either 1310nm or 1550nm signals coming from the transmitter of the transport terminal. Each channel interfaces the client (SONET, asynchronous inputs) signal through a remodulator card. On the receive side, there is a selector card which outputs 2 channels towards the SONET/asynchronous receivers. This output is a 1550nm signal, therefore the transport terminal receiver must be able to support an input at this level.

A MultiWave 1600 OADM provides for adding and dropping of 1-4 channels. Channels available for dropping at a terminal are 7, 8, 15, and 16. There are multiple wavelength filters available for the OADM to perform the add/drop functionality in any combination of drops. However, in order to simplify the need for many filters being available, causing additional spares, it is recommended to deploy either a 2-channel filter or the 4-channel filter depending upon planning considerations for the need to have drop capability at an office.

2.0 Planning Recommendations

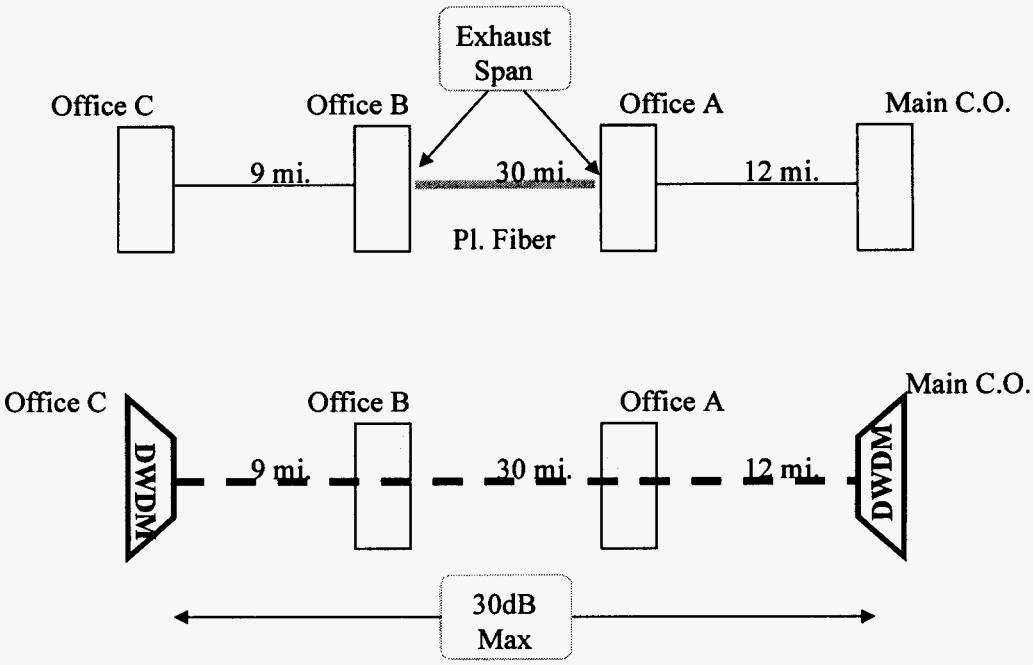
2.1 Fiber cable exhaust relief

Deployment of the CIENA system becomes an economical alternative for providing relief of exhausted fiber cable where the fiber construction span is 15 miles or greater. **OR,** where the cost of deploying a fiber facility equates that of 15 miles, the application should be considered for deployment of the DWDM system. Based upon historical costs to place new fiber cable in the region, the fiber construction costs comparison would be an equivalent of about $480,000.

One important finding of our initial studies is that when an exhaust condition is identified as a DWDM candidate, planners should also look at fiber cable spans adjacent to the exhausting span to possibly extend the DWDM span beyond the immediate wire centers terminating the fiber segment. The importance of this is that it may be done at NO ADDITIONAL CAPITAL COSTS when it is triggered by the shorter cross-section to be treated for relief. Figure 1 gives an example of how this might be applied. The amplification of the DWDM terminals allows for a reach of up to 34 dB in a single span between two terminals. This might allow a span of

up to 120 Km (about 70 miles) under certain fiber quality conditions. Transmission designs will establish the limits for each fiber span planned for DWDM.

FIGURE 1
DWDM Extension Beyond Exhausted Fiber Cross-section



(Note: In a single span application, the distance may be increased to 34dB reach using the 30dB amplifier. Over good fiber quality sections, this distance may be up to 120Km, or about 75 miles.)

When planners are considering the locations for the DWDM terminal equipment, they must also evaluate the relief objectives to be achieved. For example, in Figure 1 the actual requirement may be for fiber strands in the Office A to Office B segment. If the DWDM system is placed at Main and Office C, there would have to be "express" rings with nodes in these offices that can be rolled off of the physical fibers onto a DWDM channel in order to provide spare fibers between Office A and B. Therefore, the state planning teams will have to examine their overall fiber demands for each cross-section to determine the best location for the DWDM end terminals.

2.2 Impact of DWDM on joint IOF/Loop planning

When planning for IOF fiber cable relief, planners consult with their loop planning counterparts to evaluate the need for construction of a joint IOF/Loop fiber facility for some portions of the planned placement route. Many new fiber construction undertakings have provided significant savings by adding incremental Loop fibers to a planned IOF sheath, eliminating the need for a second sheath plus placing costs that would be incurred otherwise to provision loop facilities in a route. However, with the DWDM alternative available to an IOF

planner, the consideration for loop fiber relief, or initial trigger for fiber in a feeder route, should not be ignored when finalizing a relief plan.

For example, suppose an interoffice fiber route has exhausted in a 25 mile cross-section except for a single fiber pair. At an average placement cost of $33,000 per mile, cost of a new fiber facility would approximate $825,000. Assume an additional cost of $100,000 for incremental loop feeder fibers over a portion of the IOF route, giving a total undertaking cost of $925,000. An alternative placing DWDM for IOF relief would cost about $400,000, a clear economic alternative over additional IOF fiber cable construction.

Consideration must also be made for the requirement to place loop fibers in the route, including full placement costs. Assume that over a period of 2 years the loop fiber spans are required at a total cost of $300,000 for the sheath, placing costs and structure costs as required. A study of the DWDM alternative for IOF, plus the cost to place the loop fibers in subsequent years, finds that the total cost for additional capacity is actually $700,000. Based on total network requirements, the DWDM alternative may not be the best or most economical alternative in this case.

Interoffice facility planners should take proactive steps to design an overall relief strategy, including "all" network relief costs for both Loop and IOF when planning for DWDM deployment in a fiber route. It is also recognized that providing capacity relief in a short time frame to support service demands may be an over-riding factor in many cases, driving the placement of the faster DWDM relief alternative.

2.3 Optical add/drop multiplexer deployment

Deployment of the OADM should only be considered where the equivalent fiber placement is near 30 miles. This is based on the higher cost of the OADM versus an end terminal. Infrastructure Planning should perform local studies to determine the impact of placing an OADM at an intermediate node in a DWDM span. A number of planning issues arise when considering use of OADM nodes.

First, the cost of the OADM is nearly double that of the end terminal. To offset this economic startup penalty, the first cost of a fiber cable construction alternative will need to approximate that of a 30 mile cross-section. If a span is long enough to require an optical line amplifier, then the incremental cost of the OADM impacts the first cost much less. An OADM offers an expensive "access" to the SONET or asynchronous fiber system being transported over an optical channel.

Depending upon the drop demands at an intermediate node, the OADM may offer an efficient alternative for access to optical channels, or it may be too limiting for long term demands for a node. The MultiWave 1600 OADM can add or drop from 1 to 4 channels in each direction, east to west and west to east. These channels available for add/drop are 7, 8, 15 and 16. Channels are "filtered" out of the high speed optical path to drop at an OADM. There are 16 different filtering units available to allow complete flexibility of combining any or all of the 4 channels for add/drop demand. One consequence of the multiple filters is that if a change is needed from one filter type to a second, it requires that all working channels be switched to protect routes since the OADM filters are changed on an out of service condition.

Another add/drop planning issue is that any channel being filtered at an OADM is not available to be utilized as a through channel. That is, if a 2-channel filter is used at an add/drop site, the 7 and 8 channels are not usable for an express ring system between the DWDM end terminals. Although the MultiWave 1600 OADM offers expanded add/drop flexibility, maintaining simplicity seems to be in order for these high capacity transport systems. Therefore, it **is recommended that only the 2-channel or the 4-channel filters be utilized as standard configurations** to limit sparing and PICS requirements for inventory of multiple A/D plug-in units as well as simplifying overall planning alternatives. These configurations are modeled in the MBOS product inventories.

Finally, using an OADM will impact some add/drop alternatives. There are some failure conditions identified by CIENA in their multiplexer that could isolate both amplified directions of the OADM. Thus, a SONET ring carrying all of the traffic and signaling links to an office would be isolated from the remaining ring nodes if it rides over the DWDM system, dropping and adding in both directions at an OADM. **Therefore, any ring system serving as the sole transport delivery node for a wire center cannot be routed over both east to west and the west to east directions of the DWDM system. One direction of the ring path must be on direct fibers leaving the office.**

2.4 Initial MultiWave 1600 configuration

For the initial deployment of a MultiWave 1600 system, it is recommended that the first 2 channels be equipped in the following manner: Channel 1 is reserved as a "hot spare," Channel 2 is the first working channel. As systems are deployed, operations will need to have spare remodulator interface cards available in the event of a unit failure. Since there are 16 different remodulator units, the sparing costs may become quite expensive to keep such an inventory. Therefore, the recommendation of maintaining Channel 1 as a hot spare will provide a tested spare channel to which a working ring system may be moved should its own channel remodulator card fail. Thus, the first working channel will be Channel 2. Provisioning in this way will reduce sparing costs, reduce PICS inventory volumes, have a pre-tested channel available for immediate use and may reduce channel downtime in the event that a specific channel remodulator is not immediately available in the office.

2.5 Optical line interface rates supported

The MultiWave 1600 system supports interfaces of optical line rates from 50 Mb/s to 2.4 Gb/s. These rates include SONET, asynchronous, ATM, LAN, Fast Ethernet and other optical inputs in the range. (BellSouth has not evaluated most of the non-SONET systems over the lab DWDM system. Should these interfaces be needed, planners should contact TAS-T/A prior to initiating this service.) There are two remodulator unit configurations, one for OC-48 and one for all other optical rates. Both remodulators have been tested in the BellSouth lab. The physical cards are basically the same except for some varied strapping options that are to be factory set. (The strapping changes can be field altered, but this is not recommended in BST.) This also impacts the "hot spare" provisioning with potentially two client interfaces that must be supported. It is recommended to deploy the hot spare unit that supports the majority of the remodulators working in the system, expected to be the OC-48 module in most IOF routes.

SONET systems used by BellSouth use both 1310nm and 1550nm transmitters, depending upon the transmission characteristics of the fiber span. The MultiWave 1600 Remodulator

interface card supports both 1310nm and 1550nm inputs for all bit-rates. Therefore, no changing out of transmitter cards is required when connecting to the DWDM terminal. On the output side of the DWDM terminal, there is a 1550nm signal that interfaces with the SONET receiver on the ring terminal. Generally, the SONET receivers have a wideband characteristic, able to accept inputs of 1310 and 1550 nm wavelengths with one exception that has been identified. The Fujitsu FLM-600 has both a 1310 and a 1550 nm receiver. It has been determined that if the FLM-600 is deployed over a DWDM channel, it must have the 1550nm receiver in place to accept the output signal of the MW 1600 terminal.

2.6 Operations impacts

There are a number of operations benefits as well as process changes that are driven by DWDM technology deployments. One of the most significant will be the decrease in number of fiber optic ring regenerators to be maintained in the network. These regens are often located at very remote central office locations or standalone repeater huts located in rural sites and independent company service areas. For some long routes deployed with DWDM, rolling of the ring systems onto an optical virtual fiber may allow for some remote huts to be abandoned for interoffice requirements. Another benefit will be fewer fiber cable sheaths in plant that are subject to damage and cable cuts requiring contractor excavations and operations repair expenses. This is especially critical for those routes that traverse non-BST service areas where the time to locate and repair a damaged fiber cable may be quite long due to the rural nature of extremely long routes, making it very difficult for locating the damaged site to quickly make repairs.

A change in the operations area of NE communication to NMA will be to utilize the Central Office Wide Area Network (CO-WAN) offering Direct Telnet Connection - TL1 via TCP/IP. Each DWDM terminal and OADM will be cabled to the office CO-WAN hub/router. Optical line amplifiers do not require connectivity to a router since their network management will be via the Nodal Control Processor and the system Optical Service Channel (OSC) to an end terminal node. If a DWDM terminal is placed into an office that is not already equipped with a hub/router, the router is to be placed in conjunction with the DWDM node. The CCM Manager should coordinate with the state Network Telemetry Manager and the IT Packet Datakit Network Planner to have a hub/router deployed in the office. The capital savings associated with deployment of DWDM over fiber cable will more than offset the expense of the hub/router elements at both end terminal locations.

Other operations features available in the CIENA system Software Release 3.2.0 include:

1. Span Management - Includes automatic adjustment of amplifier power, selector drift containment and detection of duplicate channel sources.
2. Dynamic Amplifier Power Control - Identifies the number of channels in a span and adjusts amplifier output levels.
3. Duplicate Channel Source Avoidance - Prevents two identical wavelengths from being active in the same direction on a fiber.
4. Distribution of Circuit Pack Software Via Profile Maintenance - Enables the coordinated loading of all circuit pack software in a single operation.

As we move into optical networking technologies, there are some new test set units that are needed to fully support the installation turn-up and ongoing maintenance of these DWDM systems. Three new test sets are recommended for use in these procedures. First is the Optical Spectrum Analyzer, which provides a full view of all channels across the DWDM span to insure flat gain on all wavelengths. Secondly, an OC-48 Bit Error Rate Test (BERT) set is needed to verify quality of the OC-48 signals being transported over a wavelength (channel). Up until this time, the OC-48 has never been the low-speed input to a higher speed transport system. With DWDM, the OC-48 level signal test will need to be made over the equipped channel to verify no errors are being generated on the ring system. The third test set is the Optical Scope, which allows for close inspection of the fiber end points prior to connection of the DWDM system. Further description and references to these new test sets may be found in BSP: 855-355-101 BT for engineering guidelines, and in RL 99-04-002 BT, the product announcement letter. Also, Operations M&Ps being developed will address some of these system turn-up and testing requirements. (Contact Bob Todd for further details.)

Initially, methods and procedures are being developed for acceptance testing of the MultiWave 1600 system. Due to this being a new technology, the initial systems being deployed may benefit from having CIENA Technical Support personnel perform the turn-up and testing of the spans. This will provide local technicians an opportunity for on site turn-up assistance with the supplier experts in preparation for ongoing maintenance support after service activation. Contract pricing for the supplier turn-up/test support is currently $5,000 per node. Utilizing the CIENA turn-up support may also reduce the initial need for the new test sets as these will be provided by CIENA for their own procedures. The acceptance testing M&Ps are planned for release in April.

PRIVATE/PROPRIETARY

BELLSOUTH

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other: None

to: Attached Distribution List

entities: BellSouth Infrastructure Planning, Capacity Management and Network Operations

from: D. L. King, Network Vice President - Infrastructure Planning

description: Transmits updates to asynchronous technology equipment inventory and supplier product support status.

* * *

Region Letter 95-11-009 BT transmitted asynchronous technology replacement strategies for the migration of services to SONET based transport facilities. These migration strategies, as shown in Attachment 1, are still valid and nothing in this letter alters our recommendations at this time. We will continue to use these six strategies as the focus for positioning the transport networks to transition off of older, obsolete equipment.

This region letter is an update on the status of asynchronous equipment in service in the BellSouth interoffice and loop networks. BellSouth continues to maintain a significant inventory of working asynchronous systems, many of which have been Manufacturer Discontinued by the suppliers. In Table 1, the 1997 capital expenditures for asynchronous equipment are identified by supplier. The majority of these expenditures were for growth channel cards in existing terminal equipment. Also, current contractual policy with each supplier is shown indicating their ongoing support for their products. Table 2 provides a current supplier/product status for those asynchronous fiber terminals and electrical multiplexers in service.

It is desired to minimize any growth on asynchronous technology. We need your help to reduce expenditures on these obsolete technologies. Following recommendations in Attachment 1 will help to insure minimal expenditures on this equipment. However, while working to minimize future expenditures to grow on asynchronous equipment, these systems should continue to be supported to provide alternative routing for critical services where diversity objectives drive the need for diverse electronics capability. In addition, there are service demands and network interface requirements which will continue to necessitate the purchases of 3/1 multiplexer equipment. An example of this is to channelize a DS-3 service for a customer. At this time, only the Lucent DDM-1000, the Alcatel DMX-3003 and the Telco 828A/AF multiplexers continue to be manufacturer available for purchase. A study is underway to evaluate a single 3/1 mux supplier source for these applications at lower price points and requiring no DS-1 interface port cards to install. Further information will be provided when review of these alternatives is complete.

Table 1
1997 Asynchronous Multiplexer Purchases and Supplier Support

Supplier	Contract	1997 Expenditures [1]	Years Continuing Support [2]	Repair Policy [3]	Notification of MD Status
Alcatel	PR-9276-A	$2.6	10	Repair, Replace, Manufacture, Provide Specs	180 days
Lucent	PR-3200-B	$11.7	5	Repair, Replace, Offer to License Specs [4]	1 year
NEC	none	$0.7	10	Repair, Replace, Manufacture, Provide Specs	6 months [5]
Nortel	PR-2166-A	$0.1	20	Repair, Replace, Provide Specs	6 months [5]
Telco Systems	PR-2289-A	$1.5	10	Repair, Replace, Manufacture, Provide Specs	6 months [5]

[1] Telco Systems purchases from 9/1/96 to 11/30/97, all others 1/1/97 to 11/30/97.
[2] Years Continuing Support refers to provisions that the supplier will provide for sale; maintenance, replacement, repair parts, software support, and telephone/field services (service terms negotiated separately) for the period noted.
[3] Repair policy for the most suppliers is that they will attempt to repair the part. If irreparable, they will replace the part from stock or distributed sources. Failing to find a replacement, some suppliers will manufacture the part. The willingness to manufacture most likely depends on the price. Price may be current in the contract, which means the supplier will lose money on the deal if they decide to produce the product, or the contracted price has expired and a new price must be negotiated.
[4] Lucent's terms for continuing support differ in that they will offer license to such information required to produce the unattainable item, however, the license may be granted free of charge or may be offered at mutually agreed reasonable terms.
[5] Nortel and Telco Systems have no specific language regarding notification. Nortel will honor orders for MD'd equipment up to six months prior to MD date. Telco Systems and NEC representatives stated their policy is six months notification.

An inventory has been taken to determine what products continue to be in service in the interoffice and loop networks. The TIRKS and LEIM data base resources were used to determine working units as of the end of 1997. Table 2 provides a summary of the in-service asynchronous equipment with the number of units shown as working in the database extracts. Also, Table 3 is provided to show the current trends for removing from service in the interoffice obsolete equipment through network migration efforts.

This manufacturer status information is provided to assist the planners when making the selection of older, obsolete technology as first choice for migration of existing demands to new SONET systems where these are being deployed. As suppliers initiate future changes in availability of asynchronous equipment, this information will be forwarded for your network planning considerations.

Questions from your staff regarding this matter may be directed to Jim Jackson at (205) 977-5032 or Ken Cook at (205) 977-7153.

Original signed by D. L. King

D. L. King
Network Vice President - Infrastructure Planning

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ATTACHMENT 1
RL 95-11-009 BT Technology Directives Summary

Following is a summary of the strategies presented in the 1995 RL which are still valid when planning migration off of asynchronous equipment. These recommendations have not changed. Additional planning considerations are presented that can further your efforts to cap growth on asynchronous systems and provision growth on SONET transport facilities.

1.1 Cap purchases of new asynchronous 3/1 multiplexers. Continue to grow only those asynchronous multiplexers which are currently equipped with common plug-ins to support DS1 drops.

1.2 Network churn, exhaust situations and customer demand for SONET architecture features will drive replacement of many asynchronous fiber systems. However, advancement of asynchronous fiber terminal replacements is not recommended, nor is funding available, at this time.

1.3 Cap growth of new ring terminal nodes on existing asynchronous rings.

1.4 Where available, place all growth requirements on existing SONET systems. Do not equip existing asynchronous network elements for growth except to defer significant expenditures for fiber cable placements due to facility exhausts.

1.5 Size new SONET ring facilities to support future migration of working capacity from asynchronous systems.

In addition to the recommendations in the original Region Letter, the following planning strategies are provided which should also be considered to further minimize purchases of asynchronous terminals and low-speed interface cards.

2.1 Restrict spare capacity remaining on existing asynchronous terminals to inhibit flow-through assignment of circuits to obsolete equipment. This can only be applicable where an alternative SONET facility exists to which growth demands may be assigned.

2.2 Where channelized DS-3 capability is needed, consider use of a SONET multiplexer with the new "transmux" functional interface units. The DDM-2000 is planned to support transmux feature in Rel. 13.0 (1998) while the Fujitsu FLM-150 features will be available in Rel. 12S (1998).

TABLE 2
Asynchronous Equipment Deployment

The following asynchronous fiber terminals and multiplexers are currently shown as deployed in the region:

Vendor	Equipment Type	A&M,MD Status
Alcatel (Rockwell Collins)	DML 45 DS3-DS1 Mux	MD - 1993
	DML 3x50, 135 Mb/s Pt-Pt FOT	Available
	DMX-2003 DS3-DS1 Mux	MD - 1993
	DMX-3003 DS3-DS1 Mux	Available
	LTS-3139, 135 Mb/s Pt-Pt FOT	MD - 1994
	LTS-1565, 560 Mb/s Pt-Pt FOT	MD - 7/96
	LTS-1565, 560 Mb/s Ring FOT	MD - 7/96
	LTS-21130, 1.2 Gb/s Ring FOT	MD - 7/96
	LTS-21130, 1.2 Gb/s Pt-Pt FOT	MD - 7/96
Lucent (AT&T)	DDM-1000 DS3-DS1 Mux	Available
	DDM-1000, 45 Mb/s FOT	M.D. - 7/96
	DDM-1000, 90 Mb/s FOT	M.D. - 1/96
	DDM-1000, 180 Mb/s FOT	M.D. - 7/96
	FT Series G, 417 Mb/s FOT	M.D. - 4/96
	FT Series G, 1.7 Gb/s Pt-Pt FOT	M.D. - 4/96
	FT Series G, 1.7 Gb/s Ring FOT	M.D. - 4/96
NEC Corp.	RC28C, DS3-DS1 Mux, Non B8ZS	M.D. - 6/95
	RC28D, DS3-DS1 Mux	Available
	RC28B1, DS3-DS1 Mux	Available
	FD-1840, DS3-DS1 Mux	Available
	FD-33001A, 135 Mb/s Pt-Pt FOT	M.D. - 6/95
	FD-39001A, 405 Mb/s Pt-Pt FOT	M.D. - 6/95
	FD-31201A, 560 Mb/s Pt-Pt FOT	M.D. - 6/95
	FD-31201, 560 Mb/s Ring FOT	M.D. - 6/95
	FD-32401,1.2 Gb/s Pt-Pt FOT	Available
	FD-32401,1.2 Gb/s Ring FOT	Available
NorTel (Northern Telecom)	DMT-300, DS3-DS1 Mux	Available
	FMT-150, 45 Mb/s FOT	Available
	FD-135, 135 Mb/s FOT	M.D. - 1996
	FD-565, 560 Mb/s Pt-Pt FOT	M.D. - 3/97
Telco Systems	828, DS3-DS1 Mux, Non B8ZS	M.D. - 6/96
	828A, DS3-DS1 Mux	Available
	828AF, DS3-DS1 Mux	Available
	M90, 90 Mb/s Pt-Pt FOT	M.D. - 7/96
	M560, 560 Mb/s Pt-Pt FOT	M.D. - 7/96

TABLE 3
Asynchronous Equipment In-Service, Year End 1997

Equipment Type	Equip. Description	AL IOF	AL Loop	N. FL IOF	N. FL Loop	S. FL IOF	S. FL Loop	GA. IOF	GA. Loop	KY IOF	KY Loop	LA IOF	LA Loop	MS IOF	MS Loop	NC IOF	NC Loop	SC IOF	SC Loop	TN IOF	TN Loop	Equip Summary
DBS	NEC RC17A elec mux	12																				12
DCB13	NEC RC28B1 ds1-opt							1														1
DCD13	NEC RC28D ds1-opt		26				4			4	4		2		1				1		66	108
DCD1E	NEC RC28A elec mux	574				3		24		30								1		1112		1744
DCDAEZ	NEC RC28A elec mux B8ZS	1652																				1652
DCR13	NEC RC28C elec mux	16								15		1		3						98		133
DCS13	NEC RC28C1 ds1-opt											2										2
EF13	Nortel DMT-300 elec mux		1		51			3		34		54		28	2	8			2	85	5	273
EFH	Nortel FD135 opt																			2		2
EFJ	Nortel FD565		3	32	60			16	2	2		17		4		8	2		2			148
EFN1/2	Nortel FMT150A													4								4
EFN3	Nortel FMT150B elec mux							6		4										14		24
EFN4/EFNA	Nortel FMT150B/D elec mux			1				2										8		6		17
EGH4	Collins DML45 mux ds1-ds3	3	7		25		37		13				17		2		4		35	2	10	155
EGJ1	Collins DMX2003 elec mux			23	23		34	202	39							196		2				519
EGJ1A	Collins DMX3003 elec mux			26		2650		1680		66		23				544				4		4993
EGL1	Collins LTS3139					34	37	15	15										24			125
EGL10	Collins LTS1565R ring											70										70
EGL2	Collins LTS1565		2	30	2	16	4	48		3						80		74				259
EGL3	Collins LTS21130			8		406		484								90		36				1024
EGL3R	Collins LTS21130R ring			6		323		269		38						22		36				694
EGL5	Collins DML3x50 opt		6	6	25		38		82				16				36		5		160	374
EGL6	Collins LTS1565D					5			3	8							4					20
EGM1	Collins DML3x50 mux ds1-ds3			105																		217
FD1	NEC FD33001A opt 135	53										1		10						2		66
FD12	NEC FD1840A opt mux	1																				1
FD13	NEC FD32401A oltm term	262		194		168		427								64		6				1121
FD13R	NEC FD32401 1.12 ring															112						112
FD13S	NEC FD32401 1.12 simplified							46														46
FD2	NEC FD39001A 405mb	32										6								8		46
FD8	NEC FD31201A 560mb	342		16		24				9				2		6		16	8	161		573
FD8A	NEC FD31201A 560mb simp							9	1											372		382

FD9		NEC 1840A opt mux							1											7		8
FTG		Lucent FTSerG 417mb	2								4		464		36					324		830

TABLE 3 (cont'd)
Asynchronous Equipment In-Service, Year End 1997

Equipment Type	Equip. Description	AL IOF	AL Loop	N. FL IOF	N. FL Loop	S. FL IOF	S. FL Loop	GA. IOF	GA. Loop	KY IOF	KY Loop	LA IOF	LA Loop	MS IOF	MS Loop	NC IOF	NC Loop	SC IOF	SC Loop	TN IOF	TN Loop	Equip Summary
FTG1	Lucent FTSerG 1.7gb							4				86				42		92		4		228
FTG2	Lucent FTSerG 417-1.7 mux	16						9		48		29										102
M123	Lucent elec mux	1			29																	30
M13	Lucent elec mux							13				2										15
M1CA	Lucent M1CA elec mux	48		1						178		491		16		10		10		106		860
MW13	Lucent DDM1000 90mb	34	342	64	2679	55	4019	69	5292	78	197	173	312	64	203	31	1905	164	1810		573	18064
MW14	Lucent DDM1000 180mb	2		94		18		93				129		39		64		46		174		659
MWX4	Lucent DDM1000 180mb mux			12												2		18				32
MY13	Lucent DDM1000 elec mux	40		197		99				646		834		893		233		166		483		3591
MY1C	Lucent DDM1000 elec mux	1								4				187						8		200
MY33	Lucent DDM1000 ds3-90mb			18						1		4		8								31
MY34	Lucent DDM1000 ds3-180mb	9		22						21		16		10		4		12		13		107
MYC3	Lucent DDM1000 elec mux									1		70										71
RDS	LucentFTserG Ring Div Sw											144		1		108		338				591
TF2	Telco Sys M90 90mb							10														10
TF4	Telco Sys M560 560mb	1		85	40	14	60	23	7							16	7	4				257
TM1	Telco Sys 828 elec mux			394		499		404	55		9		1			263		166	33			1824
TM1A	Telco Sys 828A elec mux	3		1103		150		629								590		215				2690
TM3	Telco Sys 828 opt mux	3		3	169	7	253	24								2		4				465
TM3F	Telco Sys 828AF opt mux			2				1						4								7
X13	Lucent MX3 elec mux											5										5
X13LA	Lucent MX3 mux ds1-ds3									8		1					18		6		10	43
XC3	Lucent MX3 mux ds1c-ds3				29		44	64	1			1					34		9		7	189
XC3LA	Lucent MX3 mux ds1c-ft3								53			2										55
	State Summary	3107	387	2553	3132	4471	4530	4576	5563	1202	210	2625	348	1309	208	2495	2010	1414	1935	2975	831	

BellSouth Summary **45,881**

TABLE 4

Interoffice Network Year Over Year Trend for In-Service Asynchronous Equipment

This table depicts the changes in the Interoffice networks use of asynchronous network elements. Prior year data has not been assembled for loop asynchronous equipment remaining in service and is not included in this table. Loop data will be encompassed in future analysis beginning with year-end 1997 summary shown in Table 2.

Equipment Type	Equip. Description	YE 1996 In-Service	YE 1997 In-Service	1997 Change
DBS	NEC RC17A elec mux	23	12	-47.8%
DCB13	NEC RC28B1 ds1-opt	17	1	-94.1%
DCD13	NEC RC28D ds1-opt	10	4	-60.0%
DCD1E	NEC RC28A elec mux	1921	1744	-9.2%
DCDAEZ	NEC RC28A elec mux B8ZS	1525	1652	8.3%
DCR13	NEC RC28C elec mux	210	133	-36.7%
DCS13	NEC RC28C1 ds1-opt	12	2	-83.3%
EF13	Nortel DMT-300 elec mux	231	212	-8.2%
EFH	Nortel FD135 opt	13	2	-84.6%
EFJ	Nortel FD565	103	79	-23.3%
EFN1/2	Nortel FMT150A	4	4	0.0%
EFN3	Nortel FMT150B elec mux	24	24	0.0%
EFN4/EFNA	Nortel FMT150B/D elec mux	18	17	-5.6%
EGH4	Collins DML45 el mux ds1-ds3	5	5	0.0%
EGJ1	Collins DMX2003 elec mux	435	423	-2.8%
EGJ1A	Collins DMX3003 elec mux	4730	4993	5.6%
EGL1	Collins LTS3139	63	49	-22.2%
EGL10	Collins LTS1565R ring	60	70	16.7%
EGL2	Collins LTS1565	297	251	-15.5%
EGL3	Collins LTS21130	1070	1024	-4.3%
EGL3R	Collins LTS21130R ring	757	694	-8.3%
EGL5	Collins DML3x50 opt	6	6	0.0%

TABLE 4 continued

Equipment Type	Equip. Description	YE 1996 In-Service	YE 1997 In-Service	1997 Change
EGL6	Collins LTS1565D	15	13	-13.3%
EGM1	Collins DML3x50 mux ds1-ds3	105	105	0.0%
FD1	NEC FD33001A opt 135	86	66	-23.3%
FD12	NEC FD1840A opt mux	2	1	-50.0%
FD13	NEC FD32401A term	1130	1121	-0.8%
FD13R	NEC FD32401 1.12 ring	112	112	0.0%
FD13S	NEC FD32401 1.12 simplified	46	46	0.0%
FD2	NEC FD39001A 405mb	74	46	-37.8%
FD8	NEC FD31201A 560mb	686	565	-17.6%
FD8A	NEC FD31201A 560mb simplified	392	381	-2.8%
FD9	NEC 1840A opt mux	8	8	0.0%
FTG	Lucent FTSerG 417mb	955	830	-13.1%
FTG1	Lucent FTSerG 1.7gb	243	228	-6.2%
FTG2	Lucent FTSerG 417-1.7 mux	112	102	-8.9%
M123	Lucent elec mux	1	1	0.0%
M13	Lucent elec mux	19	15	-21.1%
M1CA	Lucent M1CA elec mux	1223	860	-29.7%
MW13	Lucent DDM1000 90mb	800	732	-8.5%
MW14	Lucent DDM1000 180mb	778	659	-15.3%
MWX4	Lucent DDM1000 180mb mux	24	32	33.3%
MY13	Lucent DDM1000 elec mux	3524	3591	1.9%
MY1C	Lucent DDM1000 elec mux	256	200	-21.9%
MY33	Lucent DDM1000 ds3-90mb	35	31	-11.4%
MY34	Lucent DDM1000 ds3-180mb	124	107	-13.7%
MYC3	Lucent DDM1000 elec mux	74	71	-4.1%
RDS	LucentFTserG Ring Div Sw	668	591	-11.5%
TF2	Telco Sys M90 90mb	10	10	0.0%
TF4	Telco Sys M560 560mb	194	143	-26.3%
TM1	Telco Sys 828 elec mux	1314	1726	31.4%

TM1A	Telco Sys 828A elec mux	2558	2690	5.2%
TM3	Telco Sys 828 opt mux	50	43	-14.0%

TABLE 4 continued

TM3F	Telco Sys 828AF opt mux	7	7	0.0%
X13	Lucent MX3 elec mux	94	5	-94.7%
X13LA	Lucent MX3 elec mux ds1-ft3	13	9	-30.8%
XC3	Lucent MX3 elec mux ds1c-ds3	105	65	-38.1%
XC3LA	Lucent MX3 elec mux ds1c-ft3	4	2	-50.0%
	State Summary	**27375**	**26727**	-2.4%

BELLSOU

Regional Deployment Plan

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Subject: Interoffice Asynchronous Technology Replacement Plan

Type: Regional Deployment Plan

Date: December 20, 1995

Distribution List: (See Attached Distribution List)

Related Documents: RL 95-10-030 BT
Implementation of SONET Self-Healing Transport Plan - 9/17/93

To: Vice President - Broadband Business Systems
Sales Vice Presidents - Interconnect Marketing
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Assistant Vice President - Network Planning and Provisioning Support
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Directors - Network Operations
Director - Architecture and Operations Planning & Engineering (BBS)

From: D. L. King, Executive Director - Infrastructure Planning

Description: Interoffice Asynchronous Technology Replacement Plan

This Regional Deployment Directive provides analysis of the existing asynchronous fiber optic technology deployed in the interoffice network and replacement triggers for migrating services to the Synchronous Optical Network (SONET) architectures being constructed today. The migration strategy from asynchronous equipment to SONET provides enhanced network capabilities, improving overall service quality, additional capacity over fiber facilities and reduced expenses through remote provisioning and maintenance features not available in the asynchronous architectures. In addition, SONET architectures will position the interoffice network to support the many new advanced fast packet and broadband services which are being proposed for many customers in the BellSouth region.

In order to develop the interoffice infrastructure that maximizes the network's ability to economically provision these enhanced services, these directives advance some limited asynchronous technology replacements, bringing the network closer to an all SONET platform. With many of the asynchronous product vendors limiting future support of their products, these directives also limit future growth on asynchronous technology which may require excessive cost or maintenance support from internal resources.

However, with limited resources available for extensive migration from asynchronous to SONET during the next three years, this deployment plan only focuses on replacing the asynchronous equipment where maintenance costs can be reduced, basic data services can be supported and the forecasted demands for enhanced services significantly alter the requirements for SONET architecture capability. Also, large customers, such as the

interexchange carriers and state governments, are requesting SONET optical level interfaces with the local exchange companies in the region's larger metropolitan areas. Other wireless customers and competitive alternative providers, which are constructing new networks comprised of all SONET technology in 1995 and beyond, will require SONET at their points of interface with BellSouth. Thus, customer demands will drive near term interoffice migration to SONET in the metro areas while network capacities, maintenance concerns, vendor support for early vintage products and total network service quality will trigger replacement of asynchronous fiber equipment throughout the remainder of the network during the next five years.

Specifically, this deployment directive recommends the following:

1. Cap purchases of new asynchronous 3/1 multiplexers. Continue to grow only on those asynchronous multiplexers which are currently equipped. All new multiplexer growth is to be on SONET electrical muxes. An exception will be multiplexers for purchased channelized DS3 circuits routed on asynchronous fiber systems.

2. Replace all NEC RC28C and Telco Systems 828 3/1 multiplexers with SONET DDM-2000 or FLM-150 systems, beginning in 1997 and completing in 1998. These specific multiplexers were selected for replacement due to being the earliest vintage muxes and do not offer 64 CC capability. In addition, the NEC RC28C was manufacture discontinued in 1995 and the Telco 828 is planned for discontinue status by June, 1996.

3. Network churn, exhaust and customer demands for SONET architecture features will drive the eventual replacement of asynchronous fiber optic terminals. However, advancement of asynchronous fiber terminal replacements is not recommended at this time.

4. Cap growth of new ring terminal nodes on existing asynchronous rings.

5. Where available, place all growth requirements on existing SONET systems. Do not equip existing asynchronous network elements for growth except to defer significant fiber cable placement due to exhaust considerations. Our intent is to minimize any further expenditures on any asynchronous equipment.

6. Size new SONET ring facilities to support future migration of working capacity from asynchronous systems.

Your support of this deployment plan will allow the IOF network to advance its migration to the complete SONET-based facilities. This focus on providing enhanced features, provisioning and performance capabilities with SONET reduces network costs associated with maintaining many of these asynchronous components in service. Benefits will include a higher quality of customer service, increased customer network control features, lower costs to provide new services and reduced service provisioning times for services via SONET remote access and control.

D. L. King
Executive Director -
Infrastructure Planning

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1.0 Introduction

1.1 Purpose

With the rapid deployment of Synchronous Optical Network (SONET) elements in the interoffice network, the value of maintaining the asynchronous optical network elements is diminished. It might even suggest that effort should be made to advance replacement of the asynchronous systems in service with their limited feature enhancements compared to SONET capabilities. However, the majority of the interoffice transport network demand generally does not require enhancements beyond survivability and maximizing of the overall quality of service to our customers. To that extent, the asynchronous architectures deployed through 1994 have positioned the interoffice network to support a majority of customer demands over self-healing systems, enhancing the quality of service significantly when compared to media such as copper or digital radio.

This deployment plan determines the extent of the asynchronous deployment in BellSouth, the quality of the products used, current vendor support levels, product availability and network triggers which increase the need to replace existing equipment. In addition, new enhanced services being tariffed by the Customer Operating Units (COUs) are considered which cannot be supported by the asynchronous architectures in place. The evaluation considers the costs associated with replacement of any asynchronous systems, expenses for cutover to new SONET systems, operations issues and customer considerations for proposed rearrangements. Forecast data is considered relative to the economic and average remaining life analyses for support of the recommended plan.

The value of maintaining the high quality of service currently available on the existing architecture mix of both asynchronous and SONET systems is critical to the success of this plan. A second objective is to insure that the interoffice network is capable of meeting growth for enhanced service offerings, providing a services platform which proactively positions the network to economically and rapidly deploy capacity as required in the most highly competitive metropolitan areas. Thirdly, consideration must be made for the impact of any plan upon the ability of network operations to support the circuit rearrangements required to affect any replacement of asynchronous network elements. In the final analysis, capital constraints will ultimately control the extent to which the recommendations herein are accomplished in the proposed time frames.

1.2 Audience:

Network Operations - Circuit Capacity Management
Infrastructure Planning
Broadband Multimedia IBU
Interconnect Marketing IBU

1.3 Target Area:

All states are included in this study of the asynchronous technology network elements in the interoffice network. Wire centers impacted are those where asynchronous equipment is in service and identified for replacement per this deployment plan. However, it is anticipated that the metro service areas in the region will support earlier advancements in replacing the older technology due to rapid growth triggers along with demands for enhanced feature capability of the interoffice network, such as ATM transport, which can only be provided with SONET architectures.

1.4 Time Frames:

The network equipment replacements identified herein are to begin in 1997 as change plan funding through the multi-year budgeting process becomes available to support these recommendations. Asynchronous replacement advancements will also occur in 1998.

1.5 BST Strategy Linkages:

FLSS - Deploy and maintain a technologically-proficient and cost-effective core network infrastructure that satisfies customer requirements for basic (steady state) services.

FLDR - Improve network reliability

FLII - Develop a dynamic and flexible infrastructure (that is both economically and operationally efficient) to meet the needs of the interconnect customers.

FMMI - Develop broadband interpremises switching and transport capacities needed to support emerging multimedia applications.

FSOS - Develop and introduce operational support to meet the time, cost and flexibility needs of new services in targeted markets.

1.6 COUs/IBUs Involved: Multimedia IBU; Interconnect, Public & Operator Services; Broadband Business Systems

1.7 Capital/Expense Dollar Identification:

This Regional Deployment Directive requires capital and expense dollars associated with placement of new SONET 3/1 multiplexers. Funding for the recommend plan will be identified at the regional level in the new multi-year budgeting process in effect beginning with the 1997 program. Capital and Expense requirements for this Directive are as follows:

Year	($000) Capital	Retirements	($000) Expense
1997	3,528.0	1,680.0	141.1
1998	2,352.0	1,125.0	94.1

1.8 Executive Summary

The following recommendations are made regarding the replacement of asynchronous technology fiber optic terminals and multiplexers:

1. Cap growth on new purchases of asynchronous 3/1 multiplexers. Continue to grow on existing equipped multiplexers. Hardwired asynchronous bay frameworks with multiplexer shelves which have no circuit packs equipped should be retrofitted for growth on SONET electrical muxes. The exception to this recommendation is where purchased channelized DS3 circuits require the DS3 to DS1 multiplexer. However, the first resource for these muxes should be the re-use inventory of hardwired or PICS units.

2. Replace all NEC RC28C 3/1 and Telco Systems 828 multiplexers with SONET multiplexers beginning in 1997, completing by year end 1998. Cutover and remove these obsolete muxes which are not able to support 64 Clear Channel/B8ZS services. Several major interexchange carrier customers have already expressed concern about our ability to provide B8ZS capabilities on all of their circuits. Services demand

commitments are being delayed due to moving circuits to DS3 channels utilizing newer B8ZS capable multiplexers. (More details available in Appendix A.)

3. At this time, do not advance replacement of any other asynchronous fiber optic terminals. Replacements will be driven where there are other triggers in the future such as exhaust or customer requirements for SONET features and architectures.

4. Cap growth of new ring terminal nodes on existing asynchronous rings. Planners should plan growth on existing SONET systems or plan growth SONET ring systems to avoid additional placements of any asynchronous optical terminals.

5. Where available, place all growth requirements on existing SONET systems. Parallel asynchronous systems should not be equipped for IOF growth except to defer significant fiber cable investments due to exhaust considerations.

6. Size new SONET ring facilities to support future migration of working capacity from asynchronous systems to the planned SONET network placements. Minimize all future increases of working capacity on asynchronous networks.

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2.0 Implementation Plan for Replacement of Asynchronous Equipment

2.1 Study Methodology

The evaluations for this plan included four key areas of focus. They are:

1. Determine the existing asynchronous vendor products deployed and number of units.
2. Define and evaluate replacement triggers relative to current deployment.
3. Where recommended, establish costs to replace with SONET network elements.
4. Determine funding requirements and timing of recommended plan.

A primary source of data on existing asynchronous deployment was the Planning Work Station, retrieving equipment capacities from the TIRKS database. Other sources included the state Infrastructure Planners, Circuit Capacity Management groups and Asset Management Group. Suppliers of the asynchronous technology equipment across the region were consulted, along with Procurement Services, to establish the current and planned status for the older technology relative to manufacturers' support or discontinuance of these products. Also, the Technology Forecasting Group was consulted for established life cycle recommendations of asynchronous assets in service. For replacement costs considerations, current SONET vendor pricing configurators were used to provide the capital expenditures required for the various alternatives studied in this plan.

These components were used to determine the value of existing asynchronous network elements, the costs to replace them and the benefits gained from advancing the modernization of the network to the SONET architectures. Using the CUCRIT Economic Evaluator tool, analyses were made on the various alternatives for asynchronous technology replacement. Sensitivity analysis was used to evaluate variations in the timing of the capital expenditures for new SONET elements, advancing replacement or supporting asynchronous NEs through their average economic remaining life.

2.2 Deployment Directives

An objective of this RL is to minimize expenditures for further deployment and growth on asynchronous terminals or muxes. To insure that the asynchronous technology equipment deployment is confined to that which is installed for interoffice requirements, the initial recommendation is to cap purchases of new asynchronous fiber terminals or multiplexers. Existing equipped fiber terminals should continue to be used for growth only where a parallel SONET system is not available for growth requirements. However, it is no longer acceptable to add new fiber ring nodes on an existing asynchronous ring system. Planners should evaluate other alternatives for implementing SONET systems to avoid the addition of any asynchronous network elements for interoffice growth. The exception for this will be those asynchronous SMARTRing services where a customer requests the addition of a node to their ring system.

Limited growth of asynchronous muxes will be required for purchased DS3 circuits which are channelized to DS1s for the customer. These will generally require an asynchronous mux for this channelization. However, the first choice for these muxes will be the re-use inventory. Obtaining the network elements of plug-ins for these new service demands through re-use stock will continue to limit future purchases of new asynchronous equipment.

Where 3/1 multiplexers are equipped in an office and are working, planners should continue to make use of the equipped capacity for these units. However, many offices may have circuit equipment bays which have been installed with shelves for asynchronous muxes, planned for anticipated growth. The recommendation is to not equip these "growth" shelves for provisioning IOF growth. The growth circuit bay framework should be retrofitted to support SONET DDM-2000 or FLM-150 3/1 multiplexers on the next growth requirement.

With many of the asynchronous vendors beginning to manufacture discontinue their products, network support from these suppliers will decline significantly, generally beyond the third year after a declaration of discontinuance. Although network planners should begin to develop plans to migrate from MDd fiber systems identified in Table 2, it cannot be determined at this time which terminal products may present problems or sufficient economic benefits for advancing the replacement with SONET network rings. Proactive effort will be required to insure sufficient common and interface port cards are held in re-use for these systems where vendor delivery may be lengthy or not available at all for the products. The Infrastructure Planning Technology Deployment Directives group will initiate the process for identifying the asynchronous systems which would be supported through re-use efforts when required. The Plug-In Recovery Incentive Plan is expected to initiate a plug-in return program which should support requirements for growth on existing asynchronous terminals and muxes to limit the purchase of new PICS associated with any MD'd product.

Some of the earliest vintages of asynchronous 3/1 multiplexers do not support some data services requirements, such as B8ZS. Advanced replacement is recommended for these muxes beginning in 1997. It is estimated that 685 muxes are currently working in the interoffice network which do not have this capability. SONET muxes should be used for these replacements and cutover of the working capacity. These will be DS-3 requirements on the new multiplexer, terminated on asynchronous high speed fiber system via the DSX-3 cross-connect. Beginning in 1997, capital expenditures are included to support replacement and cutover to SONET muxes for a two year period, completing the replacement program by year end 1998. Where plans exist to migrate to SONET rings architectures prior to 2000, the working capacity on the asynchronous muxes included in this recommendation should be delayed and assigned to multiplexers associated with the new SONET network. Where a wideband digital cross-connect system exists in an office, these muxes should be replaced first with retermination of the DS3 channel onto the WDCS where capacity is available. A critical element for planner consideration is to minimize the impact on operations by insuring that the DS3 and DS1 systems are not reterminated multiple times in order to meet a 1998 migration objective. Effective planning will also insure that quality service for the customers will be maintained with minimum service impeding rearrangements.

Although many asynchronous fiber optic systems are also identified for manufacturer discontinued status in 1996, clear economic advantages supporting advanced replacement of these high speed systems is not easily identified at this time. SONET interfaces will become a requirement for many major customers beginning in 1996 where there now exists only asynchronous systems. This will occur primarily with points of interface with interexchange carriers and local alternative providers in the major metropolitan areas. However, timing of these SONET interface requirements is not available at this time from these customers and they are not willing to migrate off of the existing architectures to SONET network elements prior to completion of their own network to support STS and OC-3 or higher bandwidth interfaces. In addition, many of the interexchange carriers are being proposed for enhanced SONET ring network architectures by the Interconnect Marketing groups, i.e. SMARTRing℠, SMARTPath℠, and SMARTGate℠ services.

Therefore, it is not recommended to advance replacement of asynchronous fiber optic systems. Planners should continue to look for opportunities to size new SONET ring networks to support the migration off of existing asynchronous systems. First choice will be those asynchronous systems which are not protected via alternate routing of protection channel fibers, or any system not provisioned for self-healing capability. This may include additional nodes on existing SONET rings, proposed growth rings configured to insure timely replacement of the asynchronous systems and newly proposed SONET architectures which provide for the working capacity on associated asynchronous systems along the same cross-sections.

2.3 Diagrams of SONET Migration Alternatives Being Used in BellSouth

Figures in Appendix B depict various central office arrangements associated with asynchronous and SONET terminations in typical arrangements. These are provided as examples for considerations where planners are evaluating the central office terminations for cutover options of working capacity from asynchronous terminals or muxes to newer SONET architectures. These are not expected to cover every alternative or central office arrangement, but are considered typical network configurations which will be supported by economic analysis included in this RL.

2.4 Capital and Expense Dollar Funding Allocation

The capital and expense funding for the replacemet recommendations in this directive are proposed to occur in 1997 and 1998. These dollars will be recommended for inclusion as a regional component in performance contracts identified for the impacted network areas. The expenditures include purchase and installation of SONET 3/1 multiplexers plus cutover of working DS3 channels to the new mux termination. Future determination will be made for allocation of funding on a state basis as the performance contract areas and network requirements are established.

2.5 Critical Success Factors

Success of this directive is primarily dependent on the ability of the network operations groups to cutover working DS3/DS1 channels from the obsolete vintage of asynchronous multiplexers to the newer SONET units proposed herein. Significant effort to schedule these cutovers will require planning among circuit capacity management and central office operations to minimize impact of cutover on customers' hi-cap services. This plan enhances the interoffice network migration to all SONET architectures and features which will reduce the total costs for deployment of new services. Adherence to the recommendations will reduce dependency upon obsolete asynchronous equipment which has been declared manufactured discontinued, limiting costs to grow working capacity and maintain these network elements.

3.0 Contingency Plans

Infrastructure Planning will work with the COU/IBU groups and the multi-year performance contract planning process to secure the funding to support the recommendations in this directive. In the event that total funding of the recommendations for asynchronous equipment replacements is not available, several contingency plans should be considered to support maintaining these network elements in the interoffice network. Normal interoffice growth on SONET systems will make available some number of asynchronous systems which should be returned to re-use stock for redeployment where these recommendations can not be funded. The primary focus of this effort will be 3x1 multiplexers, such as the DDM-1000 or Telco Systems 828AF. Placements of wideband digital cross-connect systems as identified in RL 95-06-008 BT will provide a significant number of re-use asynchronous multiplexers upon cutover of DS3 channels to the DCS systems. In particular, high demand reusable plug-ins are to be a priority in support of the Network Planning and Provisioning Reengineering teams "Plug-in Recovery Incentive Plan." Acceleration of the plug-in return program will help to offset anticipated capital expenditures of "$130 million in 1996." By the end of 1998, this effort will become critical in subsidizing the remaining asynchronous systems where sufficient funding has not been provided for the replacement program.

A second area of concern is the future vendor support policies for the earlier technology products. Where a product is declared to be supported with "additions and maintenance" only, (A&M), the vendor will continue to provided additions, but with longer order intervals for delivery, as well as maintenance of products/plug-ins in service. When a product is declared "manufactured discontinued, (MD), the supplier is expected to provide up to five years support for products in service, primarily on a maintenance basis only. Special efforts will need to be made for a regional program where an MD product can be internally maintained through re-use stock programs until all of the identified systems are no longer in service. As products are declared MD, notification should be sent from Procurement Services to Network Operations so

that a re-use program may be started. Infrastructure Planning will work closely with these groups to coordinate this activity.

Thirdly, a product's performance may degrade such that the quality of customer service is lessened, or the product becomes non-maintainable for some reason. Should this occur, Infrastructure Planning will support Network Operations efforts to secure adequate funding from change plan sources to advance replacement of the identified products with SONET systems. The Site Specific Infrastructure Planning organizations will assist in quantifying of the pending service issues to request funding support for resolution of problems identified with asynchronous maintenance considerations.

In general, the contingency plan is to support the asynchronous terminal equipment as it is today. The existing architectures support diversity and self-healing capability where alternate fiber routing is available. Ring systems provide survivability for interoffice demands and critical customers subscribing to asynchronous SMARTRing℠ service. The majority of these systems require very low maintenance efforts. They have a high level of reliability and support a majority of the current interoffice demands. However, should these products remain in service beyond 2000, a significant penalty will occur for operations maintenance and service quality throughout the interoffice network if a concentrated effort is not made to internally provide for long-term support through re-use stock programs.

APPENDIX A

INTEROFFICE ASYNCHRONOUS EQUIPMENT REPLACEMENT ANALYSIS

INDEX

APPENDIX A

ANALYSIS OF REPLACE TRIGGERS FOR ASYNCHRONOUS TECHNOLOGY EQUIPMENT

1.0 Introduction

Fiber optic network elements have been deployed in BellSouth since prior to 1984. Initially at 45 Mb/s over multimode fiber cable, asynchronous technology soon increased the bandwidth to 90 Mb/s and 135 Mb/s. With the placements of singlemode fiber, the bandwidth capability advanced rapidly up to 1.7 Gb/s, transporting 36 DS3 channels. These asynchronous network elements have been deployed in point to point and unidirectional ring architectures throughout the interoffice network. Fiber systems have greatly enhanced BellSouth's total quality of service to all customers through improved provisioning, performance monitoring and maintenance capabilities inherent in these network elements. The ring technology and diverse routing of point to point optical systems further provides network survivability through automatic routing to a protection fiber path in the event of a fiber cut.

With the growth of fiber optic technology, copper media has diminished significantly for transport of interoffice traffic. At year end, 1994, copper accounted for only about 12% of the interoffice (IOF) facilities across the region. This involves a network capacity of nearly 14,500 DS1 channels over copper, although only comprising about 7% of the working interoffice circuits. It is forecasted that all copper will be out of the IOF network by year end 2000.

Asynchronous systems continue to transport about 65% of the working IOF circuits in BellSouth. Significant investment has been made to migrate to an all fiber interoffice network during the past 10 years. The deployment of asynchronous technology has continued with $15.7 million in 1994 and nearly $10 million through third quarter, 1995, being invested in various equipment. These 1994 purchases were primarily for asynchronous SMARTRing℠ service, 3/1 multiplexers for existing asynchronous systems and adding nodes to existing asynchronous rings in the network. However, this is a 67.9% decrease from the purchases of asynchronous network elements over 1993 and accounted for only 7.5% of the total BellSouth investment in fiber circuit equipment for interoffice transport in 1994.

In 1992, BellSouth began limited deployment of Synchronous Optical Network (SONET) elements for transport of interoffice demands. As SONET standards further developed, feature enhancements and bandwidth capacity growth to 48 DS3 channels provided network planners with circuit equipment solutions for fiber and circuit capacity exhausts. By mid-1994, IOF circuit managers began to migrate to all SONET purchases for their circuit equipment growth needs. In addition, feature enhancements within the SONET architectures for provisioning and maintenance clearly identified this new technology platform as the economic choice for all interoffice growth. New services for BellSouth customers have been developed based on capabilities that only SONET can provide. It is estimated that by year end 1995, nearly 30% of the total working optical capacity will be made up of SONET technology.

An all SONET interoffice network is one of the goals of infrastructure planning. Numerous benefits associated with these architectures support this strategy. In addition, our competitors are utilizing their ability to transport customers' services over their "totally SONET" networks, emphasizing that the local exchange companies are continue using asynchronous technology in the majority of our transport networks. While this may be true when considering the total IOF network, metro areas in the region have significant network deployment of SONET rings in service to provide for enhanced services for all customers. However, many of these SONET higher bandwidth systems parallel asynchronous systems transporting up to 36 working DS3 channels. Competitors in the region are promoting their SONET networks as a differentiator from the local exchange company's network. Significant effort will be made to push forward with SONET deployment as driven by the BellSouth business units to proactively position the metro areas for meeting demands from major customers requiring SONET based features and interfaces.

With SONET architectures providing the network of the future for BellSouth, what are the triggers for replacing the existing asynchronous equipment transporting the majority of the IOF circuits today? What are the significant benefits of a program for removing this "old" technology, the majority of which has been in service for much less than its economic life? What are the operations impacts for moving DS1s from asynchronous terminating equipment to the growing SONET networks with ever decreasing manpower for manual rearrangements in the offices? Which asynchronous suppliers have announced their products as being "manufactured discontinued" and what is the impact on BellSouth for long term support of these network elements? Furthermore, what are the funding requirements to advance replacement of asynchronous technology beyond normal growth and network rearrangements? This RL addresses these questions and others related to the considerations for replacing asynchronous equipment in the IOF network.

2.0 Technology Analysis

2.1 Existing Asynchronous Equipment Deployment

The earliest asynchronous technology vendors used in BellSouth included AT&T, Telco Systems and Rockwell Collins. These early equipment capacities were 45 Mb/s up to 135 Mb/s and transmitted over multimode fiber interoffice facilities. These multimode fiber cables were limiting in the bandwidth allowed for transmission to usually 135 Mb/s or less. With the deployment of singlemode fiber facilities, planners soon began placements of larger bandwidth capable network elements, from 180 Mb/s to 1.2 Gb/s. Other vendors equipment, such as NEC and Northern Telecom, were also deployed to take advantage of the increased number of DS3 channels which could be transported over these singlemode fibers. These five suppliers' products comprise nearly all asynchronous systems that remain in the interoffice network.

Telco Systems' largest capacity system deployed is the 560 Mb/s rate (12 DS3 channels), though it was one of the first vendors to expand to higher bit rate systems. In addition, they have some of the oldest 3x1 multiplexers in service. Northern Telecom systems are the least deployed vendor in the region. Many of these placements were to interface with independent companies with initial fiber deployments. All of the vendors are deployed in point-to-point architecture at all line rates. Also, ring technology was provided at primarily higher bit rates by the vendors, though Telco Systems has not been deployed in ring architectures. The primary asynchronous product vendors in the interoffice network are Rockwell Collins (Alcatel), AT&T and NEC.

Generally, for every DS3 channel transported via asynchronous systems, there were also two M13 multiplexers placed to access the DS1 channels at the terminating points of the DS3. Where available, the DS3 might be terminated upon a digital cross-connect system in an office. However, a major investment has been made purchasing these M13 multiplexers which can be found in nearly every wire center where asynchronous IOF transport equipment has been deployed. Each of the five suppliers have M13 muxes that were placed in association with their higher bit rate systems, although this was not a requirement for multiplexing DS1s to DS3 channels. Many planners settled upon a particular vendor mux and deployed for all applications, regardless of the higher rate system. The Telco Systems 828A and the Collins DMX-2003 or DMX-3003 have been favorites placed for all mux growth in a wire center. These asynchronous multiplexers have also been used to terminate DS3 channels which were placed on some newer SONET systems deployed for exhausts, requiring higher bandwidth capability in interoffice cross-sections.

Throughout BellSouth, with five suppliers approved for asynchronous equipment, many vendor equipment configurations and quantities were deployed as areas became comfortable and trained on a particular vendor's asynchronous products. In addition, vendor product selections were made to meet a specific need for extended capacity, providing for the opportunity to migrate in service to the higher bandwidth requirements in later years. Pricing and operational features were also reasons for the numerous vendors approved for use in the region. Table 2 (page 23) lists the vendors and associated asynchronous equipment currently deployed in the interoffice network. In addition, the table provides a reference to those

asynchronous products which have been statused as Additions and Maintenance only (A&M), or Manufactured Discontinued (MD) by the suppliers.

2.2 Product Status

As indicated in Table 2, the vendors are beginning significantly to status the asynchronous products as either supported for Additions and Maintenance only, or Manufactured Discontinued. If a product line has been statused for A&M, the vendor provides twofold support. First, they will provide for additions to existing networks, including plug-ins and hardwire equipment. The growth triggers for additional hardwire orders may be additional nodes on existing rings or additional low speed shelves to terminate DS3 growth. However, planners should expect longer order intervals for these products. If growth plug-in requirements cannot be met through existing PICS inventory, there will likely be some delay in delivery from the vendor.

In the event a product is declared MD, it is expected that the vendor will support in place systems for up to five years from the date of the declaration. This support may vary from vendor to vendor, but Procurement Services will standardize upon a set of requirements for these products which would be adhered to by all manufacturers of the MD product. This may include repair of existing plug-ins, software and operations support. It is likely that beyond 2-3 years after a product is statused MD, this support will become limited at best.

An evaluation of the existing asynchronous terminals deployed in the region finds that many of the systems have been declared either manufactured discontinued (MD) or supported with additions and maintenance (A&M) only. Table 2 provides the current status of the in-plant equipment by vendor. Where a product is currently statused as A&M only, it is anticipated that the vendor will declare those products MD within 6 months of the A&M classification. The major problem with a product declared A&M will be delivery of new circuit packs. Planners may expect up to 27 weeks for delivery of some higher costs optics cards from the vendor. In our current competitive environment, this will not be acceptable for provisioning circuit demand requirements from our customers. In addition, we may not be able to control pricing of these products as they become in short supply. As evident of this, AT&T has increased the 1996 pricing for the DDM-1000 and FT Series G fiber terminals to 12% higher than 1995 prices. The corresponding price change in the DDM-2000 equipment is a 10% discount.

Products with an MD status will receive minimum support from the vendors in the early years after discontinuing a product. However, this support effort will decrease significantly once vendor surplus stock is depleted, even though BellSouth requires support for up to five years. Some vendors provide a replacement alternative associated with the MD notice for a product. However, for asynchronous products, this alternative will also be an asynchronous system. The recommendation is to not deploy any new asynchronous fiber equipment which has been declared manufactured discontinued and to minimize deployments of systems which are posted as support by the vendor for additions and maintenance only.

3.0 Network Triggers for Asynchronous Equipment Replacements

3.1 Fiber Exhaust

Situations where an interoffice fiber exhaust condition is imminent will likely have two primary relief alternatives. First, additional fiber facilities may be placed in the cross-section or in an adjacent cross-section for routing of new ring systems. Metro areas with short distances between wire centers are the best candidates for economical placement of additional fiber sheaths. An opportunity may exist which involves re-routing existing systems to defer over-building the exhausted cross-section. These fiber systems may be asynchronous or SONET. However, the opportunity for re-routing, or mis-routing as the case may be, will be limited, even in metro areas. Re-routing of existing systems will generally defer new fiber construction for only a short period of time or even advance exhaust of other fiber routes. Therefore, long-term economic

benefits will generally not be favorable to these temporary system routing alternatives. However, fiber placements in the high fiber demand routes of metro areas should be supported by economical considerations.

The second relief plan will involve circuit equipment changes. This may include placement of new SONET systems, consolidation of existing lower bit rate systems to higher speed systems, or replacement of asynchronous systems with SONET ring networks. With the availability of OC-48 rings, a single system may have the capacity to replace two or more asynchronous systems. Also, existing SONET systems should be considered where capacity exists to migrate off of asynchronous networks.

Some cross-sections continue to have multi-mode fiber cable with asynchronous IOF systems routed via these links. Previous recommendations have stated that SONET facilities should not be routed on multi-mode fiber cable. This cable type does not support higher bit-rate laser technology, thus is very limited to long term growth capacity demands. As plans are made to transition from these multi-mode fiber links, the working capacity must be moved to another system. It is recommended that cutover be made only to SONET systems. Although this is the likely plan of action for multi-mode relief, it is re-inforced here to insure no cutover is made to existing asynchronous equipment capacity in order to reduce the work for operations with anticipation that these same systems will be moved once again within 3-4 years due to asynchronous support capabilities.

Planning and related funding for fiber exhaust situations are not the focus of this RL, being supported in the steady state growth plans. However, they are discussed here to re-inforce the network migration strategy to SONET architectures in an economical, timely manner. In consideration of the above, where asynchronous systems are routed through an exhausted fiber route, a planner's first consideration should be to move the working capacity to a SONET ring where available. Although this may only defer fiber reinforcement for a short period, the long term benefits of SONET only transport facilities in the interoffice network will provide significant maintenance and provisioning operations savings to offset advancing the cutover and removal of the asynchronous systems.

3.2 Circuit Equipment Exhausts

Network capacity exhausts associated with circuit equipment will happen in many various aspects. One situation may be exhaust of a point to point asynchronous or SONET system. Another could be uni-directional asynchronous or SONET ring capacity exhaust. A third could be the capacity depletion of single section in a bi-directional ring SONET system. Here we focus on the exhaust of asynchronous systems. As network planners consider alternatives for providing relief of any non-protected asynchronous system, SONET ring architectures are the first choice alternative to enhance the overall reliability of the interoffice network. If capacity exhaust occurs on a point-to-point, non-protected, asynchronous system operating at less than 1.2 Gb/s, it is not recommended to upgrade the existing system to a higher bandwidth capacity. The upgrade costs should be applied to grow existing SONET systems or replacement of exhausted systems with SONET network rings. New placements triggered by growth should be sized to cutover DS3 demands from asynchronous systems to SONET facilities. Capacity should be reserved on a new SONET ring system to support the circuits which will be transferred to the new system.

Within a wire center, exhaust may occur with the 3/1 multiplexers supporting asynchronous systems. A limited funding alternative may be to grow on spare capacity in an existing asynchronous system by adding 3/1 multiplexers. The purchase of new asynchronous multiplexers is not recommended. If the requirements cannot be met with re-use stock inventory, then SONET muxes should be purchased with DS3 interfaces to support growth demands on asynchronous terminals. Longer economic life and future re-use of the new SONET muxes increase the value of this recommendation versus asynchronous alternatives.

As in the fiber exhaust considerations, funding for these growth triggers is supported within steady state planning management. However, there may be areas which cannot support these SONET recommendation

in the existing steady state structure. The objective is to minimize placement or re-use of asynchronous technology equipment in the network. As these older devices become manufactured discontinued, the maintenance costs to keep them in service will escalate significantly.

3.4 Operations and Maintenance

A critical measure of a trigger for transport equipment replacement is the history of a product for causing outages and creating maintenance trouble tickets. Both conditions lessen the quality of service provided to the end users. The end result is higher costs to our customers and to BellSouth. Asynchronous equipment in the network has presented various levels of maintenance and operations issues over the past 10 years. Many have been corrected by vendor software upgrades or replacement alternatives. Others have received replacement circuit packs which have eliminated problems of earlier vintage production.

One of the products which has been a major source of troubles is the 3/1 electrical multiplexer. A study by Tennessee network maintenance found that the 3/1 mux was the second highest contributor to central office circuit troubles. The only higher single-most cause of troubles is the coax cabling and connectors, which are driven by the deployment of 3/1 multiplexers. Many of the troubles are associated with the earlier vintage asynchronous muxes terminating at the DSX3 cross-connect. Network benefits to removing these high trouble points in the offices impact operations maintenance as well as customer service reliability. However, with nearly 18,000 DDM-1000 multiplexers alone existing in the interoffice network by year end 1995, the effort to replace the working systems with SONET muxes cannot realistically occur in a matter of a few years. It is anticipated that asynchronous multiplexers will require supporting until 2000-2001 time frame.

4.0 Enhanced Services Triggers for Asynchronous Replacement

4.1 Narrowband Services Growth

In the earliest years of fiber optic system deployment there were some vendor products which were later found to not support certain features for network performance, network monitoring or customer services. Many of these initial fiber technology systems are still working in the IOF network today. An example of this is the NEC RC28C DS3 to DS1 multiplexer. This early mux does not support 64 clear channel/B8ZS capability. This is also true of the 828 3/1 multiplexer from Telco Systems. The NEC RC28C and Telco 828 multiplexers are provisioned for AMI, but do not support the B8ZS formats. In order to provision the network for these minimum service capabilities, it is recommended that all NEC RC28C and Telco 828 multiplexers be replaced with SONET muxes by the end of 1998.

Growth of enhanced communications services has significantly altered the capacity demands on the interoffice network. Most narrowband growth has been supported by the asynchronous technology for bandwidth demand. However, other services have been developed which require SONET architecture capabilities, i.e. SMARTPath℠, SMARTRing℠ and SMARTGate℠ Services. In these cases, many of the narrowband services have been moved from older facilities to these self-healing architectures. Many of the narrowband services are now routed over asynchronous systems, but will soon require SONET transport features for new sales. Narrowband services currently being provisioned and those existing data, frame relay and fast packet services are anticipated to require SONET transport for beginning in 1997. These services will primarily be transported between the ATM Edge Device and the ATM Tandem switch. Listed in Table 1 are the broadband and narrowband products with time frames when SONET transport is required.

4.2 Broadband Services

The growth of broadband services requiring SONET architectures is expected to increase rapidly , especially in the major metropolitan service areas. Interexchange carriers, competitive alternative providers and large

customers will drive placements of higher bandwidth systems, including OC-48 and OC192, to support these high capacity broadband products. These critical customers are beginning to demand the capability to monitor performance integrity of their services, perform customer rearrangements of "subrate" type services over the SONET path and desire on-demand capacity expansion for short-term high volume requirements. Also, many of our competitors are utilizing their ability to provide customers with SONET based transport to differentiate themselves from the local exchange company which have networks consisting mostly of asynchronous technology.

Interexchange carriers will soon require SONET interfaces at their points of interface with the local network. For example, SPRINT is investing significant capital to upgrade their backbone networks to SONET architectures, with a goal of 100% SONET at their points of interface by the end of 1996. An aggressive effort which will impact our existing locations where served by asynchronous technology. In addition, MCI has capital intensive programs to migrate their networks to SONET and currently have a SONET presence in the 20 largest service areas in BellSouth. As of today, these customers are ordering DS3 interfaces, but 1996 is forecasted to bring the first requests for optical interfaces at the OC-3 rate at some of these customer POPs. It is expected that these SONET interface requirements will be for growth systems. Migrations requests will follow over longer periods of time as the customer is able to schedule the rearrangements within their own capabilities. Growth demands will trigger the replacement of asynchronous systems to the interexchange carriers. The customers are generally supportive of advancing the cutover from asynchronous to SONET until their backbone networks are complete to minimize multiple rearrangements of the DS3 channels, reducing operations impacts and customer service interruptions.

Product	SONET Required	Comments
CDS DS0/DS1	1997	Assume 50% SONET Edge-ATM Demand
Frame Relay DS0/DS1	1997	Assume 50% SONET Edge-ATM Demand
Fast Packet DS0/DS1/DS2	1997	Assume 50% SONET Edge-ATM Demand
Fast Packet DS3	1997	New Sales-1997 Require SONET; Existing units migrate to SONET 20% per year
SMARTRing Service	Now	A SONET Based Service
SMARTPath Service	Now	A SONET Based Service
NMLI	1996	New Sales-1996; Existing units migrate to SONET 20% per year.
Video Services	1998	New Sales-1996; Existing units migrate to SONET 20% per year.
SMARTGate Service	Now	A SONET Based Service

Table 1
Broadband & Narrowband Services SONET Transport

To combat erosion of services to these major customers because of "older' technology transport capability, the interexchange carrier marketing groups are actively identifying opportunities where the network may be enhanced with SONET architecture systems. Many of these are new sales for SMARTRing and SMARTGate services. Other locations which are served by asynchronous systems are being studied for upgrade to SONET to proactively position the network for future sales of features inherent with SONET technology. The primary triggers for actively proposing SONET to the interexchange carriers and major customers are "competitive threats, contract expirations and optimization proposals."[1]

[1] Joe A. Garcia, Manager, BellSouth Interconnect Marketing, Oct. 25, 1995.

Interexchange carrier customers are beginning to demand SONET based services and capabilities. As they complete the migration of their backbone long distance networks between the POP nodes to SONET, change-over to mid-span optical meets are anticipated with the major carriers. Although the majority of the interfaces continue to be DS3, the STS-1 and OC-3 interfaces should become prevalent in 1996 as standard interfaces with the carriers. Also, alternative network providers competing in the local arena will certainly have all SONET facilities and expect like interfaces with local exchange companies. However, new facilities will be constructed to these customers with SONET transport systems, thus asynchronous replacement will not be an issue with these applications.

Asynchronous Transfer Mode (ATM) technology is another architecture supporting various broadband products. This new dimension of services being developed will involve narrowband and broadband services routing over ATM/SONET architectures. Initially, higher bandwidth video and fast packet type products will drive overlay ring networks based on SONET feature capability. Many demands on the transport network will come from ATM Edge devices to ATM core switching nodes. The demands for these ATM/SONET networks will be provisioned with overlay transport facilities. Thus, existing demands on the asynchronous networks are expected to be impacted very little by the expansion of the requirements associated with ATM services.

With these considerations for higher bandwidth demands over SONET facilities, it is clear that the asynchronous system replacements will be required to the major customers and carriers sites as demands for narrowband and broadband products increases. Many of these customers have already been migrated to SONET architectures due to capacity exhausts. Others will incur SONET deployment associated with new broadband product sales. Analysis also reveals that customers with high growth rates and requirements for advanced services are generally not impacted by the considerations for asynchronous equipment replacement triggers identified in this deployment plan. It is expected that replacements of early vintage 3/1 muxes will impact some of the interexchange carrier nodes which continue to be served by 1.2 Gb/s and 1.7 Gb/s fiber systems. Growth and SONET feature requirements will provide the primary opportunities for asynchronous replacement triggers.

5.0 Network Operating Plan SONET Migration Strategy

5.1 Overview of Network Operating Plan and Migration Strategies

In March, 1995, the Infrastructure Planning Network Strategic Planning Group issued a "Network Operating Plan," (NOP) for BellSouth. Included in this plan are near-term, mid-term and long-term views of the strategic network architectures and associated operations support for the interoffice, switching and loop deployment throughout the region. In particular, the NOP presents the impact of broadband and ATM services upon the transport network infrastructure, including SONET deployment architectures, an integrated ATM/STM platform, as well as capacity demands to be supported across transport media.

The Future Method of Operation (FMO) for the year 2000 presented in the Plan for transport identifies ATM-SONET as the infrastructure architecture which will be required to meet extensive demands for broadband and ATM services. These ATM-SONET systems may be upgrades to existing SONET products or new products to be developed with ATM interfaces. The view in the plan is that the ATM-SONET architecture will be an overlay network. As stated, "The trend toward deploying new services on overlay networks will increase due to time, cost, and flexibility factors."[2]

This migration strategy to support future ATM and broadband service products will primarily focus on the larger metro areas in BellSouth. Through 1998, there will be hybrid ATM-SONET networks to meet demands for transport between customers and ATM switch nodes, and among switch nodes themselves.

[2] "BST Network Operating Plan", Infrastructure Planning, January, 1995, page 4.

Beyond 1998, overlay networks will not be able to support growing demands, triggering full ATM-SONET network elements to be implemented to completely manage requirements for the ATM network services. However, these FMO strategies will have minimum impact on the existing asynchronous network elements and the current working capacities on these systems. Many narrowband services and switch message type trunk networks will continue to use asynchronous technology where available. These services are not expected to require SONET features through the year 2000. Thus, the NOP does not identify specific target replacement dates for asynchronous NEs to be addressed in this RL.

6.0 Asynchronous Equipment Replacement Recommendations

6.1 3/1 Multiplexer Replacements

Asynchronous multiplexers have been identified in this RL which will not provide some of the basic data requirements such as B8ZS and 64 Clear Channel capability without significant effort to recondition these terminals. These older products also have other operations issues, including high heat, vendor support, placements in the central office which are not part of newer circuit areas and current training for maintenance. Many of the early model mux products have already been declared MD by the manufacturers, providing very little support for repairs and offering no replacement options for defective units.

Table 3 identifies asynchronous 3/1 multiplexers which are recommended for replacement by the end of 1998. Where existing SONET systems can support the capacity demand increase between the A-end and the Z-end of the DS3 channel, the DS3 should be transitioned to a new SONET mux and transported over the SONET network. It is assumed in this analysis that a SONET multiplexer will be used to support two DS3 channels cutover from asynchronous muxes. A SONET mux equipped for 2 DS3s and 56 DS1 drops has an in plant cost of $21,000 for the study. However, if a SONET system is not available for routing the DS3, then a SONET electrical mux with a DS3 interface should be added to replace the asynchronous terminating equipment. In this case, the DS3 will continue to route over the high speed asynchronous fiber system. It is not recommended to cutover any DS3s from an early vintage mux to a later version asynchronous mux.

TABLE 3
Asynchronous 3/1 Multiplexers To Be Replaced

TYPE MULTIPLEXER	STATE	QUANTITY	%
NEC RC28C 3/1 Mux	Alabama	161	
	Mississippi	122	
	Tennessee	301	
	Total	584	
Telco Systems 828 Mux	Alabama	5	
	Georgia	54	
	N. Florida	13	
	S. Florida	40	
	North Carolina	4	
	South Carolina	23	
	Total	139	

(This derived from a PWS extract September, 1995)

Some wire centers may be equipped with a wideband digital cross-connect system (WDCS) which was placed for growth. Where a WDCS exists, DS3 channels moved off of asynchronous muxes should be terminated on the WDCS. With an average DS3 interface port card cost of $2,400 and port costs for 28 DS1s of $4,300, this will be a more economical alternative versus standalone SONET terminal, providing

additional maintenance and provisioning capabilities for the DS3 channel. Another consideration may include a narrowband DCS (NDCS). If the NDCS is equipped with DS3 interface capability, the asynchronous mux should be replaced by moving the intraoffice DS3 and DS1 systems to interface the NDCS. As these are deployed in more wire centers, mostly smaller locations, than the WDCSs, this arrangement may occur more often than the previous scenarios. Interfaces to NDCS systems will costs an average $4,700 for DS3 ports and $1,100 per DS1 digroup port.

These recommendations are made for the asynchronous mux replacements to allow the planner to determine the best long-term architecture for moving working DS3 channels to SONET, maximizing the total benefits of SONET or DCS capabilities. Appendix B provides schematics depicting typical office arrangements which will be incurred with replacements of asynchronous equipment. Pages 3-6 provide alternatives scenarios of replacing muxes, rearrangement and cutover of the DS1 systems working on the 3/1 mux.

6.2 Asynchronous Fiber Terminal Replacements

As shown previously, a significant majority of the asynchronous terminals deployed in the region are classified as MD or planned for MD status in 1996 by the vendor. These are listed in Table 2. The vendors are expected to support these products for 5 years after the MD date. However, the quality of the support for MD products may be less than expected after three years, thus planning should anticipate longer lead times for product repairs or support. Also, no asynchronous fiber terminals are currently identified as causing abnormal maintenance activities. Some asynchronous system circuit packs may cause higher than normal attention or replacements, but these are not sufficient to classify the terminals as candidates for advanced replacements with SONET network elements.

Based on evaluation of the overall status of asynchronous fiber terminals, it is not recommended to advance replacement of these products earlier than the 1998 timeframe. Migration off of these network elements will occur through normal growth or circuit rearrangement activity, enhanced service provisioning requirements and rearrangements associated with fiber exhaust. Planners should size growth SONET systems in 1998 and beyond to consolidate working capacity of the asynchronous systems onto the proposed ring networks. Although an objective would be to migrate out of asynchronous fiber terminals by the end of 2001, based on the majority of the MD date and support commitment by the vendor, economic advantage is insufficient for triggering inordinate expenditures for a replacement program.

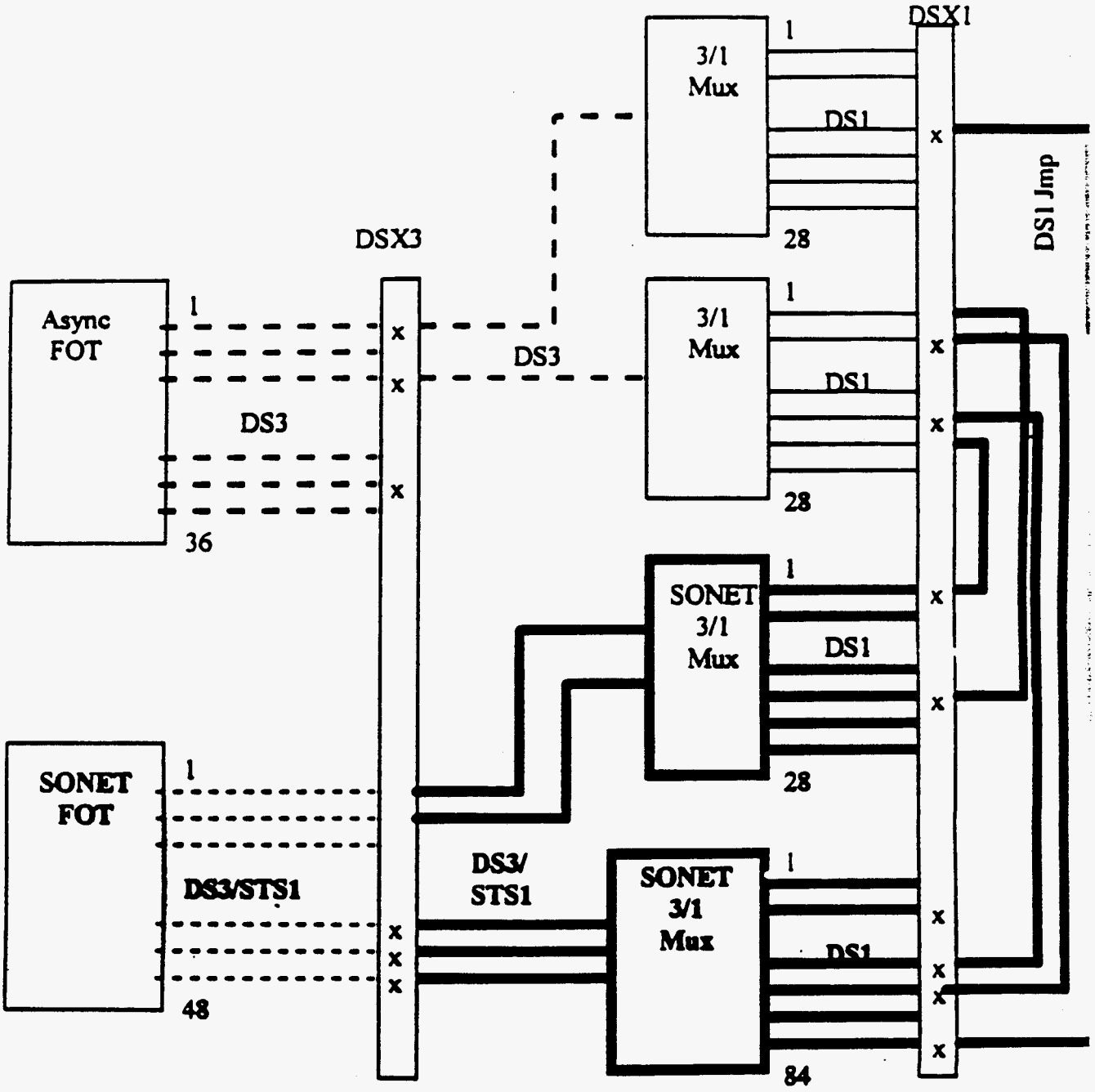
TABLE 2
Asynchronous Equipment Deployment

The following asynchronous fiber terminals and multiplexers are currently shown as deployed in the region in various quantities:

Vendor	Equipment Type	A&M,MD Status
Rockwell Collins	DML 45 DS3-DS1 Mux	MD-1993
	DML 3x50, 135 Mb/s Pt-Pt FOT	
	DMX-2003 DS3-DS1 Mux	MD-1993
	DMX-3003 DS3-DS1 Mux	
	LTS-3139, 135 Mb/s Pt-Pt FOT	MD-1994
	LTS-1565, 560 Mb/s Pt-Pt FOT	A&M - 1/96
	LTS-1565, 560 Mb/s Ring FOT	A&M - 1/96
	LTS-21130, 1.2 Gb/s Ring FOT	A&M - 1/96
	LTS-21130, 1.2 Gb/s Pt-Pt FOT	A&M - 1/96
AT&T	DDM-1000 DS3-DS1 Mux	M.D. - 7/96
	DDM-1000, 45 Mb/s FOT	M.D. - 7/96
	DDM-1000, 90 Mb/s FOT	M.D. - 1/96
	DDM-1000, 180 Mb/s FOT	M.D. - 7/96
	FT Series G, 417 Mb/s FOT	M.D. - 4/96
	FT Series G, 1.7 Gb/s Pt-Pt FOT	M.D. - 4/96
	FT Series G, 1.7 Gb/s Ring FOT	M.D. - 4/96
NEC Corp.	RC28C, DS3-DS1 Mux, Non B8ZS	M.D. - 6/95
	RC28D, DS3-DS1 Mux	
	RC28B1, DS3-DS1 Mux	
	FD-1840, DS3-DS1 Mux	
	FD-33001A, 135 Mb/s Pt-Pt FOT	M.D. - 6/95
	FD-39001A, 405 Mb/s Pt-Pt FOT	M.D. - 6/95
	FD-31201A, 560 Mb/s Pt-Pt FOT	M.D. - 6/95
	FD-31201, 560 Mb/s Ring FOT	M.D. - 6/95
	FD-32401,1.2 Gb/s Pt-Pt FOT	
	FD-32401,1.2 Gb/s Ring FOT	
Northern Telecom	DMT-300, DS3-DS1 Mux	
	FMT-150, 45 Mb/s FOT	
	FD-135, 135 Mb/s FOT	
	FD-565, 560 Mb/s Pt-Pt FOT	A&M - 1996
Telco Systems	828, DS3-DS1 Mux, Non B8ZS	A&M-1/96;MD 6/96
	828A, DS3-DS1 Mux	
	828AF, DS3-DS1 Mux	
	M90, 90 Mb/s Pt-Pt FOT	A&M 1/96
	M560, 560 Mb/s Pt-Pt FOT	A&M 1/96

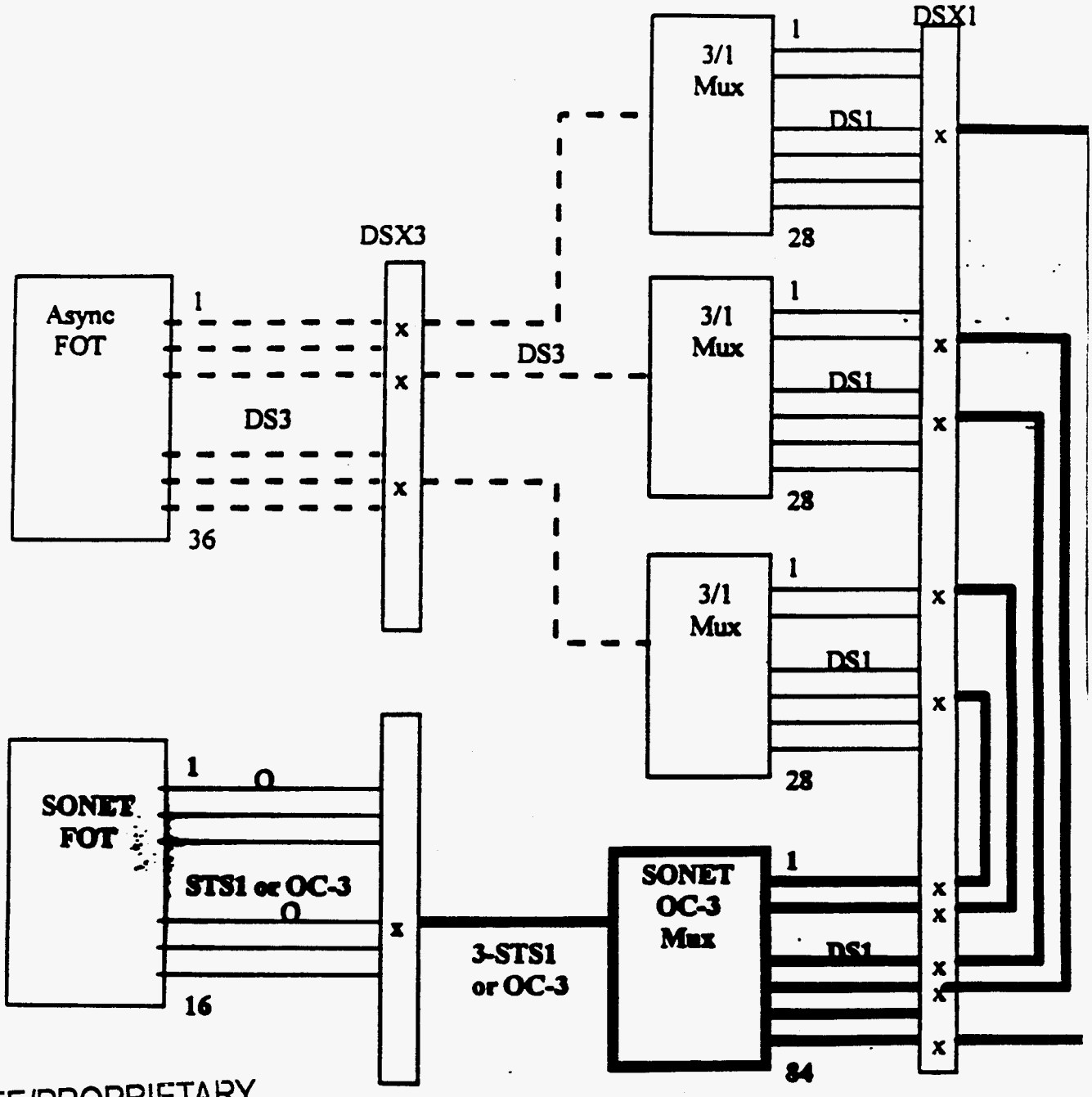
ASYNCHRONOUS TECHNOLOGY REPLACEMENT

An Alternative for Async. Mux Replaced with SONET Mux
Bridge DS3 at DSX3 & Cutover DS1 at DSX1
Remove Async. 3/1 Mux



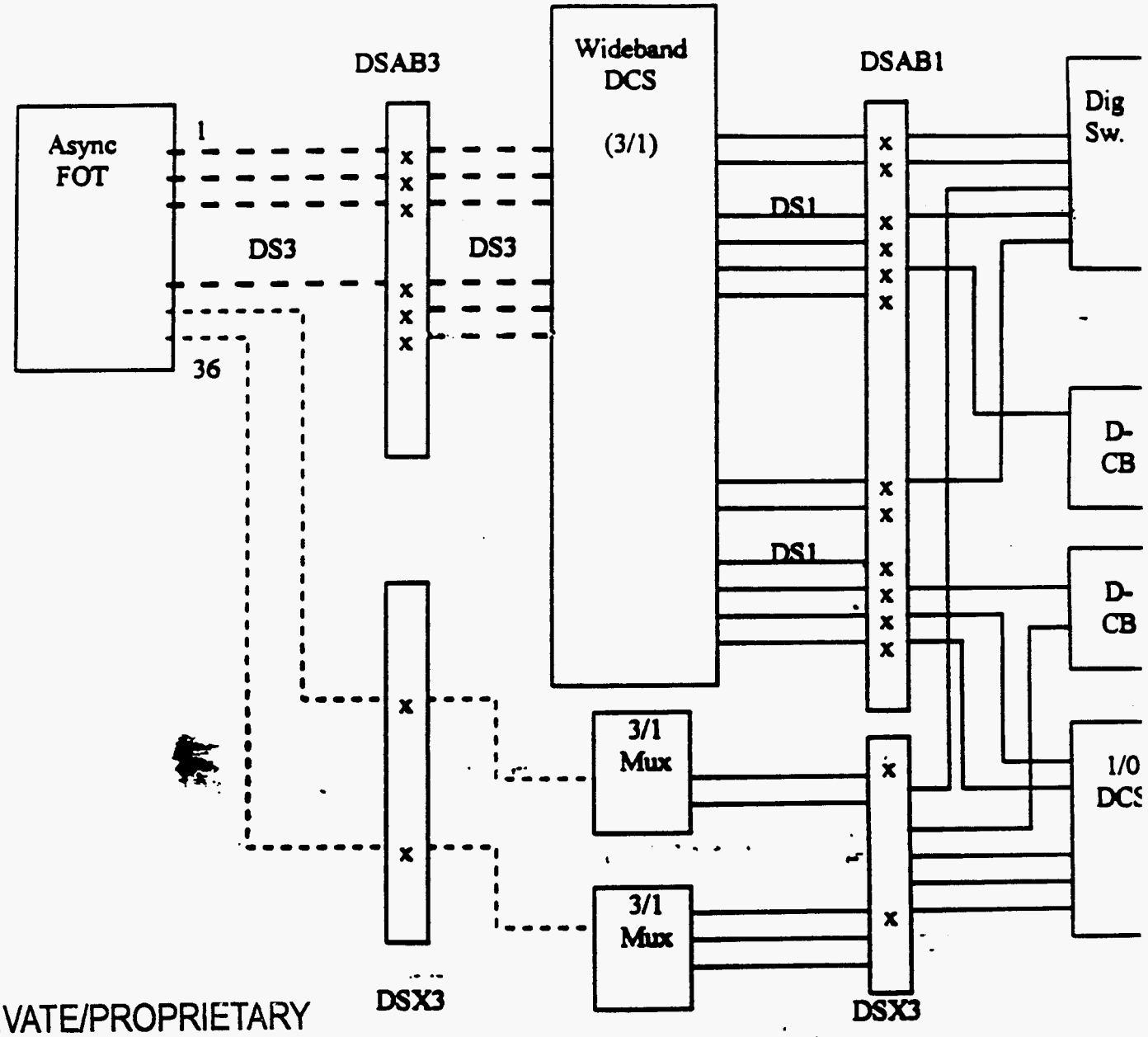
ASYNCHRONOUS TECHNOLOGY REPLACEMENT

Alternative for Cutover of 3 DS3 Channels From Async. Muxes
to a Single STS-3 or OC-3 Multiplexer on a SONET System
Cutover at DSX1 and Remove 3/1 Muxes



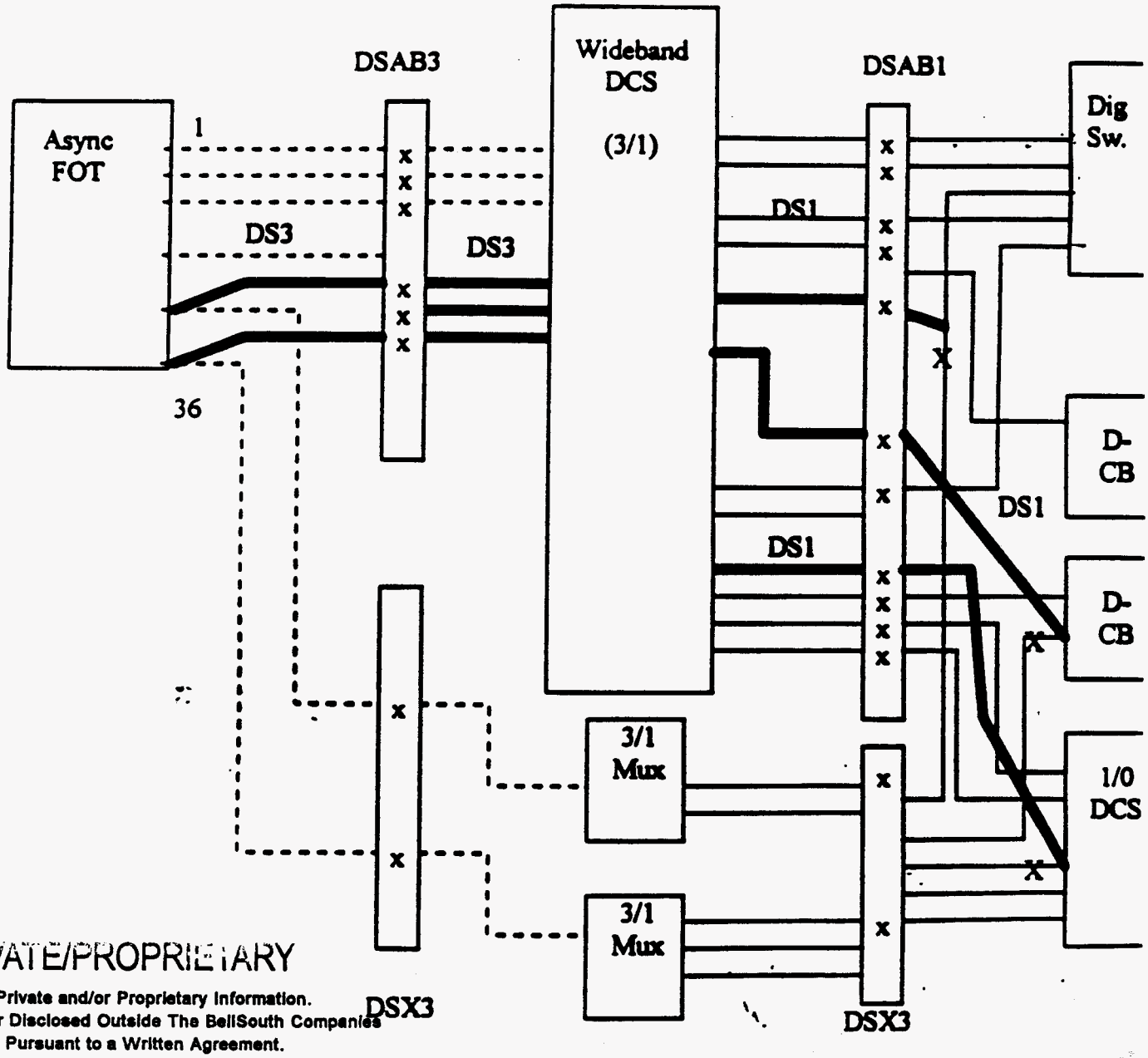
ASYNCHRONOUS TECHNOLOGY REPLACEMENT

Typical Central Office Arrangement With WDCS
and Standalone 3/1 Muxes



ASYNCHRONOUS TECHNOLOGY REPLACEMENT

Cutover DS3 Channels from Async. Muxes to Ports on WDCS
Use Bridge & Roll Feature in WDCS to Cut 28 DS1s at a Time.
Remove 3/1 Asynch. Muxes



BELLSOUTH TELECOMMUNICATIONS, INC.

FPSC DKT NO. 990649-TP

DECLASSIFIED

STAFF'S SEVENTH REQUEST FOR PRODUCTION OF DOCUMENTS

POD NO. 38

~~PROPRIETARY~~ NO

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June 30, 2000

VIA FEDERAL EXPRESS

DECLASSIFIED

James Lamoureux, Esquire
AT&T Law Department
1200 Peachtree Street, Suite 4066
Atlanta, Georgia 30309

Re: *In re: Investigation Into Pricing of Unbundled Network Elements*
Docket No. 990649-TP

Dear Jim:

Enclosed are BellSouth Telecommunications, Inc.'s General Objections to AT&T's Fifth Set of Requests for Production of Documents and Fifth Set of Interrogatories.

Yours very truly,

Bennett L. Ross

Bennett L. Ross

(22)

Enclosures

CERTIFICATE OF SERVICE
Docket No. 990649-TP

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via U.S. Mail and Federal Express (#) this 30th day of June, 2000 to the following:

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(+) Signed Protective Agreement

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Investigation Into Pricing Of Unbundled Network Elements	)	Docket No. 990649-TP
	)	Filed: June 30, 2000

BELLSOUTH TELECOMMUNICATIONS, INC.'S GENERAL OBJECTIONS TO AT&T's FIFTH REQUESTS FOR PRODUCTION OF DOCUMENTS AND FIFTH SET OF INTERROGATORIES

BellSouth Telecommunications, Inc., ("BellSouth" or "Company"), pursuant to Rule 28-106.206, Florida Administrative Code, and Rules 1.340, 1.350 and 1.280(b), Florida Rules of Civil Procedure, hereby submits the following General Objections to AT&T Communications of the Southern States ("AT&T") Fifth Requests for Production of Documents and Fifth Set of Interrogatories.

The objections stated herein are preliminary in nature and are made at this time for the purpose of complying with the ten-day requirement set forth in the procedural order issued by the Florida Public Service Commission ("Commission") in the above-referenced docket. Should additional grounds for objection be discovered as BellSouth prepares its responses to the above-referenced requests, BellSouth reserves the right to supplement, revise, or modify its objections at the time that it serves its responses on AT&T. Moreover, should BellSouth determine that a Protective Order is necessary with respect to any of the material requested by AT&T, BellSouth reserves the right to file a motion with the Commission seeking such an order at the time that it serves its responses on AT&T.

GENERAL OBJECTIONS

BellSouth makes the following General Objections to AT&T's Fifth Requests for Production of Documents and Fifth Set of Interrogatories (the "requests"), which will be incorporated by reference into BellSouth's responses when they are served on AT&T.

1. BellSouth objects to the requests to the extent that such requests seek to impose an obligation on BellSouth to respond on behalf of subsidiaries, affiliates, or other persons that are not parties to this case on the grounds that such requests are overly broad, unduly burdensome, oppressive, and not permitted by applicable discovery rules.

2. BellSouth has interpreted AT&T's requests to apply to BellSouth's regulated intrastate operations in Florida and will limit its responses accordingly. To the extent that any request is intended to apply to matters other than Florida intrastate operations subject to the jurisdiction of the Commission, BellSouth objects to such request to produce as irrelevant, overly broad, unduly burdensome, and oppressive.

3. BellSouth objects to each and every request and instruction to the extent that such request or instruction calls for information which is exempt from discovery by virtue of the attorney-client privilege, work product privilege, or other applicable privilege.

4. BellSouth objects to each and every request insofar as the request is vague, ambiguous, overly broad, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of

these requests. Any responses provided by BellSouth in response to AT&T's requests will be provided subject to, and without waiver of, the foregoing objection.

5. BellSouth objects to each and every request insofar as the request is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth will attempt to note in its responses each instance where this objection applies.

6. BellSouth objects to AT&T's discovery requests, instructions and definitions, insofar as they seek to impose obligations on BellSouth that exceed the requirements of the Florida Rules of Civil Procedure or Florida Law.

7. BellSouth objects to providing information to the extent that such information is already in the public record before the Florida Public Service Commission, or elsewhere.

8. BellSouth objects to each and every request, insofar as it is unduly burdensome, expensive, oppressive, or excessively time consuming as written.

9. BellSouth objects to each and every request to the extent that the information requested constitutes "trade secrets" which are privileged pursuant to Section 90.506, Florida Statutes. To the extent that AT&T's requests proprietary confidential business information which is not subject to the "trade secrets" privilege, BellSouth will make such information available to counsel for AT&T pursuant to an appropriate Protective Agreement, subject to any other general or specific objections contained herein.

10. BellSouth is a large corporation with employees located in many different locations in Florida and in other states. In the course of its business, BellSouth creates countless documents that are not subject to Florida Public Service Commission or FCC retention of records requirements. These documents are kept in numerous locations that are frequently moved from site to site as employees change jobs or as the business is reorganized. Therefore, it is possible that not every document will be provided in response to these discovery requests. Rather, BellSouth's responses will provide, subject to any applicable objections, all of the information obtained by BellSouth after a reasonable and diligent search conducted in connection with these requests. BellSouth shall conduct a search of those files that are reasonably expected to contain the requested information. To the extent that the discovery requests purport to require more, BellSouth objects on the grounds that compliance would impose an undue burden or expense. To the extent that AT&T requests herein documents that have previously been produced to other parties in response to previous discovery, then without limiting any of the foregoing objections, BellSouth incorporates herein by reference its objections to that previous discovery.

Respectfully submitted this 30th day of June, 2000.

BELLSOUTH TELECOMMUNICATIONS, INC.

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BELLSOUTH TELECOMMUNICATIONS, INC.

FPSC DOCKET NO 990649-TP

AT&T'S FOURTH REQUEST FOR PRODUCTION OF DOCUMENTS

POD NO. 51

ORDERING

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (SUMMARY)
REPORT PERIOD: 05/01/00 - 05/31/00

		ADJUSTED FLOW-THROUGH %
CLEC AGGREGATE		
REGION ALL SERVICES		91.30%
		FLOW-THROUGH %
BST AGGREGATE		
REGION		
- RETAIL RESIDENCE		96.70%
- RETAIL BUSINESS **		0 **
Note **: According to the FCC's ordering flow-through definition in the Louisiana II Order, stating that orders must be transmitted electronically through the gateway without manual intervention, BellSouth has uncovered that BST retail business orders have no mechanized service order generation and therefore do not fall within the FCC's flow-through definition. Therefore, the appropriate BST business retail flow-through is really 0.		

ORDERING

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES																
Company Info							LSR PROCESSING								FLOWTHROUGH	
							LESOG									
			Mechanized Interface Used				Manual	Rejects	Validated	Errors						
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's		Base Calculation	CLEC Error Excluded Calculation
#1		0	12	0	0	12	2	2	8	2	0	2	6		75.00%	100.00%
#2		2	1459	0	0	1459	35	35	1389	64	49	15	1325		95.39%	96.43%
#3		0	0	0	4	4	0	1	3	3	1	2	0		0.00%	0.00%
#4		0	9	0	0	9	5	0	4	1	1	0	3		75.00%	75.00%
#5		2	354	0	0	354	54	57	243	28	16	12	215		88.48%	93.07%
#6		7	89	0	0	89	2	23	64	42	26	16	22		34.38%	45.83%
#7		14	1926	0	0	1926	84	24	1818	70	62	8	1748		96.15%	96.57%
#8		1	638	0	0	638	43	15	580	39	32	7	541		93.28%	94.42%
#9		0	1	0	0	1	1	0	0	0	0	0	0		0.00%	0.00%
#10		0	0	0	1	1	0	1	0	0	0	0	0		0.00%	0.00%
#11		0	0	0	2	2	0	1	1	1	0	1	0		0.00%	0.00%
#12		8	186	0	0	186	41	20	125	51	34	17	74		59.20%	68.52%
#13		53	3493	0	0	3493	260	324	2909	172	114	58	2737		94.09%	96.00%
#14		2	1013	0	0	1013	16	38	959	87	68	19	872		90.93%	92.77%
#15		6	44	0	0	44	6	16	22	13	9	4	9		40.91%	50.00%
#16		0	10	0	0	10	2	0	8	1	1	0	7		87.50%	87.50%
#17		19	0	0	2	2	0	0	2	1	1	0	1		50.00%	50.00%
#18		19	757	0	0	757	37	40	680	43	25	18	637		93.68%	96.22%
#19		0	33	0	0	33	1	4	28	3	2	1	25		89.29%	92.59%
#20		0	1	0	0	1	0	1	0	0	0	0	0		0.00%	0.00%
#21		0	7	0	0	7	3	1	3	1	0	1	2		66.67%	100.00%
#22		1	90	0	0	90	9	2	79	10	9	1	69		87.34%	88.46%
#23		1	97	0	0	97	10	12	75	35	28	7	40		53.33%	58.82%
#24		0	2	0	0	2	0	0	2	1	1	0	1		50.00%	50.00%
#25		3	520	0	0	520	37	48	435	54	31	23	381		87.59%	92.48%
#26		278	0	0	2345	2345	901	235	1209	346	192	154	863		71.38%	81.80%
#27		278	706	0	0	706	127	116	463	178	136	42	285		61.56%	67.70%
#28		398	0	0	14095	14095	2320	2091	9684	2965	1689	1276	6719		69.38%	79.91%
#29		398	110	0	0	110	10	31	69	34	23	11	35		50.72%	60.34%
#30		2	100	0	0	100	14	2	84	9	8	1	75		89.29%	90.36%
#31		0	56	0	0	56	9	4	43	5	4	1	38		88.37%	90.48%
#32		0	1	0	0	1	0	1	0	0	0	0	0		0.00%	0.00%
#33		6	429	0	0	429	28	3	398	23	21	2	375		94.22%	94.70%
#34		5	1284	0	0	1284	51	60	1173	108	81	27	1065		90.79%	92.93%
#35		152	0	0	6992	6992	80	405	6507	402	258	144	6105		93.82%	95.95%
#36		152	1188	0	0	1188	82	93	1013	125	96	29	888		87.66%	90.24%
#37		0	1	0	0	1	0	0	1	1	1	0	0		0.00%	0.00%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#38		1	33	0	0	33	2	1	30	2	1	1	28	93.33%	96.55%
#39		57	0	187	0	187	110	19	58	51	38	13	7	12.07%	15.56%
#40		0	2	0	0	2	0	0	2	0	0	0	2	100.00%	100.00%
#41		4	170	0	0	170	53	11	106	29	22	7	77	72.64%	77.78%
#42		11	453	0	0	453	21	45	387	120	111	9	267	68.99%	70.63%
#43		23	313	0	0	313	86	39	188	72	48	24	116	61.70%	70.73%
#44		104	0	0	2606	2606	145	172	2289	178	119	59	2111	92.22%	94.66%
#45		104	10	0	0	10	0	1	9	0	0	0	9	100.00%	100.00%
#46		4	305	0	0	305	44	22	239	43	33	10	196	82.01%	85.59%
#47		16	139	0	0	139	10	12	117	22	17	5	95	81.20%	84.82%
#48		47	1192	0	0	1192	155	275	762	234	195	39	528	69.29%	73.03%
#49		22	271	0	0	271	21	24	226	29	22	7	197	87.17%	89.95%
#50		5	5	0	0	5	2	0	3	0	0	0	3	100.00%	100.00%
#51		31	3831	0	0	3831	212	190	3429	309	248	61	3120	90.99%	92.64%
#52		4	98	0	0	98	17	21	60	50	41	9	10	16.67%	19.61%
#53		7	990	0	0	990	79	35	876	114	106	8	762	86.99%	87.79%
#54		22	2058	0	0	2058	113	183	1762	204	137	67	1558	88.42%	91.92%
#55		8	62	0	0	62	16	2	44	19	13	6	25	56.82%	65.79%
#56		1	34	0	0	34	6	4	24	12	7	5	12	50.00%	63.16%
#57		18	1510	0	0	1510	108	117	1285	121	96	25	1164	90.58%	92.38%
#58		5	408	0	0	408	50	21	337	58	54	4	279	82.79%	83.78%
#59		0	2	0	0	2	2	0	0	0	0	0	0	0.00%	0.00%
#60		14	336	0	0	336	130	93	113	58	50	8	55	48.67%	52.38%
#61		1	109	0	0	109	9	11	89	15	12	3	74	83.15%	86.05%
#62		0	7	0	0	7	0	0	7	6	3	3	1	14.29%	25.00%
#63		14	212	0	0	212	8	8	196	25	15	10	171	87.24%	91.94%
#64		6	392	0	0	392	117	20	255	7	7	0	248	97.25%	97.25%
#65		2	398	0	0	398	29	30	339	30	27	3	309	91.15%	91.96%
#66		25	722	0	0	722	49	58	615	68	45	23	547	88.94%	92.40%
#67		8	3804	0	0	3804	110	155	3539	104	63	41	3435	97.06%	98.20%
#68		1	178	0	0	178	30	10	138	23	19	4	115	83.33%	85.82%
#69		2	1710	0	0	1710	36	46	1628	28	19	9	1600	98.28%	98.83%
#70		0	50	0	0	50	6	8	36	7	7	0	29	80.56%	80.56%
#71		16	1363	0	0	1363	54	362	947	304	222	82	643	67.90%	74.34%
#72		27	408	0	0	408	59	109	240	80	63	17	160	66.67%	71.75%
#73		1	318	0	0	318	33	50	235	45	34	11	190	80.85%	84.82%
#74		0	348	0	0	348	56	32	260	10	9	1	250	96.15%	96.53%

ORDERING

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#75		7	126	0	0	126	26	3	97	21	18	3	76	78.35%	80.85%
#76		48	807	0	0	807	53	45	709	65	42	23	644	90.83%	93.88%
#77		0	5	0	0	5	0	0	5	1	0	1	4	80.00%	100.00%
#78		0	36	0	0	36	6	0	30	6	6	0	24	80.00%	80.00%
#79		76	0	1141	0	1141	218	157	766	178	110	68	588	76.76%	84.24%
#80		76	4178	0	0	4178	610	174	3394	344	225	119	3050	89.86%	93.13%
#81		0	7	0	0	7	0	0	7	1	0	1	6	85.71%	100.00%
#82		13	0	0	101	101	65	3	33	23	16	7	10	30.30%	38.46%
#83		13	300	0	0	300	43	34	223	84	60	24	139	62.33%	69.85%
#84		2	51	0	0	51	0	7	44	8	7	1	36	81.82%	83.72%
#85		0	126	0	0	126	2	7	117	7	4	3	110	94.02%	96.49%
#86		344	0	0	11545	11545	110	188	11247	1398	1124	274	9849	87.57%	89.76%
#87		344	2834	0	0	2834	182	339	2313	383	322	61	1930	83.44%	85.70%
#88		6	0	126	0	126	28	34	64	21	20	1	43	67.19%	68.25%
#89		6	31	0	0	31	1	4	26	9	4	5	17	65.38%	80.95%
#90		3	0	30	0	30	8	9	13	9	8	1	4	30.77%	33.33%
#91		4	0	56	0	56	0	11	45	42	36	6	3	6.67%	7.69%
#92		4	1	0	0	1	0	0	1	1	0	1	0	0.00%	0.00%
#93		1	0	0	66	66	59	2	5	3	3	0	2	40.00%	40.00%
#94		1	2	0	0	2	0	0	2	0	0	0	2	100.00%	100.00%
#95		13	297	0	0	297	27	44	226	62	52	10	164	72.57%	75.93%
#96		22	0	0	8	8	3	2	3	1	1	0	2	66.67%	66.67%
#97		22	602	0	0	602	38	54	510	140	108	32	370	72.55%	77.41%
#98		7	205	0	0	205	72	3	130	12	10	2	118	90.77%	92.19%
#99		0	111	0	0	111	21	14	76	29	22	7	47	61.84%	68.12%
#100		0	0	6	0	6	4	0	2	0	0	0	2	100.00%	100.00%
#101		0	14	0	0	14	3	4	7	2	1	1	5	71.43%	83.33%
#102		0	2	0	0	2	1	1	0	0	0	0	0	0.00%	0.00%
#103		11	89	0	0	89	16	13	60	23	15	8	37	61.67%	71.15%
#104		159	0	1295	0	1295	0	122	1173	505	448	57	668	56.95%	59.86%
#105		3	930	0	0	930	30	55	845	31	21	10	814	96.33%	97.49%
#106		0	21	0	0	21	0	2	19	6	3	3	13	68.42%	81.25%
#107		6	41	0	0	41	8	5	28	12	7	5	16	57.14%	69.57%
#108		0	6	0	0	6	0	1	5	3	2	1	2	40.00%	50.00%
#109		1	72	0	0	72	1	3	68	6	5	1	62	91.18%	92.54%
#110		2	368	0	0	368	30	14	324	17	13	4	307	94.75%	95.94%
#111		1	128	0	0	128	27	18	83	30	24	6	53	63.86%	68.83%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#112		1	0	8	0	8	4	0	4	2	1	1	2	50.00%	66.67%
#113		1	34	0	0	34	17	2	15	4	3	1	11	73.33%	78.57%
#114		0	13	0	0	13	0	3	10	2	1	1	8	80.00%	88.89%
#115		14	82	0	0	82	21	7	54	8	8	0	46	85.19%	85.19%
#116		0	3	0	0	3	2	0	1	0	0	0	1	100.00%	100.00%
#117		5	524	0	0	524	6	31	487	26	24	2	461	94.66%	95.05%
#118		9	350	0	0	350	25	29	296	27	19	8	269	90.88%	93.40%
#119		0	10	0	0	10	0	3	7	0	0	0	7	100.00%	100.00%
#120		0	32	0	0	32	10	2	20	17	12	5	3	15.00%	20.00%
#121		10	2865	0	0	2865	131	94	2640	136	100	36	2504	94.85%	96.16%
#122		8	0	35	0	35	16	8	11	4	1	3	7	63.64%	87.50%
#123		8	68	0	0	68	7	6	55	29	18	11	26	47.27%	59.09%
#124		0	3	0	0	3	0	0	3	2	2	0	1	33.33%	33.33%
#125		60	0	0	12	12	2	0	10	6	5	1	4	40.00%	44.44%
#126		60	3588	0	0	3588	98	375	3115	280	217	63	2835	91.01%	92.89%
#127		0	3	0	0	3	0	0	3	0	0	0	3	100.00%	100.00%
#128		10	0	0	9	9	2	1	6	2	1	1	4	66.67%	80.00%
#129		10	6626	0	0	6626	437	247	5942	285	221	64	5657	95.20%	96.24%
#130		40	0	0	596	596	299	78	219	129	104	25	90	41.10%	46.39%
#131		40	2115	0	0	2115	369	139	1607	820	437	383	787	48.97%	64.30%
#132		1	0	0	6	6	5	0	1	1	1	0	0	0.00%	0.00%
#133		2	0	0	10	10	4	0	6	5	4	1	1	16.67%	20.00%
#134		0	0	0	1	1	1	0	0	0	0	0	0	0.00%	0.00%
#135		0	2	0	0	2	1	0	1	0	0	0	1	100.00%	100.00%
#136		1	3	0	0	3	0	2	1	1	1	0	0	0.00%	0.00%
#137		0	8	0	0	8	2	0	6	5	5	0	1	16.67%	16.67%
#138		0	12	0	0	12	1	1	10	4	4	0	6	60.00%	60.00%
#139		2	17	0	0	17	4	0	13	3	3	0	10	76.92%	76.92%
#140		1	20	0	0	20	1	3	16	3	3	0	13	81.25%	81.25%
#141		0	14	0	0	14	0	0	14	1	1	0	13	92.86%	92.86%
#142		4	350	0	0	350	37	12	301	37	33	4	264	87.71%	88.89%
#143		0	53	0	0	53	6	5	42	15	13	2	27	64.29%	67.50%
#144		2	140	0	0	140	75	12	53	36	29	7	17	32.08%	36.96%
#145		0	91	0	0	91	2	10	79	13	9	4	66	83.54%	88.00%
#146		14	421	0	0	421	30	110	281	39	25	14	242	86.12%	90.64%
#147		0	136	0	0	136	0	0	136	136	125	11	0	0.00%	0.00%
#148		2	680	0	0	680	36	11	633	27	23	4	606	95.73%	96.34%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#149		5	0	0	447	447	4	30	413	100	82	18	313	75.79%	79.24%
#150		5	20	0	0	20	0	5	15	5	3	2	10	66.67%	76.92%
#151		0	18	0	0	18	1	0	17	3	3	0	14	82.35%	82.35%
#152		46	2297	0	0	2297	123	168	2006	89	65	24	1917	95.56%	96.72%
#153		5	0	0	9571	9571	289	316	8966	168	61	107	8798	98.13%	99.31%
#154		5	241	0	0	241	5	9	227	3	3	0	224	98.68%	98.68%
#155		3	384	0	0	384	60	54	270	212	156	56	58	21.48%	27.10%
#156		2	329	0	0	329	28	25	276	23	17	6	253	91.67%	93.70%
#157		129	0	0	435	435	172	118	145	130	100	30	15	10.34%	13.04%
#158		14	740	0	0	740	58	66	616	43	27	16	573	93.02%	95.50%
#159		125	0	0	1894	1894	72	201	1621	139	71	68	1482	91.43%	95.43%
#160		125	222	0	0	222	31	55	136	23	16	7	113	83.09%	87.60%
#161		2	1267	0	0	1267	70	76	1121	133	107	26	988	88.14%	90.23%
#162		0	86	0	0	86	10	13	63	11	8	3	52	82.54%	86.67%
#163		0	0	0	6744	6744	120	306	6318	138	103	35	6180	97.82%	98.36%
#164		0	158	0	0	158	2	29	127	2	2	0	125	98.43%	98.43%
#165		20	343	0	0	343	18	25	300	22	13	9	278	92.67%	95.53%
#166		35	533	0	0	533	59	44	430	38	32	6	392	91.16%	92.45%
#167		1	153	0	0	153	6	11	136	26	20	6	110	80.88%	84.62%
#168		1	1611	0	0	1611	61	105	1445	122	98	24	1323	91.56%	93.10%
#169		7	536	0	0	536	46	65	425	153	136	17	272	64.00%	66.67%
#170		0	722	0	0	722	40	28	654	46	33	13	608	92.97%	94.85%
#171		8	1590	0	0	1590	75	73	1442	104	88	16	1338	92.79%	93.83%
#172		2	122	0	0	122	10	12	100	18	15	3	82	82.00%	84.54%
#173		3	229	0	0	229	8	12	209	9	5	4	200	95.69%	97.56%
#174		0	54	0	0	54	3	13	38	6	5	1	32	84.21%	86.49%
#175		13	0	0	53	53	0	2	51	3	1	2	48	94.12%	97.96%
#176		13	218	0	0	218	36	15	167	28	23	5	139	83.23%	85.80%
#177		0	167	0	0	167	16	33	118	13	10	3	105	88.98%	91.30%
#178		0	23	0	0	23	9	0	14	2	1	1	12	85.71%	92.31%
#179		1	0	4	0	4	1	1	2	2	1	1	0	0.00%	0.00%
#180		0	2	0	0	2	0	0	2	1	1	0	1	50.00%	50.00%
#181		181	0	0	12	12	0	2	10	0	0	0	10	100.00%	100.00%
#182		181	7208	0	0	7208	173	366	6669	698	625	73	5971	89.53%	90.52%
#183		0	7	0	0	7	1	1	5	2	2	0	3	60.00%	60.00%
#184		8	1273	0	0	1273	80	73	1120	241	210	31	879	78.48%	80.72%
#185		1	291	0	0	291	17	12	262	26	26	0	236	90.08%	90.08%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#186		0	8	0	0	8	0	0	8	8	6	2	0	0.00%	0.00%
#187		0	85	0	0	85	22	8	55	16	14	2	39	70.91%	73.58%
#188		0	582	0	0	582	39	22	521	24	20	4	497	95.39%	96.13%
#189		0	198	0	0	198	6	13	179	6	4	2	173	96.65%	97.74%
#190		13	782	0	0	782	67	18	697	73	64	9	624	89.53%	90.70%
#191		39	0	1468	0	1468	784	132	552	255	201	54	297	53.80%	59.64%
#192		39	217	0	0	217	16	34	167	57	51	6	110	65.87%	68.32%
#193		1	23	0	0	23	2	2	19	4	3	1	15	78.95%	83.33%
#194		4	53	0	0	53	7	14	32	21	20	1	11	34.38%	35.48%
#195		9	0	0	262	262	42	75	145	55	40	15	90	62.07%	69.23%
#196		9	24	0	0	24	12	3	9	2	1	1	7	77.78%	87.50%
#197		0	20	0	0	20	0	1	19	19	16	3	0	0.00%	0.00%
#198		0	588	0	0	588	15	62	511	25	11	14	486	95.11%	97.79%
#199		8	165	0	0	165	3	16	146	6	6	0	140	95.89%	95.89%
#200		2	2	0	0	2	0	0	2	0	0	0	2	100.00%	100.00%
#201		2	301	0	0	301	40	19	242	77	57	20	165	68.18%	74.32%
#202		0	14	0	0	14	3	1	10	5	5	0	5	50.00%	50.00%
#203		0	31	0	0	31	4	4	23	8	5	3	15	65.22%	75.00%
#204		6	0	0	16521	16521	274	477	15770	352	207	145	15418	97.77%	98.68%
#205		6	291	0	0	291	3	12	276	3	3	0	273	98.91%	98.91%
#206		4	708	0	0	708	40	44	624	37	29	8	587	94.07%	95.29%
#207		0	11	0	0	11	3	0	8	0	0	0	8	100.00%	100.00%
#208		0	12	0	0	12	1	5	6	4	2	2	2	33.33%	50.00%
#209		103	22611	0	0	22611	726	1008	20877	1321	970	351	19556	93.67%	95.27%
#210		0	62	0	0	62	2	5	55	2	1	1	53	96.36%	98.15%
#211		0	3	0	0	3	0	1	2	0	0	0	2	100.00%	100.00%
#212		0	1	0	0	1	0	0	1	1	1	0	0	0.00%	0.00%
#213		11	1464	0	0	1464	89	149	1226	82	36	46	1144	93.31%	96.95%
#214		0	108	0	0	108	5	2	101	8	5	3	93	92.08%	94.90%
#215		1	183	0	0	183	6	19	158	10	5	5	148	93.67%	96.73%
#216		0	95	0	0	95	6	8	81	4	2	2	77	95.06%	97.47%
#217		0	2	0	0	2	0	1	1	1	1	0	0	0.00%	0.00%
#218		14	319	0	0	319	45	40	234	86	68	18	148	63.25%	68.52%
#219		27	216	0	0	216	21	24	171	15	6	9	156	91.23%	96.30%
#220		81	18489	0	0	18489	887	1209	16393	1467	1038	429	14926	91.05%	93.50%
#221		1	13	0	0	13	0	0	13	4	1	3	9	69.23%	90.00%
#222		16	638	0	0	638	37	50	551	77	55	22	474	86.03%	89.60%

ORDERING

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#223		49	514	0	0	514	40	29	445	37	28	9	408	91.69%	93.58%
#224		4	48	0	0	48	4	12	32	19	10	9	13	40.63%	56.52%
#225		8	914	0	0	914	57	114	743	48	15	33	695	93.54%	97.89%
#226		0	315	0	0	315	57	16	242	55	44	11	187	77.27%	80.95%
#227		7	111	0	0	111	5	4	102	5	4	1	97	95.10%	96.04%
#228		231	0	1342	0	1342	317	152	873	303	201	102	570	65.29%	73.93%
#229		231	2	0	0	2	0	1	1	1	1	0	0	0.00%	0.00%
#230		1	139	0	0	139	12	6	121	27	20	7	94	77.69%	82.46%
#231		11	246	0	0	246	23	43	180	40	34	6	140	77.78%	80.46%
#232		62	605	0	0	605	16	22	567	168	147	21	399	70.37%	73.08%
#233		17	279	0	0	279	31	16	232	33	28	5	199	85.78%	87.67%
#234		8	0	118	0	118	3	7	108	7	6	1	101	93.52%	94.39%
#235		8	315	0	0	315	7	2	306	17	17	0	289	94.44%	94.44%
#236		17	0	0	26	26	1	5	20	1	0	1	19	95.00%	100.00%
#237		17	490	0	0	490	71	42	377	86	66	20	291	77.19%	81.51%
#238		15	1548	0	0	1548	71	90	1387	75	51	24	1312	94.59%	96.26%
#239		0	23	0	0	23	6	6	11	6	6	0	5	45.45%	45.45%
#240		5	305	0	0	305	11	6	288	22	20	2	266	92.36%	93.01%
#241		0	143	0	0	143	12	4	127	19	13	6	108	85.04%	89.26%
#242		1	411	0	0	411	17	30	364	50	43	7	314	86.26%	87.96%
#243		9	0	124	0	124	96	9	19	19	12	7	0	0.00%	0.00%
#244		58	0	397	0	397	142	69	186	182	114	68	4	2.15%	3.39%
#245		58	259	0	0	259	16	26	217	107	75	32	110	50.69%	59.46%
#246		3	119	0	0	119	6	27	86	12	8	4	74	86.05%	90.24%
#247		53	2460	0	0	2460	262	439	1759	791	703	88	968	55.03%	57.93%
#248		0	2	0	0	2	1	0	1	1	1	0	0	0.00%	0.00%
#249		0	3	0	0	3	1	0	2	0	0	0	2	100.00%	100.00%
#250		7	119	0	0	119	10	18	91	28	16	12	63	69.23%	79.75%
#251		7	86	0	0	86	12	7	67	14	10	4	53	79.10%	84.13%
#252		4	394	0	0	394	60	67	267	76	69	7	191	71.54%	73.46%
#253		0	6	0	0	6	0	0	6	0	0	0	6	100.00%	100.00%
#254		0	10	0	0	10	1	2	7	1	0	1	6	85.71%	100.00%
#255		1	13	0	0	13	1	5	7	3	2	1	4	57.14%	66.67%
#256		8	25	0	0	25	3	1	21	11	7	4	10	47.62%	58.82%
#257		0	46	0	0	46	11	5	30	9	7	2	21	70.00%	75.00%
#258		0	54	0	0	54	17	2	35	6	5	1	29	82.86%	85.29%
#259		2	54	0	0	54	7	6	41	20	13	7	21	51.22%	61.76%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#260		3	252	0	0	252	53	28	171	43	34	9	128	74.85%	79.01%
#261		1	290	0	0	290	74	25	191	46	37	9	145	75.92%	79.67%
#262		10	404	0	0	404	50	92	262	105	78	27	157	59.92%	66.81%
#263		10	891	0	0	891	134	150	607	296	229	67	311	51.24%	57.59%
#264		5	0	0	86	86	37	13	36	12	7	5	24	66.67%	77.42%
#265		0	0	0	3	3	0	0	3	0	0	0	3	100.00%	100.00%
#266		2	0	0	26	26	9	6	11	5	1	4	6	54.55%	85.71%
#267		23	0	0	337	337	135	56	146	60	41	19	86	58.90%	67.72%
#268		1	0	0	110	110	42	11	57	19	14	5	38	66.67%	73.08%
#269		1	6	0	0	6	1	3	2	0	0	0	2	100.00%	100.00%
#270		4	64	0	0	64	2	10	52	7	6	1	45	86.54%	88.24%
#271		3	164	0	0	164	12	26	126	20	15	5	106	84.13%	87.60%
#272		0	2	0	0	2	0	0	2	0	0	0	2	100.00%	100.00%
#273		24	0	0	490	490	22	33	435	122	90	32	313	71.95%	77.67%
#274		24	99	0	0	99	9	6	84	8	5	3	76	90.48%	93.83%
LENS Subtotal		3619	147903			147903	9543	10485	127875	14594	11054	3540	113281	88.59%	91.11%
EDI Subtotal		660		6337		6337	1731	730	3876	1580	1197	383	2296	59.24%	65.73%
TAG Subtotal		1989			75418	75418	5215	4831	65372	6768	4337	2431	58604	89.65%	93.11%
TOTAL INTERFACES		**6268**	**147903**	**6337**	**75418**	**229658**	**16489**	**16046**	**197123**	**22942**	**16588**	**6354**	**174181**	**88.36%**	**91.30%**

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (RESIDENCE DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#1		0	8	0	0	8	0	2	6	1	0	1	5	83.33%	100.00%
#2		2	1459	0	0	1459	35	35	1389	64	49	15	1325	95.39%	96.43%
#3		0	0	0	4	4	0	1	3	3	1	2	0	0.00%	0.00%
#4		2	343	0	0	343	46	55	242	27	15	12	215	88.84%	93.48%
#5		7	75	0	0	75	1	22	52	30	20	10	22	42.31%	52.38%
#6		14	1904	0	0	1904	84	22	1798	69	61	8	1729	96.16%	96.59%
#7		1	638	0	0	638	43	15	580	39	32	7	541	93.28%	94.42%
#8		0	0	0	1	1	0	1	0	0	0	0	0	0.00%	0.00%
#9		8	18	0	0	18	1	3	14	9	8	1	5	35.71%	38.46%
#10		53	3493	0	0	3493	260	324	2909	172	114	58	2737	94.09%	96.00%
#11		2	1013	0	0	1013	16	38	959	87	68	19	872	90.93%	92.77%
#12		6	2	0	0	2	0	1	1	0	0	0	1	100.00%	100.00%
#13		0	1	0	0	1	0	0	1	0	0	0	1	100.00%	100.00%
#14		19	757	0	0	757	37	40	680	43	25	18	637	93.68%	96.22%
#15		19	0	0	2	2	0	0	2	1	1	0	1	50.00%	50.00%
#16		0	23	0	0	23	0	0	23	1	0	1	22	95.65%	100.00%
#17		0	1	0	0	1	0	1	0	0	0	0	0	0.00%	0.00%
#18		0	7	0	0	7	3	1	3	1	0	1	2	66.67%	100.00%
#19		1	90	0	0	90	9	2	79	10	9	1	69	87.34%	88.46%
#20		1	45	0	0	45	4	4	37	22	16	6	15	40.54%	48.39%
#21		0	2	0	0	2	0	0	2	1	1	0	1	50.00%	50.00%
#22		3	516	0	0	516	36	47	433	52	29	23	381	87.99%	92.93%
#23		278	149	0	0	149	18	31	100	33	24	9	67	67.00%	73.63%
#24		278	0	0	963	963	104	147	712	145	72	73	567	79.63%	88.73%
#25		398	0	0	211	211	55	64	92	34	5	29	58	63.04%	92.06%
#26		2	100	0	0	100	14	2	84	9	8	1	75	89.29%	90.36%
#27		0	53	0	0	53	7	4	42	5	4	1	37	88.10%	90.24%
#28		0	1	0	0	1	0	1	0	0	0	0	0	0.00%	0.00%
#29		6	429	0	0	429	28	3	398	23	21	2	375	94.22%	94.70%
#30		5	1261	0	0	1261	45	55	1161	105	80	25	1056	90.96%	92.96%
#31		152	1188	0	0	1188	82	93	1013	125	96	29	888	87.66%	90.24%
#32		152	0	0	6992	6992	80	405	6507	402	258	144	6105	93.82%	95.95%
#33		0	1	0	0	1	0	0	1	1	1	0	0	0.00%	0.00%
#34		1	33	0	0	33	2	1	30	2	1	1	28	93.33%	96.55%
#35		0	2	0	0	2	0	0	2	0	0	0	2	100.00%	100.00%
#36		4	90	0	0	90	16	7	67	15	10	5	52	77.61%	83.87%
#37		11	453	0	0	453	21	45	387	120	111	9	267	68.99%	70.63%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (RESIDENCE DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#38		23	251	0	0	251	62	29	160	53	37	16	107	66.88%	74.31%
#39		104	10	0	0	10	0	1	9	0	0	0	9	100.00%	100.00%
#40		104	0	0	2606	2606	145	172	2289	178	119	59	2111	92.22%	94.66%
#41		4	304	0	0	304	44	22	238	43	33	10	195	81.93%	85.53%
#42		16	127	0	0	127	10	12	105	10	5	5	95	90.48%	95.00%
#43		47	989	0	0	989	94	254	641	183	155	28	458	71.45%	74.71%
#44		22	263	0	0	263	20	21	222	26	21	5	196	88.29%	90.32%
#45		31	3772	0	0	3772	188	189	3395	298	241	57	3097	91.22%	92.78%
#46		4	31	0	0	31	11	3	17	16	11	5	1	5.88%	8.33%
#47		7	990	0	0	990	79	35	876	114	106	8	762	86.99%	87.79%
#48		22	2043	0	0	2043	112	182	1749	201	134	67	1548	88.51%	92.03%
#49		8	21	0	0	21	5	1	15	4	4	0	11	73.33%	73.33%
#50		1	12	0	0	12	2	1	9	2	1	1	7	77.78%	87.50%
#51		18	1510	0	0	1510	108	117	1285	121	96	25	1164	90.58%	92.38%
#52		5	353	0	0	353	34	17	302	51	48	3	251	83.11%	83.95%
#53		14	327	0	0	327	130	91	106	58	50	8	48	45.28%	48.98%
#54		1	106	0	0	106	9	11	86	15	12	3	71	82.56%	85.54%
#55		0	7	0	0	7	0	0	7	6	3	3	1	14.29%	25.00%
#56		14	212	0	0	212	8	8	196	25	15	10	171	87.24%	91.94%
#57		6	392	0	0	392	117	20	255	7	7	0	248	97.25%	97.25%
#58		2	398	0	0	398	29	30	339	30	27	3	309	91.15%	91.96%
#59		25	716	0	0	716	49	54	613	68	45	23	545	88.91%	92.37%
#60		8	3804	0	0	3804	110	155	3539	104	63	41	3435	97.06%	98.20%
#61		1	168	0	0	168	26	9	133	18	17	1	115	86.47%	87.12%
#62		2	1710	0	0	1710	36	46	1628	28	19	9	1600	98.28%	98.83%
#63		0	50	0	0	50	6	8	36	7	7	0	29	80.56%	80.56%
#64		16	1363	0	0	1363	54	362	947	304	222	82	643	67.90%	74.34%
#65		27	392	0	0	392	56	106	230	72	59	13	158	68.70%	72.81%
#66		1	316	0	0	316	32	50	234	44	33	11	190	81.20%	85.20%
#67		0	348	0	0	348	56	32	260	10	9	1	250	96.15%	96.53%
#68		7	126	0	0	126	26	3	97	21	18	3	76	78.35%	80.85%
#69		48	800	0	0	800	52	40	708	64	41	23	644	90.96%	94.01%
#70		0	36	0	0	36	6	0	30	6	6	0	24	80.00%	80.00%
#71		76	4176	0	0	4176	610	174	3392	344	225	119	3048	89.86%	93.13%
#72		76	0	1141	0	1141	218	157	766	178	110	68	588	76.76%	84.24%
#73		0	7	0	0	7	0	0	7	1	0	1	6	85.71%	100.00%
#74		13	46	0	0	46	2	6	38	10	6	4	28	73.68%	82.35%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (RESIDENCE DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#75		13	0	0	9	9	0	0	9	4	1	3	5	55.56%	83.33%
#76		2	51	0	0	51	0	7	44	8	7	1	36	81.82%	83.72%
#77		0	125	0	0	125	2	6	117	7	4	3	110	94.02%	96.49%
#78		344	2834	0	0	2834	182	339	2313	383	322	61	1930	83.44%	85.70%
#79		344	0	0	11545	11545	110	188	11247	1398	1124	274	9849	87.57%	89.76%
#80		1	0	0	66	66	59	2	5	3	3	0	2	40.00%	40.00%
#81		13	109	0	0	109	6	13	90	14	13	1	76	84.44%	85.39%
#82		22	343	0	0	343	20	41	282	54	44	10	228	80.85%	83.82%
#83		22	0	0	8	8	3	2	3	1	1	0	2	66.67%	66.67%
#84		7	96	0	0	96	6	2	88	2	1	1	86	97.73%	98.85%
#85		0	111	0	0	111	21	14	76	29	22	7	47	61.84%	68.12%
#86		0	1	0	0	1	0	0	1	0	0	0	1	100.00%	100.00%
#87		0	0	2	0	2	0	0	2	0	0	0	2	100.00%	100.00%
#88		0	1	0	0	1	0	1	0	0	0	0	0	0.00%	0.00%
#89		11	40	0	0	40	7	6	27	7	5	2	20	74.07%	80.00%
#90		159	0	1295	0	1295	0	122	1173	505	448	57	668	56.95%	59.86%
#91		3	930	0	0	930	30	55	845	31	21	10	814	96.33%	97.49%
#92		6	13	0	0	13	1	3	9	0	0	0	9	100.00%	100.00%
#93		0	6	0	0	6	0	1	5	3	2	1	2	40.00%	50.00%
#94		1	72	0	0	72	1	3	68	6	5	1	62	91.18%	92.54%
#95		2	368	0	0	368	30	14	324	17	13	4	307	94.75%	95.94%
#96		1	60	0	0	60	8	11	41	12	8	4	29	70.73%	78.38%
#97		0	5	0	0	5	0	0	5	1	0	1	4	80.00%	100.00%
#98		14	30	0	0	30	9	6	15	6	6	0	9	60.00%	60.00%
#99		5	524	0	0	524	6	31	487	26	24	2	461	94.66%	95.05%
#100		9	341	0	0	341	24	29	288	23	16	7	265	92.01%	94.31%
#101		0	8	0	0	8	0	2	6	0	0	0	6	100.00%	100.00%
#102		0	1	0	0	1	0	0	1	0	0	0	1	100.00%	100.00%
#103		10	2864	0	0	2864	131	93	2640	136	100	36	2504	94.85%	96.16%
#104		0	3	0	0	3	0	0	3	2	2	0	1	33.33%	33.33%
#105		60	3587	0	0	3587	98	375	3114	280	217	63	2834	91.01%	92.89%
#106		60	0	0	12	12	2	0	10	6	5	1	4	40.00%	44.44%
#107		0	3	0	0	3	0	0	3	0	0	0	3	100.00%	100.00%
#108		10	6626	0	0	6626	437	247	5942	285	221	64	5657	95.20%	96.24%
#109		10	0	0	9	9	2	1	6	2	1	1	4	66.67%	80.00%
#110		40	60	0	0	60	5	19	36	14	11	3	22	61.11%	66.67%
#111		40	0	0	128	128	18	36	74	35	27	8	39	52.70%	59.09%

ORDERING

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (RESIDENCE DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#112		0	14	0	0	14	0	0	14	1	1	0	13	92.86%	92.86%
#113		4	350	0	0	350	37	12	301	37	33	4	264	87.71%	88.89%
#114		0	53	0	0	53	6	5	42	15	13	2	27	64.29%	67.50%
#115		2	24	0	0	24	5	4	15	4	2	2	11	73.33%	84.62%
#116		0	91	0	0	91	2	10	79	13	9	4	66	83.54%	88.00%
#117		14	417	0	0	417	30	110	277	35	23	12	242	87.36%	91.32%
#118		0	128	0	0	128	0	0	128	128	118	10	0	0.00%	0.00%
#119		2	676	0	0	676	34	11	631	26	22	4	605	95.88%	96.49%
#120		5	20	0	0	20	0	5	15	5	3	2	10	66.67%	76.92%
#121		5	0	0	447	447	4	30	413	100	82	18	313	75.79%	79.24%
#122		0	17	0	0	17	1	0	16	3	3	0	13	81.25%	81.25%
#123		46	2294	0	0	2294	123	168	2003	89	65	24	1914	95.56%	96.72%
#124		5	241	0	0	241	5	9	227	3	3	0	224	98.68%	98.68%
#125		5	0	0	9571	9571	289	316	8966	168	61	107	8798	98.13%	99.31%
#126		3	6	0	0	6	1	0	5	4	1	3	1	20.00%	50.00%
#127		2	328	0	0	328	28	25	275	23	17	6	252	91.64%	93.68%
#128		14	728	0	0	728	54	66	608	43	27	16	565	92.93%	95.44%
#129		125	222	0	0	222	31	55	136	23	16	7	113	83.09%	87.60%
#130		125	0	0	1893	1893	72	200	1621	139	71	68	1482	91.43%	95.43%
#131		2	1267	0	0	1267	70	76	1121	133	107	26	988	88.14%	90.23%
#132		0	86	0	0	86	10	13	63	11	8	3	52	82.54%	86.67%
#133		0	158	0	0	158	2	29	127	2	2	0	125	98.43%	98.43%
#134		0	0	0	6744	6744	120	306	6318	138	103	35	6180	97.82%	98.36%
#135		20	343	0	0	343	18	25	300	22	13	9	278	92.67%	95.53%
#136		35	533	0	0	533	59	44	430	38	32	6	392	91.16%	92.45%
#137		1	153	0	0	153	6	11	136	26	20	6	110	80.88%	84.62%
#138		1	1611	0	0	1611	61	105	1445	122	98	24	1323	91.56%	93.10%
#139		7	524	0	0	524	41	64	419	151	134	17	268	63.96%	66.67%
#140		0	722	0	0	722	40	28	654	46	33	13	608	92.97%	94.85%
#141		8	1587	0	0	1587	75	73	1439	104	88	16	1335	92.77%	93.82%
#142		2	122	0	0	122	10	12	100	18	15	3	82	82.00%	84.54%
#143		3	229	0	0	229	8	12	209	9	5	4	200	95.69%	97.56%
#144		0	54	0	0	54	3	13	38	6	5	1	32	84.21%	86.49%
#145		13	218	0	0	218	36	15	167	28	23	5	139	83.23%	85.80%
#146		13	0	0	53	53	0	2	51	3	1	2	48	94.12%	97.96%
#147		0	167	0	0	167	16	33	118	13	10	3	105	88.98%	91.30%
#148		0	2	0	0	2	1	0	1	0	0	0	1	100.00%	100.00%

ORDERING

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (RESIDENCE DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#149		181	7207	0	0	7207	173	366	6668	698	625	73	5970	89.53%	90.52%
#150		181	0	0	12	12	0	2	10	0	0	0	10	100.00%	100.00%
#151		0	6	0	0	6	1	1	4	2	2	0	2	50.00%	50.00%
#152		8	1266	0	0	1266	79	73	1114	238	209	29	876	78.64%	80.74%
#153		1	291	0	0	291	17	12	262	26	26	0	236	90.08%	90.08%
#154		0	5	0	0	5	0	0	5	5	4	1	0	0.00%	0.00%
#155		0	76	0	0	76	17	6	53	16	14	2	37	69.81%	72.55%
#156		0	581	0	0	581	39	22	520	24	20	4	496	95.38%	96.12%
#157		0	198	0	0	198	6	13	179	6	4	2	173	96.65%	97.74%
#158		13	754	0	0	754	54	15	685	62	54	8	623	90.95%	92.02%
#159		39	23	0	0	23	0	0	23	6	6	0	17	73.91%	73.91%
#160		39	0	158	0	158	9	25	124	28	18	10	96	77.42%	84.21%
#161		1	23	0	0	23	2	2	19	4	3	1	15	78.95%	83.33%
#162		4	53	0	0	53	7	14	32	21	20	1	11	34.38%	35.48%
#163		9	0	0	2	2	1	0	1	0	0	0	1	100.00%	100.00%
#164		0	578	0	0	578	15	57	506	22	9	13	484	95.65%	98.17%
#165		8	165	0	0	165	3	16	146	6	6	0	140	95.89%	95.89%
#166		2	2	0	0	2	0	0	2	0	0	0	2	100.00%	100.00%
#167		2	196	0	0	196	15	15	166	42	34	8	124	74.70%	78.48%
#168		6	291	0	0	291	3	12	276	3	3	0	273	98.91%	98.91%
#169		6	0	0	16521	16521	274	477	15770	352	207	145	15418	97.77%	98.68%
#170		4	708	0	0	708	40	44	624	37	29	8	587	94.07%	95.29%
#171		0	1	0	0	1	0	0	1	0	0	0	1	100.00%	100.00%
#172		103	22589	0	0	22589	718	1006	20865	1314	965	349	19551	93.70%	95.30%
#173		0	61	0	0	61	2	4	55	2	1	1	53	96.36%	98.15%
#174		0	3	0	0	3	0	1	2	0	0	0	2	100.00%	100.00%
#175		0	1	0	0	1	0	0	1	1	1	0	0	0.00%	0.00%
#176		11	1464	0	0	1464	89	149	1226	82	36	46	1144	93.31%	96.95%
#177		0	108	0	0	108	5	2	101	8	5	3	93	92.08%	94.90%
#178		1	181	0	0	181	6	17	158	10	5	5	148	93.67%	96.73%
#179		0	95	0	0	95	6	8	81	4	2	2	77	95.06%	97.47%
#180		14	61	0	0	61	6	8	47	14	11	3	33	70.21%	75.00%
#181		27	216	0	0	216	21	24	171	15	6	9	156	91.23%	96.30%
#182		81	18485	0	0	18485	887	1209	16389	1465	1036	429	14924	91.06%	93.51%
#183		1	3	0	0	3	0	0	3	3	1	2	0	0.00%	0.00%
#184		16	638	0	0	638	37	50	551	77	55	22	474	86.03%	89.60%
#185		49	509	0	0	509	35	29	445	37	28	9	408	91.69%	93.58%

ORDERING

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (RESIDENCE DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#186		4	15	0	0	15	1	6	8	2	1	1	6	75.00%	85.71%
#187		8	910	0	0	910	57	114	739	46	14	32	693	93.78%	98.02%
#188		0	262	0	0	262	40	14	208	38	33	5	170	81.73%	83.74%
#189		7	111	0	0	111	5	4	102	5	4	1	97	95.10%	96.04%
#190		231	0	362	0	362	0	0	362	0	0	0	362	100.00%	100.00%
#191		1	139	0	0	139	12	6	121	27	20	7	94	77.69%	82.46%
#192		11	175	0	0	175	11	32	132	22	20	2	110	83.33%	84.62%
#193		62	599	0	0	599	14	21	564	165	144	21	399	70.74%	73.48%
#194		17	278	0	0	278	30	16	232	33	28	5	199	85.78%	87.67%
#195		8	315	0	0	315	7	2	306	17	17	0	289	94.44%	94.44%
#196		8	0	118	0	118	3	7	108	7	6	1	101	93.52%	94.39%
#197		17	490	0	0	490	71	42	377	86	66	20	291	77.19%	81.51%
#198		17	0	0	26	26	1	5	20	1	0	1	19	95.00%	100.00%
#199		15	1541	0	0	1541	68	89	1384	74	50	24	1310	94.65%	96.32%
#200		0	2	0	0	2	1	0	1	1	1	0	0	0.00%	0.00%
#201		5	305	0	0	305	11	6	288	22	20	2	266	92.36%	93.01%
#202		0	143	0	0	143	12	4	127	19	13	6	108	85.04%	89.26%
#203		1	411	0	0	411	17	30	364	50	43	7	314	86.26%	87.96%
#204		58	22	0	0	22	0	1	21	11	6	5	10	47.62%	62.50%
#205		3	114	0	0	114	6	25	83	9	5	4	74	89.16%	93.67%
#206		53	2353	0	0	2353	225	422	1706	768	688	80	938	54.98%	57.69%
#207		7	119	0	0	119	10	18	91	28	16	12	63	69.23%	79.75%
#208		7	83	0	0	83	11	7	65	13	9	4	52	80.00%	85.25%
#209		4	287	0	0	287	46	54	187	51	46	5	136	72.73%	74.73%
#210		0	6	0	0	6	0	0	6	0	0	0	6	100.00%	100.00%
#211		0	1	0	0	1	0	0	1	0	0	0	1	100.00%	100.00%
#212		1	1	0	0	1	1	0	0	0	0	0	0	0.00%	0.00%
#213		10	58	0	0	58	0	3	55	10	7	3	45	81.82%	86.54%
#214		10	338	0	0	338	16	64	258	102	83	19	156	60.47%	65.27%
#215		1	2	0	0	2	1	0	1	0	0	0	1	100.00%	100.00%
#216		1	0	0	35	35	5	2	28	4	2	2	24	85.71%	92.31%
#217		4	61	0	0	61	1	10	50	7	6	1	43	86.00%	87.76%
#218		3	154	0	0	154	12	21	121	18	13	5	103	85.12%	88.79%
#219		24	99	0	0	99	9	6	84	8	5	3	76	90.48%	93.83%
#220		24	0	0	490	490	22	33	435	122	90	32	313	71.95%	77.67%
LENS Subtotal		2938	139160			139160	7806	9486	121868	11839	9170	2669	110029	90.29%	92.31%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (RESIDENCE DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
EDI Subtotal		513		3076		3076	230	311	2535	718	582	136	1817	71.68%	75.74%
TAG Subtotal		1827			58350	58350	1366	2392	54592	3239	2235	1004	51353	94.07%	95.83%
TOTAL INTERFACES		**5278**	**139160**	**3076**	**58350**	**200586**	**9402**	**12189**	**178995**	**15796**	**11987**	**3809**	**163199**	**91.18%**	**93.16%**

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (BUSINESS DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES																
Company Info							LSR PROCESSING								FLOWTHROUGH	
							LESOG									
			Mechanized Interface Used				Manual	Rejects	Validated	Errors						
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's		Base Calculation	CLEC Error Excluded Calculation
#1		0	4	0	0	4	2	0	2	1	0	1	1		50.00%	100.00%
#2		0	9	0	0	9	5	0	4	1	1	0	3		75.00%	75.00%
#3		2	11	0	0	11	8	2	1	1	1	0	0		0.00%	0.00%
#4		7	14	0	0	14	1	1	12	12	6	6	0		0.00%	0.00%
#5		14	22	0	0	22	0	2	20	1	1	0	19		95.00%	95.00%
#6		0	1	0	0	1	1	0	0	0	0	0	0		0.00%	0.00%
#7		8	168	0	0	168	40	17	111	42	26	16	69		62.16%	72.63%
#8		6	42	0	0	42	6	15	21	13	9	4	8		38.10%	47.06%
#9		0	9	0	0	9	2	0	7	1	1	0	6		85.71%	85.71%
#10		0	10	0	0	10	1	4	5	2	2	0	3		60.00%	60.00%
#11		1	52	0	0	52	6	8	38	13	12	1	25		65.79%	67.57%
#12		3	4	0	0	4	1	1	2	2	2	0	0		0.00%	0.00%
#13		278	556	0	0	556	109	85	362	144	112	32	218		60.22%	66.06%
#14		278	0	0	1324	1324	790	70	464	180	114	66	284		61.21%	71.36%
#15		398	23	0	0	23	6	13	4	3	2	1	1		25.00%	33.33%
#16		398	0	0	119	119	49	29	41	29	4	25	12		29.27%	75.00%
#17		0	3	0	0	3	2	0	1	0	0	0	1		100.00%	100.00%
#18		5	23	0	0	23	6	5	12	3	1	2	9		75.00%	90.00%
#19		57	0	9	0	9	0	2	7	3	3	0	4		57.14%	57.14%
#20		4	80	0	0	80	37	4	39	14	12	2	25		64.10%	67.57%
#21		23	62	0	0	62	24	10	28	19	11	8	9		32.14%	45.00%
#22		4	1	0	0	1	0	0	1	0	0	0	1		100.00%	100.00%
#23		16	12	0	0	12	0	0	12	12	12	0	0		0.00%	0.00%
#24		47	203	0	0	203	61	21	121	51	40	11	70		57.85%	63.64%
#25		22	8	0	0	8	1	3	4	3	1	2	1		25.00%	50.00%
#26		5	5	0	0	5	2	0	3	0	0	0	3		100.00%	100.00%
#27		31	59	0	0	59	24	1	34	11	7	4	23		67.65%	76.67%
#28		4	67	0	0	67	6	18	43	34	30	4	9		20.93%	23.08%
#29		22	15	0	0	15	1	1	13	3	3	0	10		76.92%	76.92%
#30		8	41	0	0	41	11	1	29	15	9	6	14		48.28%	60.87%
#31		1	22	0	0	22	4	3	15	10	6	4	5		33.33%	45.45%
#32		5	55	0	0	55	16	4	35	7	6	1	28		80.00%	82.35%
#33		0	2	0	0	2	2	0	0	0	0	0	0		0.00%	0.00%
#34		14	9	0	0	9	0	2	7	0	0	0	7		100.00%	100.00%
#35		1	3	0	0	3	0	0	3	0	0	0	3		100.00%	100.00%
#36		25	6	0	0	6	0	4	2	0	0	0	2		100.00%	100.00%
#37		1	10	0	0	10	4	1	5	5	2	3	0		0.00%	0.00%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (BUSINESS DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES																
Company Info							LSR PROCESSING								FLOWTHROUGH	
							LESOG									
			Mechanized Interface Used				Manual	Rejects	Validated	Errors						
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's		Base Calculation	CLEC Error Excluded Calculation
#38		27	16	0	0	16	3	3	10	8	4	4	2		20.00%	33.33%
#39		1	2	0	0	2	1	0	1	1	1	0	0		0.00%	0.00%
#40		48	7	0	0	7	1	5	1	1	1	0	0		0.00%	0.00%
#41		0	5	0	0	5	0	0	5	1	0	1	4		80.00%	100.00%
#42		76	2	0	0	2	0	0	2	0	0	0	2		100.00%	100.00%
#43		13	254	0	0	254	41	28	185	74	54	20	111		60.00%	67.27%
#44		13	0	0	91	91	64	3	24	19	15	4	5		20.83%	25.00%
#45		0	1	0	0	1	0	1	0	0	0	0	0		0.00%	0.00%
#46		6	15	0	0	15	1	4	10	4	1	3	6		60.00%	85.71%
#47		1	2	0	0	2	0	0	2	0	0	0	2		100.00%	100.00%
#48		13	188	0	0	188	21	31	136	48	39	9	88		64.71%	69.29%
#49		22	259	0	0	259	18	13	228	86	64	22	142		62.28%	68.93%
#50		7	109	0	0	109	66	1	42	10	9	1	32		76.19%	78.05%
#51		0	13	0	0	13	3	4	6	2	1	1	4		66.67%	80.00%
#52		0	0	4	0	4	4	0	0	0	0	0	0		0.00%	0.00%
#53		11	49	0	0	49	9	7	33	16	10	6	17		51.52%	62.96%
#54		0	21	0	0	21	0	2	19	6	3	3	13		68.42%	81.25%
#55		6	28	0	0	28	7	2	19	12	7	5	7		36.84%	50.00%
#56		1	68	0	0	68	19	7	42	18	16	2	24		57.14%	60.00%
#57		1	34	0	0	34	17	2	15	4	3	1	11		73.33%	78.57%
#58		1	0	8	0	8	4	0	4	2	1	1	2		50.00%	66.67%
#59		0	8	0	0	8	0	3	5	1	1	0	4		80.00%	80.00%
#60		14	52	0	0	52	12	1	39	2	2	0	37		94.87%	94.87%
#61		0	3	0	0	3	2	0	1	0	0	0	1		100.00%	100.00%
#62		9	9	0	0	9	1	0	8	4	3	1	4		50.00%	57.14%
#63		0	2	0	0	2	0	1	1	0	0	0	1		100.00%	100.00%
#64		0	31	0	0	31	10	2	19	17	12	5	2		10.53%	14.29%
#65		10	1	0	0	1	0	1	0	0	0	0	0		0.00%	0.00%
#66		8	68	0	0	68	7	6	55	29	18	11	26		47.27%	59.09%
#67		8	0	35	0	35	16	8	11	4	1	3	7		63.64%	87.50%
#68		60	1	0	0	1	0	0	1	0	0	0	1		100.00%	100.00%
#69		40	11	0	0	11	3	0	8	5	5	0	3		37.50%	37.50%
#70		40	0	0	125	125	62	17	46	39	30	9	7		15.22%	18.92%
#71		1	3	0	0	3	0	2	1	1	1	0	0		0.00%	0.00%
#72		2	17	0	0	17	4	0	13	3	3	0	10		76.92%	76.92%
#73		0	8	0	0	8	2	0	6	5	5	0	1		16.67%	16.67%
#74		0	12	0	0	12	1	1	10	4	4	0	6		60.00%	60.00%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (BUSINESS DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#75		0	2	0	0	2	1	0	1	0	0	0	1	100.00%	100.00%
#76		1	0	0	6	6	5	0	1	1	1	0	0	0.00%	0.00%
#77		2	0	0	10	10	4	0	6	5	4	1	1	16.67%	20.00%
#78		0	0	0	1	1	1	0	0	0	0	0	0	0.00%	0.00%
#79		1	20	0	0	20	1	3	16	3	3	0	13	81.25%	81.25%
#80		2	116	0	0	116	70	8	38	32	27	5	6	15.79%	18.18%
#81		14	4	0	0	4	0	0	4	4	2	2	0	0.00%	0.00%
#82		0	8	0	0	8	0	0	8	8	7	1	0	0.00%	0.00%
#83		2	4	0	0	4	2	0	2	1	1	0	1	50.00%	50.00%
#84		0	1	0	0	1	0	0	1	0	0	0	1	100.00%	100.00%
#85		46	3	0	0	3	0	0	3	0	0	0	3	100.00%	100.00%
#86		3	376	0	0	376	59	54	263	206	153	53	57	21.67%	27.14%
#87		2	1	0	0	1	0	0	1	0	0	0	1	100.00%	100.00%
#88		14	12	0	0	12	4	0	8	0	0	0	8	100.00%	100.00%
#89		125	0	0	1	1	0	1	0	0	0	0	0	0.00%	0.00%
#90		7	12	0	0	12	5	1	6	2	2	0	4	66.67%	66.67%
#91		8	3	0	0	3	0	0	3	0	0	0	3	100.00%	100.00%
#92		0	21	0	0	21	8	0	13	2	1	1	11	84.62%	91.67%
#93		0	2	0	0	2	0	0	2	1	1	0	1	50.00%	50.00%
#94		181	1	0	0	1	0	0	1	0	0	0	1	100.00%	100.00%
#95		0	1	0	0	1	0	0	1	0	0	0	1	100.00%	100.00%
#96		8	7	0	0	7	1	0	6	3	1	2	3	50.00%	75.00%
#97		0	3	0	0	3	0	0	3	3	2	1	0	0.00%	0.00%
#98		0	9	0	0	9	5	2	2	0	0	0	2	100.00%	100.00%
#99		0	1	0	0	1	0	0	1	0	0	0	1	100.00%	100.00%
#100		13	28	0	0	28	13	3	12	11	10	1	1	8.33%	9.09%
#101		39	194	0	0	194	16	34	144	51	45	6	93	64.58%	67.39%
#102		39	0	1304	0	1304	775	105	424	223	180	43	201	47.41%	52.76%
#103		9	24	0	0	24	12	3	9	2	1	1	7	77.78%	87.50%
#104		9	0	0	260	260	41	75	144	55	40	15	89	61.81%	68.99%
#105		0	10	0	0	10	0	5	5	3	2	1	2	40.00%	50.00%
#106		2	105	0	0	105	25	4	76	35	23	12	41	53.95%	64.06%
#107		0	4	0	0	4	3	1	0	0	0	0	0	0.00%	0.00%
#108		0	10	0	0	10	3	0	7	0	0	0	7	100.00%	100.00%
#109		0	12	0	0	12	1	5	6	4	2	2	2	33.33%	50.00%
#110		103	22	0	0	22	8	2	12	7	5	2	5	41.67%	50.00%
#111		0	1	0	0	1	0	1	0	0	0	0	0	0.00%	0.00%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (BUSINESS DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#112		1	2	0	0	2	0	2	0	0	0	0	0	0.00%	0.00%
#113		14	257	0	0	257	39	31	187	72	57	15	115	61.50%	66.86%
#114		81	4	0	0	4	0	0	4	2	2	0	2	50.00%	50.00%
#115		1	10	0	0	10	0	0	10	1	0	1	9	90.00%	100.00%
#116		49	5	0	0	5	5	0	0	0	0	0	0	0.00%	0.00%
#117		4	33	0	0	33	3	6	24	17	9	8	7	29.17%	43.75%
#118		8	4	0	0	4	0	0	4	2	1	1	2	50.00%	66.67%
#119		0	53	0	0	53	17	2	34	17	11	6	17	50.00%	60.71%
#120		11	71	0	0	71	12	11	48	18	14	4	30	62.50%	68.18%
#121		62	6	0	0	6	2	1	3	3	3	0	0	0.00%	0.00%
#122		17	1	0	0	1	1	0	0	0	0	0	0	0.00%	0.00%
#123		15	7	0	0	7	3	1	3	1	1	0	2	66.67%	66.67%
#124		0	21	0	0	21	5	6	10	5	5	0	5	50.00%	50.00%
#125		58	237	0	0	237	16	25	196	96	69	27	100	51.02%	59.17%
#126		3	5	0	0	5	0	2	3	3	3	0	0	0.00%	0.00%
#127		53	106	0	0	106	37	17	52	23	15	8	29	55.77%	65.91%
#128		0	2	0	0	2	1	0	1	1	1	0	0	0.00%	0.00%
#129		0	3	0	0	3	1	0	2	0	0	0	2	100.00%	100.00%
#130		7	3	0	0	3	1	0	2	1	1	0	1	50.00%	50.00%
#131		4	107	0	0	107	14	13	80	25	23	2	55	68.75%	70.51%
#132		3	252	0	0	252	53	28	171	43	34	9	128	74.85%	79.01%
#133		0	54	0	0	54	17	2	35	6	5	1	29	82.86%	85.29%
#134		1	13	0	0	13	1	5	7	3	2	1	4	57.14%	66.67%
#135		8	25	0	0	25	3	1	21	11	7	4	10	47.62%	58.82%
#136		0	45	0	0	45	11	5	29	9	7	2	20	68.97%	74.07%
#137		0	10	0	0	10	1	2	7	1	0	1	6	85.71%	100.00%
#138		2	54	0	0	54	7	6	41	20	13	7	21	51.22%	61.76%
#139		1	289	0	0	289	73	25	191	46	37	9	145	75.92%	79.67%
#140		10	346	0	0	346	50	89	207	95	71	24	112	54.11%	61.20%
#141		10	553	0	0	553	118	86	349	194	146	48	155	44.41%	51.50%
#142		1	4	0	0	4	0	3	1	0	0	0	1	100.00%	100.00%
#143		23	0	0	3	3	2	0	1	0	0	0	1	100.00%	100.00%
#144		1	0	0	75	75	37	9	29	15	12	3	14	48.28%	53.85%
#145		4	3	0	0	3	1	0	2	0	0	0	2	100.00%	100.00%
#146		3	10	0	0	10	0	5	5	2	2	0	3	60.00%	60.00%
#147		0	2	0	0	2	0	0	2	0	0	0	2	100.00%	100.00%

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (BUSINESS DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
LENS Subtotal		2217	6524			6524	1367	853	4304	1880	1409	471	2424	56.32%	63.24%
EDI Subtotal		105		1360		1360	799	115	446	232	185	47	214	47.98%	53.63%
TAG Subtotal		890			2015	2015	1055	204	756	343	220	123	413	54.63%	65.24%
TOTAL INTERFACES		**3212**	**6524**	**1360**	**2015**	**9899**	**3221**	**1172**	**5506**	**2455**	**1814**	**641**	**3051**	**55.41%**	**62.71%**

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (UNE DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
#1		0	0	0	2	2	0	1	1	1	0	1	0	0.00%	0.00%
#2		278	1	0	0	1	0	0	1	1	0	1	0	0.00%	0.00%
#3		278	0	0	58	58	7	18	33	21	6	15	12	36.36%	66.67%
#4		398	87	0	0	87	4	18	65	31	21	10	34	52.31%	61.82%
#5		398	0	0	13765	13765	2216	1998	9551	2902	1680	1222	6649	69.62%	79.83%
#6		57	0	178	0	178	110	17	51	48	35	13	3	5.88%	7.89%
#7		13	0	0	1	1	1	0	0	0	0	0	0	0.00%	0.00%
#8		6	16	0	0	16	0	0	16	5	3	2	11	68.75%	78.57%
#9		6	0	126	0	126	28	34	64	21	20	1	43	67.19%	68.25%
#10		3	0	30	0	30	8	9	13	9	8	1	4	30.77%	33.33%
#11		4	1	0	0	1	0	0	1	1	0	1	0	0.00%	0.00%
#12		4	0	56	0	56	0	11	45	42	36	6	3	6.67%	7.69%
#13		0	1	0	0	1	1	0	0	0	0	0	0	0.00%	0.00%
#14		40	2044	0	0	2044	361	120	1563	801	421	380	762	48.75%	64.41%
#15		40	0	0	343	343	219	25	99	55	47	8	44	44.44%	48.35%
#16		3	2	0	0	2	0	0	2	2	2	0	0	0.00%	0.00%
#17		129	0	0	435	435	172	118	145	130	100	30	15	10.34%	13.04%
#18		1	0	4	0	4	1	1	2	2	1	1	0	0.00%	0.00%
#19		39	0	6	0	6	0	2	4	4	3	1	0	0.00%	0.00%
#20		0	20	0	0	20	0	1	19	19	16	3	0	0.00%	0.00%
#21		0	31	0	0	31	4	4	23	8	5	3	15	65.22%	75.00%
#22		0	10	0	0	10	0	0	10	5	5	0	5	50.00%	50.00%
#23		0	2	0	0	2	0	1	1	1	1	0	0	0.00%	0.00%
#24		14	1	0	0	1	0	1	0	0	0	0	0	0.00%	0.00%
#25		231	2	0	0	2	0	1	1	1	1	0	0	0.00%	0.00%
#26		231	0	980	0	980	317	152	511	303	201	102	208	40.70%	50.86%
#27		58	0	397	0	397	142	69	186	182	114	68	4	2.15%	3.39%
#28		9	0	124	0	124	96	9	19	19	12	7	0	0.00%	0.00%
#29		53	1	0	0	1	0	0	1	0	0	0	1	100.00%	100.00%
#30		5	0	0	86	86	37	13	36	12	7	5	24	66.67%	77.42%
#31		0	0	0	3	3	0	0	3	0	0	0	3	100.00%	100.00%
#32		2	0	0	26	26	9	6	11	5	1	4	6	54.55%	85.71%
#33		23	0	0	334	334	133	56	145	60	41	19	85	58.62%	67.46%

ORDERING

REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (UNE DETAIL)
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES															
Company Info							LSR PROCESSING							FLOWTHROUGH	
							LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors					
Name	RESH / OCN	Fatal Rejects	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
LENS Subtotal		1027	2219			2219	370	146	1703	875	475	400	828	48.62%	63.55%
EDI Subtotal		408		1901		1901	702	304	895	630	430	200	265	29.61%	38.13%
TAG Subtotal		888			15053	15053	2794	2235	10024	3186	1882	1304	6838	68.22%	78.42%
TOTAL INTERFACES		**2323**	**2219**	**1901**	**15053**	**19173**	**3866**	**2685**	**12622**	**4691**	**2787**	**1904**	**7931**	**62.83%**	**74.00%**

ORDERING

REPORT: FLOWTHROUGH ERROR ANALYSIS
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES										
ERROR DETAILS (Auto Clarifications (A) & Errors (E))					CAUSATION					
					CLEC Caused			BST Caused		
Error Type (by error code)	Count	%	Σ %	Error Description	Count	% of Agg	% of CLEC	Count	% of Agg	% of BST Caused
8825	5549	14.92%	14.92%	ORDER ERR:	1402	25.27%	4.83%	4147	74.73%	50.672%
1000	4777	12.84%	27.76%	MISCELLANEOUS	4567	95.60%	15.74%	210	4.40%	2.566%
7400	2352	6.32%	34.09%	CLEC DOES NOT OWN THIS ACCOUNT.	2350	99.91%	8.10%	2	0.09%	0.024%
7645	1822	4.90%	38.99%	MATCH IN CSR SA AND LSR HOUSENUM NOT FOUND	1389	76.23%	4.79%	433	23.77%	5.291%
7785	1742	4.68%	43.67%	RSAG SITE TABLE LOOKUP FAILED TO FIND A MATCH	294	16.88%	1.01%	1448	83.12%	17.693%
9602	1437	3.86%	47.53%	USOC ALREADY EXISTS ON CUSTOMER RECORD	1429	99.44%	4.93%	8	0.56%	0.098%
7435	1380	3.71%	51.24%	WKG SVC - INPUT ADL, CONVSN ORD OR NOTE ABAND STA	1380	100.00%	4.76%	0	0.00%	0.000%
8175	1023	2.75%	53.99%	USOC NOT AVAILABLE IN SWITCH. FORMAT SAE 180N I1 BCR	1023	100.00%	3.53%	0	0.00%	0.000%
9515	991	2.66%	56.66%	WKG SVC-INPUT ADL, CONVERSION ORDER OR NOTE ABANDONED STATION	987	99.60%	3.40%	4	0.40%	0.049%
7245	936	2.52%	59.18%	NUM=00001 SFG FID, DATA, OR DELIMITER IS MISSING	924	98.72%	3.19%	12	1.28%	0.147%
7055	932	2.51%	61.68%	NUM=TELNO= ACCOUNT IS FINAL	931	99.89%	3.21%	1	0.11%	0.012%
7718	913	2.45%	64.14%	UNABLE TO RETRIEVE PSO TO PROCESS SUP	545	59.69%	1.88%	368	40.31%	4.497%
8940	852	2.29%	66.43%	CALL FORWARDING NUMBER MISSING OR INVALID	850	99.77%	2.93%	2	0.23%	0.024%
7465	808	2.17%	68.60%	MATCH IN CSR SA AND LSR HOUSENUM NOT FOUND	358	44.31%	1.23%	450	55.69%	5.499%
9529	796	2.14%	70.74%	CANNOT RESTORE A LINE WHICH IS NOT SUSPENDED/DENIED	795	99.87%	2.74%	1	0.13%	0.012%
8189	755	2.03%	72.77%	USOC IS NOT VALID ON BST FILE. FORMAT SAE 433 I1 ADL	755	100.00%	2.60%	0	0.00%	0.000%
7735	608	1.63%	74.40%	INVALID/MISSING LISTING NAME OR TYPE	608	100.00%	2.10%	0	0.00%	0.000%
7235	589	1.58%	75.99%	10 DIGIT TN REQUIRED WITH USOC/FID=CFND	582	98.81%	2.01%	7	1.19%	0.086%
8190	587	1.58%	77.57%	INVALID USOC FOR BASIC CLASS OF SERVICE. FORMAT SAE 434 I1 ESZ	587	100.00%	2.02%	0	0.00%	0.000%
9805	449	1.21%	78.77%	NO DENIAL INDICATOR ON CUSTOMER RECORD	449	100.00%	1.55%	0	0.00%	0.000%
8187	415	1.12%	79.89%	USOC MAY NOT APPEAR ON REQUEST. FORMAT SAE 431 T1 EMP1S /TN	415	100.00%	1.43%	0	0.00%	0.000%
7810	404	1.09%	80.97%	LOGON ABORTED/FAILED	146	36.14%	0.50%	258	63.86%	3.152%
9481	369	0.99%	81.97%	LNUM=00001 FEATURE DOES NOT EXIST ON ACCOUNT TO DISCONNECT	364	98.64%	1.25%	5	1.36%	0.061%
8970	366	0.98%	82.95%	FID RCU WITH TWC FOUND ON SAME LINE AS 3-WAY CALLING USOC	360	98.36%	1.24%	6	1.64%	0.073%
7860	326	0.88%	83.83%	RSAG - NO EXACT MATCH ON STREET NAME	325	99.69%	1.12%	1	0.31%	0.012%
7710	313	0.84%	84.67%	CANNOT CANCEL OR CHANGE DUE DATE ON NON-EXISTENT ORDER	260	83.07%	0.90%	53	16.93%	0.648%
8820	307	0.83%	85.49%	SOCS ERROR: FORMAT 001 FID FLAT INVALID FOR S	211	68.73%	0.73%	96	31.27%	1.173%
7250	299	0.80%	86.30%	LSR HOUSENUMBER INCORRECT	299	100.00%	1.03%	0	0.00%	0.000%
8150	280	0.75%	87.05%	ORDER HAS BEEN REQUEUED FOR THE MAXIMUM NUMBER OF OCCURRENCES	280	100.00%	0.97%	0	0.00%	0.000%
7805	251	0.67%	87.73%	SITE COULD NOT BE DETERMINED	251	100.00%	0.87%	0	0.00%	0.000%
7020	231	0.62%	88.35%	NUM= TELNO= TN NOT FOUND IN ON EATN	230	99.57%	0.79%	1	0.43%	0.012%
7225	216	0.58%	88.93%	USOC=: VR5CL IS MISSING	215	99.54%	0.74%	1	0.46%	0.012%
7315	207	0.56%	89.48%	CANNOT GENERATE BILLING NAME AND ADDRESS FIDS	83	40.10%	0.29%	124	59.90%	1.515%
7145	205	0.55%	90.04%	INTERVAL BETWEEN DATE RECEIVED AND DDD IS INVALID	197	96.10%	0.68%	8	3.90%	0.098%
7660	188	0.51%	90.54%	USOC SFWE2 NOT FOR RESALE	187	#REF!	0.64%	1	0.53%	0.012%
9519	187	0.50%	91.04%	LOCNUM= HNUM= HT= TN NOT FOUND ON CSR OR LSR	187	99.47%	0.64%	0	0.00%	0.000%

AGGREGATE ORDER TYPES											
ERROR DETAILS (Auto Clarifications (A) & Errors (E))					CAUSATION						
					CLEC Caused			BST Caused			
Error Type (by error code)	Count	%	Σ %	Error Description	Count	% of Agg	% of CLEC	Count	% of Agg	% of BST Caused
9442	171	0.46%	91.50%	DLNUM=0002 LTN= ALI MUST BE UNIQUE	167	89.30%	0.58%	4	2.34%	0.049%
8240	158	0.42%	91.93%	INVALID LINE CLASS OF SVC FOR REQUESTED SERVICE	158	92.40%	0.54%	0	0.00%	0.000%
9496	138	0.37%	92.30%	TNS=ON LNUM=00002 NOT FOUND ON EATN= FOR ACT=	137	86.71%	0.47%	1	0.72%	0.012%
7555	130	0.35%	92.65%	FID MISSING IN FEATURE DETAIL	106	76.81%	0.37%	24	18.46%	0.293%
8167	121	0.33%	92.97%	INVALID USOC CHARACTER. FORMAT SAE 013 I1 IFR	121	93.08%	0.42%	0	0.00%	0.000%
8209	114	0.31%	93.28%	USOC COMBINATION IS INVALID. FORMAT SAE 587 I1 ESXDC /TN	114	94.21%	0.39%	0	0.00%	0.000%
7890	113	0.30%	93.58%	RSAG - NO EXACT MATCH ON SUPPLEMENTAL ADDRESS	112	98.25%	0.39%	1	0.88%	0.012%
7715	107	0.29%	93.87%	SOCS TIMEOUT/NOT AVAILABLE	57	50.44%	0.20%	50	46.73%	0.611%
8173	106	0.28%	94.16%	INVALID CLASS OF SERVICE. FORMAT IDNT 131 UEPRL=	106	99.07%	0.37%	0	0.00%	0.000%
7050	102	0.27%	94.43%	BOCRIS NOT AVAILABLE	88	83.02%	0.30%	14	13.73%	0.171%
7905	99	0.27%	94.70%	RSAG - INCORRECT COMMUNITY, INCORRECT ZIP CODE OR INVALID ADDRESS F	99	97.06%	0.34%	0	0.00%	0.000%
8204	90	0.24%	94.94%	BCR/NSS/NX8 INVALID USOC COMBINATION. FORMAT SAE 575 I1 BCR /TN	90	90.91%	0.31%	0	0.00%	0.000%
7110	89	0.24%	95.18%	COFFI NOT AVAILABLE	48	53.33%	0.17%	41	46.07%	0.501%
8945	81	0.22%	95.40%	LINECLSSVC AND TOS DO NOT MATCH	81	91.01%	0.28%	0	0.00%	0.000%
8195	80	0.22%	95.61%	CALL FORWARDING USOC MUST NOT APPEAR. FORMAT SAE 540 I1 ESXDC /TN	80	98.77%	0.28%	0	0.00%	0.000%
8170	80	0.22%	95.83%	USOC MAY ONLY APPEAR ONCE. FORMAT SAE 110 I1 CREXA /TN /RMKR (A) 05-	80	100.00%	0.28%	0	0.00%	0.000%
7755	79	0.21%	96.04%	UNE - NPANXX NOT FOUND IN CLLI TABLE	56	70.00%	0.19%	23	29.11%	0.281%
8830	78	0.21%	96.25%	CLEC ALREADY OWNS THIS ACCOUNT	78	98.73%	0.27%	0	0.00%	0.000%
9860	72	0.19%	96.44%	UNABLE TO HANDLE REQUEST; ENDUSER ACCOUNT FROZEN	72	92.31%	0.25%	0	0.00%	0.000%
7360	71	0.19%	96.63%	LIFELINE SERVICE NOT AVAILABLE	29	40.28%	0.10%	42	59.15%	0.513%
7115	64	0.17%	96.81%	DSAP TELEPHONE NUMBER NOT ACTIVE/FOUND IN SITE	28	39.44%	0.10%	36	56.25%	0.440%
9605	58	0.16%	96.96%	USOC NOT FOR RESALE FORMAT SAE 959 T1 PGRX1 /ZCLR BLK /ZPGR 2 /RMK	58	90.63%	0.20%	0	0.00%	0.000%
9015	57	0.15%	97.12%	SUP FAILED TO UPDATE DUE DATE	53	91.38%	0.18%	4	7.02%	0.049%
8885	57	0.15%	97.27%	LINE ACT IS V AND LINE IS NOT ON CUSTOMER RECORD	24	42.11%	0.08%	33	57.89%	0.403%
8177	56	0.15%	97.42%	USOC INVALID FOR THIS SWITCH. FORMAT SAE 183 I1 TTR	56	98.25%	0.19%	0	0.00%	0.000%
7150	56	0.15%	97.57%	UNE - ERROR GENERATING ECCKT	39	69.64%	0.13%	17	30.36%	0.208%
9470	51	0.14%	97.71%	LOCATION QUANTITY DOES NOT EQUAL THE NUMBER OF END USER DETAIL RE	51	91.07%	0.18%	0	0.00%	0.000%
9616	46	0.12%	97.83%	YPH INVALID	46	90.20%	0.16%	0	0.00%	0.000%
9820	44	0.12%	97.95%	INVALID LINE ACTIVITY FOR SUSPENDED ACCOUNT	44	95.65%	0.15%	0	0.00%	0.000%
9800	40	0.11%	98.06%	MAIN LISTING REQUIRED FOR NEW ACCOUNT	39	88.64%	0.13%	1	2.50%	0.012%
8197	40	0.11%	98.16%	CALL FORWARDING USOC MUST APPEAR. FORMAT SAE 541	40	100.00%	0.14%	0	0.00%	0.000%
7815	40	0.11%	98.27%	FID=RCU INVALID OR MISSING DATA	35	87.50%	0.12%	5	12.50%	0.061%
7300	40	0.11%	98.38%	UNE - CANNOT GENERATE CLASS OF SERVICE USOC	40	100.00%	0.14%	0	0.00%	0.000%
9488	39	0.10%	98.48%	DISPOSITION OF ALL LINES REQUIRED ON ACT V	39	97.50%	0.13%	0	0.00%	0.000%
9475	36	0.10%	98.58%	ACT= ALLOWED ONLY ON SAME LOCNUM SERVICE ADDRESS	36	92.31%	0.12%	0	0.00%	0.000%
7690	33	0.09%	98.67%	UNE - ACTL AND ENDUSER LSO MUST BE THE SAME FOR LOOP/LINP SERVICE	33	91.67%	0.11%	0	0.00%	0.000%

AGGREGATE ORDER TYPES											
ERROR DETAILS (Auto Clarifications (A) & Errors (E))					CAUSATION						
					CLEC Caused			BST Caused			
Error Type (by error code)	Count	%	Σ %	Error Description	Count	% of Agg	% of CLEC	Count	% of Agg	% of BST Caused	
7380	31	0.08%	98.75%	UNE - ACTL INVALID	30	90.91%	0.10%	1	3.23%	0.012%	
7910	26	0.07%	98.82%	RSAG - NO MATCH ON EXACT STREET NAME	18	58.06%	0.06%	8	30.77%	0.098%	
8415	21	0.06%	98.88%	LSF LP ALREADY EXISTS ON ACCOUNT	-158	-607.69%	-0.54%	179	852.38%	2.187%	
8207	20	0.05%	98.93%	BRD/NSQ/NX9 INVALID USOC COMBINATION. FORMAT SAE 576 I1 BRD /TN	20	95.24%	0.07%	0	0.00%	0.000%	
7445	19	0.05%	98.98%	UNE - CALL FORWARD TN REQUIRED	19	95.00%	0.07%	0	0.00%	0.000%	
8180	18	0.05%	99.03%	CALL WAITING DELUXE USOC MUST CHANGE. FORMAT SAE 312	18	94.74%	0.06%	0	0.00%	0.000%	
7495	18	0.05%	99.08%	UNE - DIR LOCATOR PROBLEM	5	27.78%	0.02%	13	72.22%	0.159%	
9479	17	0.05%	99.13%	LNUM=00001 FEATURE DOES NOT EXIST ON ACCOUNT TO MODIFY	17	94.44%	0.06%	0	0.00%	0.000%	
7230	17	0.05%	99.17%	REFERENCE OF CALL OPTION NOT VALID FOR THIS ACCOUNT ACTIVITY TYPE	17	100.00%	0.06%	0	0.00%	0.000%	
9543	16	0.04%	99.21%	LOCNUM= HNUM= HT= HT CANNOT BE IN MORE THAN ONE HID	15	88.24%	0.05%	1	6.25%	0.012%	
7900	16	0.04%	99.26%	RSAG - NO MATCH ON STREET NAME	16	100.00%	0.06%	0	0.00%	0.000%	
9600	15	0.04%	99.30%	TASKMATE ERROR ARRAY SUBSCRIPT OUT OF BOUNDS	2	12.50%	0.01%	13	86.67%	0.159%	
9000	15	0.04%	99.34%	LSO/LOCBAN (NPANXX) MISSING OR INVALID	15	100.00%	0.05%	0	0.00%	0.000%	
7375	15	0.04%	99.38%	UNE - BOCABS SCREEN ERROR BOE001 ACCOUNT NUMBER NOT FOUND	11	73.33%	0.04%	4	26.67%	0.049%	
9495	14	0.04%	99.42%	EATN= MUST EXIST FOR ACT P AND Q	14	93.33%	0.05%	0	0.00%	0.000%	
7295	14	0.04%	99.45%	LINE CLASS OF SERVICE MISSING. NUM AND TN REQUIRED	13	92.86%	0.04%	1	7.14%	0.012%	
8183	13	0.03%	99.49%	AREA CALLING PLAN USOC MISMATCH. FORMAT 320 LINE UPP :0000000 / LINE A	13	92.86%	0.04%	0	0.00%	0.000%	
9484	11	0.03%	99.52%	TNS= FOR LNUM=00002 ALREADY EXIST ON ATN=	10	76.92%	0.03%	1	9.09%	0.012%	
9466	11	0.03%	99.55%	UNABLE TO DETERMINE BLOCK CHOICE	11	100.00%	0.04%	0	0.00%	0.000%	
8995	11	0.03%	99.58%	SEMICOLON DISALLOWED WITH (+) SIGN IN PERSONAL NAME LISTINGS	11	100.00%	0.04%	0	0.00%	0.000%	
9439	10	0.03%	99.60%	LTN= DISPOSITION OF LISTINGS ON MIGRATED LINES REQUIRED	10	90.91%	0.03%	0	0.00%	0.000%	
9700	9	0.02%	99.63%	REQUESTED CIRCUIT NUMBER/ECCKT NOT FOUND	9	90.00%	0.03%	0	0.00%	0.000%	
9476	9	0.02%	99.65%	IS NOT FOUND ON CSR TO DISCONNECT	9	100.00%	0.03%	0	0.00%	0.000%	
7725	9	0.02%	99.68%	WAITING PERIOD EQUALS 5 MINUTES	2	22.22%	0.01%	7	77.78%	0.086%	
9155	8	0.02%	99.70%	UNE - PORTED OUT NUMBER	8	88.89%	0.03%	0	0.00%	0.000%	
7255	7	0.02%	99.72%	NUM= TELNO= DEGREE OR PROF AFFILIATION NOT ALLOWED ON RESIDENTIAL	7	87.50%	0.02%	0	0.00%	0.000%	
9516	6	0.02%	99.73%	WSOP OF V AND ADL NOT ALLOWED ON SAME ATN	5	71.43%	0.02%	1	16.67%	0.012%	
8425	6	0.02%	99.75%	LSF OF DE INVALID ON ACT TYPE A OR V	5	83.33%	0.02%	1	16.67%	0.012%	
8179	6	0.02%	99.77%	NPA NXX NOT VALID. FORMAT SAE 184 I1 CREX1	6	100.00%	0.02%	0	0.00%	0.000%	
9165	5	0.01%	99.78%	INVALID NPA NXX	5	83.33%	0.02%	0	0.00%	0.000%	
8925	5	0.01%	99.79%	CFN HAS INVALID FORMAT ON COFFI SCREEN	3	60.00%	0.01%	2	40.00%	0.024%	
7935	5	0.01%	99.81%	RSAG-SIMILAR STREET FOUND IN DIFFERENT COMMUNITY AND/OR ZIP	5	100.00%	0.02%	0	0.00%	0.000%	
4026	5	0.01%	99.82%	MAIN LISTING REQUIRED FOR NEW ACCOUNT	2	40.00%	0.01%	3	60.00%	0.037%	
9526	4	0.01%	99.83%	BLOCK CHOICE DOES NOT EXIST ON ACCOUNT	4	80.00%	0.01%	0	0.00%	0.000%	
9190	4	0.01%	99.84%	ZIP CODE IS NOT NUMERIC	4	100.00%	0.01%	0	0.00%	0.000%	
9005	4	0.01%	99.85%	LNECLSSVC NOT ALLOWED ON R ACCOUNT ACTIVITY	4	100.00%	0.01%	0	0.00%	0.000%	

AGGREGATE ORDER TYPES											
ERROR DETAILS (Auto Clarifications (A) & Errors (E))					CAUSATION						
					CLEC Caused			BST Caused			
Error Type (by error code)	Count	%	Σ %	Error Description	Count	% of Agg	% of CLEC	Count	% of Agg	% of BST Caused	
7267	4	0.01%	99.86%	UNE - LOCBAN MISSING FOR LINP ORDER	4	100.00%	0.01%	0	0.00%	0.000%	
9815	3	0.01%	99.87%	INVALID LINE ACTIVITY FOR DENIED ACCOUNT	3	75.00%	0.01%	0	0.00%	0.000%	
9606	3	0.01%	99.88%	TNS CANNOT BE REASSIGNED FOR 90 DAYS	3	100.00%	0.01%	0	0.00%	0.000%	
8199	3	0.01%	99.89%	GCJRC/GCJ COMBINATION INVALID. FORMAT SAE 560 I1 GCJ /TN /CFND /RCYC	3	100.00%	0.01%	0	0.00%	0.000%	
8193	3	0.01%	99.90%	USOC NOT VALID WITH CALLER ID. FORMAT SAE 473 I1 ACR	3	100.00%	0.01%	0	0.00%	0.000%	
7740	3	0.01%	99.90%	LOCAL CALLING PLUS INDICATOR NOT FOUND	1	33.33%	0.00%	2	66.67%	0.024%	
7325	3	0.01%	99.91%	NUM= -TELNO= LISTING INSTRUCTION CODE IS MISSING	3	100.00%	0.01%	0	0.00%	0.000%	
9850	2	0.01%	99.92%	USOC H25 INVALID WITH USOC A6CCL IN MS	2	66.67%	0.01%	0	0.00%	0.000%	
9498	2	0.01%	99.92%	EAN= ON LNUM= AND LEAN= ARE POPULATED	2	100.00%	0.01%	0	0.00%	0.000%	
9471	2	0.01%	99.93%	TOTAL QUANTITY OF VCA AND SCO SHOULD EQUAL IWJQ	2	100.00%	0.01%	0	0.00%	0.000%	
9438	2	0.01%	99.93%	DLNUM=0001 LTN= ACCOUNT ACTIVITY OF N CAN ONLY HAVE AN LACT OF N	2	100.00%	0.01%	0	0.00%	0.000%	
9185	2	0.01%	99.94%	UNABLE TO DETERMINE TBE CHOICE	2	100.00%	0.01%	0	0.00%	0.000%	
9160	2	0.01%	99.94%	LOCBAN INVALID FOR PORTED NUMBER ACTIVITY	2	100.00%	0.01%	0	0.00%	0.000%	
9060	2	0.01%	99.95%	EU-STREET-1 REQUIRED	2	100.00%	0.01%	0	0.00%	0.000%	
8155	2	0.01%	99.95%	DIRECTORY DELIVERY INVALID WHEN ACT IS W	2	100.00%	0.01%	0	0.00%	0.000%	
7640	2	0.01%	99.96%	DUPLICATE CUSTOMERS EXCEED NINE ON CSR	0	0.00%	0.00%	2	100.00%	0.024%	
9845	1	0.00%	99.96%	COMPATIBLE FEATURE USOC REQUIRED WITH THIS CLASS OF SERVICE IN MS	1	50.00%	0.00%	0	0.00%	0.000%	
9772	1	0.00%	99.97%	UNE - ECCKT PROHIBITED WITH LINE ACTIVITY OF A	1	100.00%	0.00%	0	0.00%	0.000%	
9618	1	0.00%	99.97%	EQUAL NUMBER OF COMPLETE CHOICE AND COMPLETE CHOICE CREDIT USOC	1	100.00%	0.00%	0	0.00%	0.000%	
9517	1	0.00%	99.97%	UNDC INVALID IF PIC ALREADY EXISTS	1	100.00%	0.00%	0	0.00%	0.000%	
9508	1	0.00%	99.97%	DLNUM=0001 LTN= FIRST THREE CHARACTERS OF NSTN NUST BE NUMERIC	1	100.00%	0.00%	0	0.00%	0.000%	
9263	1	0.00%	99.98%	NC CODE IS A REQUIRED FIELD FOR LOOP REQUESTS	1	100.00%	0.00%	0	0.00%	0.000%	
9115	1	0.00%	99.98%	TELNO=LPIC REQUIRED PER UNIQUE TELNO ON A, V, P9 LINE ACTIVITY TYPES	1	100.00%	0.00%	0	0.00%	0.000%	
9110	1	0.00%	99.98%	TELNO=PIC REQUIRED PER UNIQUE TELEPHONE NUMBER ON A, V, P9 LINE ACT	1	100.00%	0.00%	0	0.00%	0.000%	
9045	1	0.00%	99.98%	TYPE OF ORDER NOT DETERMINED - CLS SVC AND TOS BLANK OR MISSING	1	100.00%	0.00%	0	0.00%	0.000%	
8980	1	0.00%	99.99%	LINE ACTIVITY INVALID	0	0.00%	0.00%	1	100.00%	0.012%	
8875	1	0.00%	99.99%	ERROR GENERATING BTN	0	0.00%	0.00%	1	100.00%	0.012%	
8870	1	0.00%	99.99%	FEATURES NOT ALLOWED ON SWITCH-AS-IS ACTIVITY TYPE	1	100.00%	0.00%	0	0.00%	0.000%	
8250	1	0.00%	99.99%	USOC NOT APPLICABLE TO PORTLOOP SERVICE	1	100.00%	0.00%	0	0.00%	0.000%	
7945	1	0.00%	100.00%	RSAG SYSTEM ERROR	1	100.00%	0.00%	0	0.00%	0.000%	
7095	1	0.00%	100.00%	INCORRECT RATE ZONE DATA RECEIVED FROM RSAG	1	100.00%	0.00%	0	0.00%	0.000%	
	37193	100.00%			29009		100.00%	8184		100.000%	

REPORT: FLOWTHROUGH ERROR ANALYSIS
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES				
ERROR DETAILS (Fatal Errors)				
Error Type (by error code)	Count	%	Σ %	Error Description
1015	1520	25.350%	25.350%	PON DUPLICATE ON INITIAL LSR
1650	911	15.193%	40.544%	LSR/PON COMPLETED
1655	610	10.173%	50.717%	LSR ORIGINATING FORMAT (TCIF) NOT SAME AS ORIGINATING FORMAT
1023	336	5.604%	56.321%	NO ORIGINAL LSR FOUND FOR THIS SUP
1153	332	5.537%	61.858%	SUP NOT ALLOWED ON THIS ACCOUNT ACTIVITY TYPE
1027	224	3.736%	65.594%	PREVIOUS LSR AGED OFF - (K) STATUS
1640	199	3.319%	68.913%	NO ORIGINAL LSR FOUND FOR THIS SUP
1030	132	2.201%	71.114%	VER MUST BE GREATER THAN PREVIOUS VERSION
1154	131	2.185%	73.299%	LSR/PON IS COMPLETED
1645	117	1.951%	75.250%	LSR/PON AGED OFF
1330	96	1.601%	76.851%	BAN1 MUST = E, N OR VALID BILLING ACCOUNT NUMBER FORMAT
1007	84	1.401%	78.252%	DUPLICATE CC, PON, VER
4115	84	1.401%	79.653%	SIC REQUIRED WHEN FIRST CHARACTER OF TOS IS 1 OR 3
4055	81	1.351%	81.004%	YPH REQUIRED WHEN FIRST CHARACTER OF TOS IS 1 OR 3
1635	69	1.151%	82.155%	LSR ORIGINATING SOURCE NOT SAME AS PRIOR VERSION
4029	58	0.967%	83.122%	REFNUM=0001-TELNO= COMMA OR SEMICOLON REQUIRED FOR BUSINESS LISTING
4028	52	0.867%	83.989%	REFNUM=0001-TELNO= COMMA OR SEMICOLON REQUIRED FOR RESIDENCE LISTING
4050	48	0.801%	84.790%	INVALID YPH ENTRY
3060	44	0.734%	85.524%	TELNO= PIC REQUIRED PER UNIQUE TELEPHONE NUMBER ON A, V, P9 LINE ACTIVITY TYPES
3070	43	0.717%	86.241%	TELNO LPIC DATA REQUIRED PER UNIQUE TELNO ON A, V, P9 ACTIVITY TYPES
4027	40	0.667%	86.908%	REFNUM=0001-TELNO= ASTERISK OR PLUS SIGN INVALID FOR LN
5175	38	0.634%	87.542%	HNUM=00001 HT= HT MUST BE 10 NUMERICS OR 14 NUMERICS WITH A HYPHEN IF HNTYP 1-4
2067	33	0.550%	88.092%	LOCBAN MUST BE 10 OR 13 ALPHANUMERICS
1664	32	0.534%	88.626%	SUP 03 NOT ALLOWED ON THIS ACCOUNT ACTIVITY TYPE
1012	28	0.467%	89.093%	CANNOT SUPP A PREVIOUSLY CANCELED LSR/PON
4052	28	0.467%	89.560%	YPH ENTRY MUST BE 999001 WHEN LISTING TYPE IS NL OR NP
1630	24	0.400%	89.960%	CANNOT SUP A PREVIOUSLY CANCELED LSR/PON
1070	21	0.350%	90.310%	DDD/DDD-CC MUST BE CURRENT OR FUTURE DATE
3065	21	0.350%	90.660%	TELNO= PIC VALID ENTRIES ARE PIC CODE OF 4 NUMERICS, NONE, DFLT, NA
1110	20	0.334%	90.994%	INVALID REQTYP - ACCOUNT ACTIVITY TYPE COMBINATION
3075	19	0.317%	91.311%	TELNO= VALID LPIC ENTRIES ARE AN LPIC CODE, NA OR NONE
3085	19	0.317%	91.628%	REFNUM=0001-TELNO= TC OPT VALID ENTRIES ARE:00, 03, 05, 08, 21, 23, 25, 26, 31, 51, 81

REPORT: FLOWTHROUGH ERROR ANALYSIS
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES				
ERROR DETAILS (Fatal Errors)				
Error Type (by error code)	Count	%	Σ %	Error Description
4045	18	0.300%	91.928%	REFNUM=0001-TELNO= LISTED ADDRESS PROHIBITED WITH THIS RECTYP AND ACTIVITY TYPE
3185	17	0.284%	92.211%	REFNUM=0001-TELNO= FEATURE REQUIRED WHEN THE FEATURE ACTIVITY IS POPULATED
4020	16	0.267%	92.478%	REFNUM=0001-TELNO= LIST PROHIBITED WITH THIS REQTYPE AND ACTIVITY TYPE
4030	16	0.267%	92.745%	REFNUM=0001-TELNO= LISTED NAME PROHIBITED WITH THIS REQTYPE AND ACTIVITY TYPE
4490	16	0.267%	93.012%	DLNUM=0001 LTN=YPH PROHIBITED WITH THIS RTY
1125	15	0.250%	93.262%	DDD MUST BE GREATER THAN OR EQUAL TO D/TSENT
4510	15	0.250%	93.512%	DLNUM=0002 LTN= ONLY ONE SIC ALLOWED PER ACCOUNT
1350	14	0.233%	93.746%	BAN2 MUST BE ENTRY OF E, N OR VALID BILLING ACCOUNT NUMBER FORMAT
3045	14	0.233%	93.979%	REFNUM=0001 -ECCKT MUST BE CLT, CLF OR CLS FORMAT
3195	12	0.200%	94.179%	TELNO= LNECLSSVC REQUIRED ON ACT TYPE A OR V
4040	12	0.200%	94.380%	REFNUM=0001-TELNO= LISTED ADDRESS REQUIRED WITH THIS REQTYP AND ACTIVITY TYPE
1215	11	0.183%	94.563%	ACTL MUST BE 11 ALPHANUMERIC CHARACTERS
3067	11	0.183%	94.746%	TELNO= PIC PROHIBITED ON R OR W ACT TYPES
3082	11	0.183%	94.930%	TELNO= LPIC PROHIBITED ON R OR W ACT TYPES
4895	11	0.183%	95.113%	DDALOC REQUIRED
1022	10	0.167%	95.280%	LSR ORIGINATING SOURCE NOT SAME AS PRIOR VERSION
1050	10	0.167%	95.447%	D/SENT - D/SENT CENTURY MUST BE CURRENT OR FUTURE DATE
1085	10	0.167%	95.614%	DDDO-CC/DDDO MUST BE CURRENT OR FUTURE DATE
1170	9	0.150%	95.764%	CHC REQUIRED WHEN REQTYP IS A OR B AND DFDT IS POPULATED
1255	9	0.150%	95.914%	NC MUST BE 4 ALPHANUMERIC CHARACTERS WITH HYPHEN ALLOWED IN THE 3RD AND 4TH POSITIONS
3135	9	0.150%	96.064%	REFNUM=0001-TELNO= TC PER-CC/TC PER-DATE REQUIRED WHEN TCTO-PRIMARY FIELD IS POPULATED
4042	9	0.150%	96.214%	REFNUM=0001-TELNO= ASTERISK OR PLUS SIGN INVALID FOR LA
3433	8	0.133%	96.348%	LOCNUM=000 LNUM=00001 TELNO=LNA PROHIBITED ON THIS REQTYP/ACT TYP/SECNCI COMBINATION
4120	8	0.133%	96.481%	DLNUM=0002 LTN= TOA B, R, RP OR BP REQUIRED
1025	7	0.117%	96.598%	VER MUST BE GREATER THAN PREVIOUS VERSION
3090	7	0.117%	96.714%	REFNUM=0001-TELNO= TC OPT PROHIBITED ON THIS ACT TYPE AND REQTYP
4075	7	0.117%	96.831%	REFNUM=0001-TELNO= DDA-NAME PROHIBITED WITH THIS REQTYPE AND ACTIVITY TYPE
2030	6	0.100%	96.931%	LCON-TELNO MUST BE A MINIMUM OF 10 NUMERICS
2040	6	0.100%	97.031%	LOCNUM=000 SANO PROHIBITED WHEN SASN IS NOT POPULATED AT THIS LOCATION
2060	6	0.100%	97.131%	LOCNUM=000 SASN REQUIRED WITH THIS REQTYP/ACT TYP COMBINATION AT THIS LOCATION
2065	6	0.100%	97.231%	LOCBAN REQUIRED

REPORT: FLOWTHROUGH ERROR ANALYSIS
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES				
ERROR DETAILS (Fatal Errors)				
Error Type (by error code)	Count	%	Σ %	Error Description
4035	6	0.100%	97.332%	REFNUM=0001-TELNO= LISTED NAME OVERFLOW PROHIBITED WITH THIS REQTYPE AND ACTIVITY TYPE
4060	6	0.100%	97.432%	YPH PROHIBITED WITH THIS REQTYPE AND ACTIVITY TYPE
4077	6	0.100%	97.532%	REFNUM=0001-TELNO= DDA-NAME2 PROHIBITED WITH THIS REQTYPE AND ACTIVITY TYPE
4085	6	0.100%	97.632%	REFNUM=0001-TELNO= DDA-ADDRESS 2 PROHIBITED WITH THIS REQTYP AND ACTIVITY TYPE
4090	6	0.100%	97.732%	REFNUM=0001-TELNO= DDA-ADDRESS 2 PROHIBITED WITH THIS REQTYP AND ACTIVITY TYPE
4095	6	0.100%	97.832%	REFNUM=0001-TELNO= DDA-CITY PROHIBITED FOR THIS REQTYP AND ACTIVITY TYPE
4100	6	0.100%	97.932%	REFNUM=0001-TELNO= DDA-STATE PROHIBITED WITH THIS REQTYP AND ACTIVITY TYPE
4110	6	0.100%	98.032%	REFNUM=0001-TELNO= DDA-ZIP CODE PROHIBITED WITH THIS REQTYP AND ACTIVITY TYPE
4140	6	0.100%	98.132%	REFNUM=0001-TELNO= DIRDATE-CC/DIRDATE PROHIBITED WITH THIS REQTYP AND ACTIVITY TYPE
4310	6	0.100%	98.232%	DLNUM=0001 LTN= LANO PROHIBITED WITHOUT LASN
1080	5	0.083%	98.316%	DDD/DDD-CC MUST BE A VALID DATE
4015	5	0.083%	98.399%	REFNUM=0001-TELNO= LIST MUST BE VALID ENTRY
4065	5	0.083%	98.482%	REFNUM=0001-TELNO= WPQTY MUST BE 2 NUMERICS OR BLANKS
1390	4	0.067%	98.549%	TOS SECOND CHARACTER MUST BE - (HYPHEN) IF REQTYP IS JB
2080	4	0.067%	98.616%	LOCNUM=000 SADLO REQUIRED WHEN SANO IS NOT POPULATED AT THIS LOCATION
3165	4	0.067%	98.682%	REFNUM=0002-TELNO= TBE PROHIBITED ON THIS ACTIVITY FOR THIS REQTYPE
3170	4	0.067%	98.749%	LOCNUM=000 LNUM=00001 TELNO= FA MUST BE N WHEN LNA IS N OR G
4830	4	0.067%	98.816%	ONLY ONE DACT PER LSR
1270	3	0.050%	98.866%	PORTTYP REQUIRED WITH THIS REQTYP/ACT TYPE COMBINATION
4010	3	0.050%	98.916%	REFNUM=0001-TELNO= LIST REQUIRED WITH THIS REQTYPE AND ACTIVITY TYPE
4475	3	0.050%	98.966%	DLNUM=0001 LTN= INVALID YPH ENTRY
8120	3	0.050%	99.016%	LNUM=00003 TC OPT VALID ENTRY IS ST, NO, CA OR TC
8180	3	0.050%	99.066%	LNUM=00001 TC TO PRIMARY NUMBER MUST BE DIFFERENT FROM NUMBER BEING REFERRED
1032	2	0.033%	99.099%	VER MUST BE SPACES OR 00(ZEROS) FOR 850
1055	2	0.033%	99.133%	AN REQUIRED FOR THIS REQTYP/ACT TYPE COMBINATION WHEN ATN IS NOT POPULATED
1075	2	0.033%	99.166%	ATN REQUIRED WITH THIS REQTYP/ACT TYPE COMBINATION WHEN AN IS NOT POPULATED
1272	2	0.033%	99.199%	RPON VALID VALUES ARE UPPER CASE ALPHA A THRU Z, NUMERIC 0 THRU 9, AND SYMBOLS . , - '
2200	2	0.033%	99.233%	EATN MUST BE 10 NUMERICS
3035	2	0.033%	99.266%	REFNUM=0001-TELNO= OTN MUST BE 10 NUMERICS
3125	2	0.033%	99.300%	LOCNUM=000 LNUM=00001 TELNO= ECCKT FORMAT INVALID
3190	2	0.033%	99.333%	REFNUM=0001-TELNO= LNECLSSVC MUST BE = 3 OR 5 ALPHANUMERICS

REPORT: FLOWTHROUGH ERROR ANALYSIS
REPORT PERIOD: 05/01/00 - 05/31/00

AGGREGATE ORDER TYPES				
ERROR DETAILS (Fatal Errors)				
Error Type (by error code)	Count	%	Σ %	Error Description
4026	2	0.033%	99.366%	MAIN LISTING REQUIRED FOR NEW ACCOUNT
4070	2	0.033%	99.400%	REFNUM=0001-TELNO= YPQTY MUST BE 2 NUMERICS OR BLANKS
4470	2	0.033%	99.433%	DLNUM=0001 LTN=LTXNUM MUST BE CONSECUTIVE AND UNIQUE WITHIN THE DLNUM
4600	2	0.033%	99.466%	DLNUM=0001 LTN=AMPERSAND REQUIRED WITH DLNM
8210	2	0.033%	99.500%	LNUM=00003 TC PER PROHIBITED WHEN LNUM TC OPT IS NOT ST OR TC
1060	1	0.017%	99.516%	AN PROHIBITED WHEN ATN IS POPULATED UNLESS REQTYP IS B
1065	1	0.017%	99.533%	AN MUST BE 10 OR 13 ALPHANUMERICS
1220	1	0.017%	99.550%	EXPEDITE VALID ENTRY IS Y OR N
1235	1	0.017%	99.566%	TOS REQUIRED
1455	1	0.017%	99.583%	BAN1 VALID ENTRY MUST BE VALID BILLING ACCOUNT NUMBER OR E WITH TRAILING BLANKS
1505	1	0.017%	99.600%	INIT REQUIRED WITH THIS REQTYP/ACT TYPE COMBINATION
1510	1	0.017%	99.616%	TEL NO-INIT REQUIRED WITH THIS REQTYP/ACT TYPE COMBINATION
1520	1	0.017%	99.633%	FAX NO-INIT REQUIRED WITH THIS REQTYP/ACT TYPE COMBINATION
2005	1	0.017%	99.650%	EU-STREET-1 REQUIRED
2090	1	0.017%	99.666%	LOCNUM=000 ROOM-EU MUST NOT BE POPULATED WITH RM OR ROOM IN ANY POSITION AT THIS LOCATION
2115	1	0.017%	99.683%	LOCNUM=000 ZIP CODE-EU MUST BE 5 OR 9 NUMERICS AT THIS LOCATION
2125	1	0.017%	99.700%	EAN OR EATN REQUIRED WHEN AN OR ATN IS POPULATED WITH THIS REQTYP/ACT TYPE COMBINATION
2130	1	0.017%	99.716%	LOCNUM=000 TEL NO-LCON MUST BE 10 NUMERICS AT THIS LOCATION
3177	1	0.017%	99.733%	REFNUM=0001-TELNO= FA PROHIBITED WITH REQTYP J
3180	1	0.017%	99.750%	REFNUM=0001-TELNO= FA VALID ENTRIES ARE A, C OR D
3186	1	0.017%	99.767%	REFNUM=0001-TELNO= FEATURE PROHIBITED WITH REQTYP J
3187	1	0.017%	99.783%	REFNUM=0001-TELNO= FEATURE DETAIL PROHIBITED WITH REQTYP J
3205	1	0.017%	99.800%	LOCNUM=000 LNUM=00001 TELNO= FEATURE DETAIL REQUIRED WHEN FA IS C
3430	1	0.017%	99.817%	FOR REQTYP E,F OR M, IF ACT IS P, Q OR V AT LEAST ONE LNA MUST BE G, P, V, W OR X
3765	1	0.017%	99.833%	LNUM=00001 TELNO= LPIC VALID ENTRIES ARE NONE, UNDC OR A VALID LPIC CODE WHEN LNA IS G, N
4061	1	0.017%	99.850%	DLNUM=0001 LTN= LASN,ADI,OR LALOC REQUIRED FOR REQTYP J, RTY OF LML, AND LACT OF N
4125	1	0.017%	99.867%	SIC MUST BE 4 NUMERICS
4160	1	0.017%	99.883%	DLNUM=0002 LTN=DOI REQUIRED VALUE MUST BE 0 - 6
4180	1	0.017%	99.900%	DLNUM=0002 LTN= DOI VALUE MUST BE ZERO
4200	1	0.017%	99.917%	DLNUM=0001 LTN MUST BE 10 NUMERICS
4890	1	0.017%	99.933%	DDADLO IS PROHIBITED

AGGREGATE ORDER TYPES				
ERROR DETAILS (Fatal Errors)				
Error Type (by error code)	Count	%	Σ %	Error Description
6005	1	0.017%	99.950%	NC CODE INVALID
6045	1	0.017%	99.967%	INVALID NC/NCI/SECNCI COMBINATION (STOP EDIT)
8115	1	0.017%	99.983%	LNUM=00001 TC OPT PROHIBITED WITH THIS REQTYP/ACT TYPE COMBINATION
8175	1	0.017%	100.000%	LNUM=00001 TC TO PRIMARY PROHIBITED WHEN LNUM TC OPT IS NOT TC OR ST
	5996	100.000%		

AGGREGATE ORDER TYPES

ERROR DETAILS

Error Type (by error code)	Error Description
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR: LA LIST 013 LIN SEE SOER DOCUMENTATION! ILA
8825	ORDER ERR: PKG SAE 010 LIN PKG NOT VALID ON THIS USOC! T1 AR4 /PIC NONE /LPIC N
8825	ORDER ERR: LN LIST 016 LIN SUBSEQUENT WORD(S) FOR PERSONAL NAME MISSING OR INCORREC
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR: RCU SAE 009 LIN RCU CODESET INVALID! I1 1FR /TN /PIC NO
8825	ORDER ERR: FORMAT 523 LINE RCVRY USOCS: 0005 LINE USOCS: 0000
8825	ORDER ERR: CFNB SAE 017 LI CFNB MUST HAVE MINIMUM OF 12 CHARACTERS! T1 GCE /TN
8825	ORDER ERR: FORMAT 102 LINE EUCLC: 0001 RELAY: 0000=
8825	ORDER ERR: ZAGG BILL 016 L ZAGG NOT VALID W/RESH!
8825	ORDER ERR: FORMAT SAE 489 I1 MFD5X /TN
8825	ORDER ERR: FORMAT 102 LINE EUCLC: 0001 RELAY: 0000=
8825	ORDER ERR: ADSL IDNT 009 L ADSL MUST APPEAR IN IDNT!
8825	ORDER ERR: (PRE) LIC 104 L SEE SOER DOCUMENTATION! LN
8825	ORDER ERR: FORMAT SAE 489 I1 MFD1A /TN 864 576-2331
8825	ORDER ERR: ADSL IDNT 009 L ADSL MUST APPEAR IN IDNT!
8825	ORDER ERR: NP LIST 010 LIN SEE SOER DOCUMENTATION! INP (NON-PUB)
8825	ORDER ERR: NP LIST 010 LIN SEE SOER DOCUMENTATION! INP (NON-PUB)
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR: FORMAT SAE 389 I1 DRS /TN /PN
8825	ORDER ERR: TYA BILL 008 LI TYA REQUIRED WITH SIC CODE OF 98XX
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR:PKG SAE 010 LIN PKG NOT VALID ON THIS USOC! T1 1FB /TN
8825	ORDER ERR: FORMAT SAE 389 I1 DRS /TN /PN
8825	ORDER ERR: FORMAT 203 LINE EUCLC: 0001 CAT D: 0000
8825	ORDER ERR: FORMAT SAE 389 I1 DRS /TN /PN
8825	ORDER ERR: RNP SAE 006 LIN SEE SOER DOCUMENTATION! I1 DRS /TN
8825	ORDER ERR: RNP SAE 006 LIN SEE SOER DOCUMENTATION! I1 DRS /TN
8825	ORDER ERR: FORMAT 523 LINE RCVRY USOCS: 0005 LINE USOCS: 0000

AGGREGATE ORDER TYPES

ERROR DETAILS

Error Type (by error code)	Error Description
8825	ORDER ERR: CFNB SAE 017 LI CFNB MUST HAVE MINIMUM OF 12 CHARACTERS! T1 GCE /TN
8825	ORDER ERR: LN LIST 013 LIN INVALID CHARACTER IN FINDING WORD FOR PERSONAL/FIRM LIST
8825	ORDER ERR: FORMAT 102 LINE EUCLC: 0001 RELAY: 0000=
8825	ORDER ERR: CN SAE 013 LINE CN MUST APPEAR IN BILL SECTION WITH CORRECT DATA! C1 /
8825	ORDER ERR: LA LIST 013 LIN SEE SOER DOCUMENTATION! ILA
8825	ORDER ERR: RESH BILL 023 L USOC BSX++ MAY NOT APPEAR!
8825	ORDER ERR: CFND SAE 011 LI CFND MUST APPEAR IN S
8825	ORDER ERR: FORMAT SAE 489 I1 MFD3X /TN
8825	ORDER ERR: FORMAT SAE 296 T1 VMSAX /TN
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR: RNP SAE 006 LIN SEE SOER DOCUMENTATION! I1 DRS /TN
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR: PDN IDNT 008 LI PDN MISSING OR DATA INCORRECT!
8825	ORDER ERR: ZLLU SAE 009 LI ZLLU MUST APPEAR!
8825	ORDER ERR: NP LIST 010 LIN SEE SOER DOCUMENTATION! INP (NON-PUB)
8825	ORDER ERR: NP LIST 010 LIN SEE SOER DOCUMENTATION! INP (NON-PUB)
8825	ORDER ERR: PKG SAE 010 LIN PKG NOT VALID ON THIS USOC! T1 1FRCL /TBE A /PIC NON
8825	ORDER ERR: PKG SAE 010 LIN PKG NOT VALID ON THIS USOC! T1 1FR /PIC NONE /LPIC N
8825	ORDER ERR: PKG SAE 010 LIN PKG NOT VALID ON THIS USOC! T1 1FR /PIC NONE /LPIC N
8825	ORDER ERR: LA LIST 013 LIN SEE SOER DOCUMENTATION! ILA 40*B C*A*R*R*O*L*L D*R*I*V
8825	ORDER ERR: FORMAT 304 LINE UPP :0000000 / LINE ASSIGN :0000001 USOC QUAN MISMATCH=
8825	ORDER ERR: NP LIST 010 LIN SEE SOER DOCUMENTATION! INP (NON-PUB) MOORE, FELICIA
8825	ORDER ERR: TN SAE 044 LINE SEE SOER DOCUMENTATION!
8825	ORDER ERR: FORMAT 762 LINE EUCLC: 0001 SLC: 0000 CAT D: 0000
8825	ORDER ERR: NP LIST 010 LIN SEE SOER DOCUMENTATION! INP (NON-PUB) NORTHERN, CORA
8825	ORDER ERR: QSN IDNT 010 LI QSN MUST NOT APPEAR!
8825	ORDER ERR: ZRTI IDNT 023 L SEE SOER DOCUMENTATION! ZRTI S,QS,800

AGGREGATE ORDER TYPES

ERROR DETAILS

Error Type (by error code)	Error Description
1000	SUP 1 TO CANCEL GB
1000	ISSUED ORDER DD 052500 CJENKINS
1000	PENDING ORDER NEW CONN HAS ABAND STAT NOT DISCONNECTED ISSD ORDER RESWTCH
1000	ERROR TO DROP, PON CANCELLED BY SUP 01...DB
1000	ORDER HAS BEEN CANCELLED
1000	ISS- 6-8-00 CRW
1000	ISS 5-31-00
1000	ISS- DD 6-12-00 CRW
1000	CANNOT ISSUE AS AN ABANDONED STATION FOR SAME END USER;CYH
1000	ORDER NUMBER DD 05-22-00
1000	MISX ORDER
1000	YAXQBHGQ FAILED TO FOC
1000	ORDER ISSUED
1000	PLACED IN E-STAT ORDER CAN
1000	DD 2000-05-31 TA.BFLRFXN
1000	ISSUED 05-31-00, GG, X1514
1000	ISSUED 05-25-00 GG X1514
1000	ISSUED 05-25-00 GG X1514
1000	UNABLE TO FORCE FOC INFO ORESH SHLD APPEAR BEFORE IRESH
1000	ERR CORRECTED DD 05-18-00 ORD#
1000	CANCEL PER CLEC.
1000	ISSD DENIAL DD 05-02-00 LJS -
1000	DD 05-17-00
1000	ISSUED 05-25-00 GG X1514
1000	ISSUED TN DD 05-24-00 PW EXT 1514
1000	CANCEL PER CLEC SUB 01--WF
1000	SUP TO CAN PON
1000	PLACED IN E-STAT SUP 1 ON PON
1000	ERROR TO DROP, PON CANCELLED PER SUP 01...DB
1000	THIS ORDER HAS BEEN CANCELLED
1000	PLACED IN E-STAT SUP 1 ISS ON VER 1
1000	ERROR TO CLEAR

AGGREGATE ORDER TYPES

ERROR DETAILS

Error Type (by error code)	Error Description
1000	LISTED ADD CORRECTED KLH
1000	ERROR TO DROP, SERVICED ALREADY RESTORED BY PON ON 05-11..DB
1000	ERR TO DROP ORD COMP 052300 YAXQBJK
1000	CANCELLED ORDER
1000	ISSUED NEW CONNCT AND DISCNT TO SWTCH AS IS DB X1514
1000	RESOLVE R STATUS
1000	ISSUED NEW CONNCT AND DISCONNCT DD 05-24-00 DB X1514
1000	RESTORED SVC DD 05-05-00
1000	THIS PON TN SHOW 2 CANCELD PENDING SVC FOR CHG BCS, REISSUED
1000	ISS ORDER # DD 05-26-00
1000	CORRECTED THE ERROR AND RESUBMITTED DB X1514
1000	ORDER ISSUED
1000	CAN PER CLEC VER 03 SUP 1
1000	ISSD DENIAL--LJS
1000	ISSUING DENIAL --LJS
1000	ERR TO DROP OFF, ORD ALRDY CPX
1000	ISSUED ORDER
1000	ERROR TO DROP.CANNOT FORCE CANCELLED ORDER...TBH
1000	ERROR TO DROP, CUSTOMER CHG TO DIFFERENT CLEC..DB
1000	ERR TO DROP ORDER HAS COMPLT'D
1000	CLRFY ORD ALRDY COMPLETED ON DD 05-25-00---GB
1000	ERROR TO DROP, PON CANCELLED PER SUP 01, NO ORDER ISSUED...DB
1000	ERROR TO DROP, CANCELLED PER SUP 01...DB
1000	ISSUED AND 1 05-23-00 GG X1514
1000	ERR CORRECTED ORD ISSD DD 5-8-00 EA
1000	ISSUED TO DISC SVC
1000	ORDER COMPLETED. ERR TO CLEAR S-STATUS.
1000	PLACED IN E TO DROP, RESH LEFT OFF ORDER CVH
1000	ERROR TO DROP, PON CANCELLED PER SUP 01...DB

BELLSOUTH TELECOMMUNICATIONS, INC.

FPSC DKT NO. 990649-TP

AT&T'S FOURTH REQUEST FOR PRODUCTION OF DOCUMENTS

DECLASSIFIED

POD NO. 52

WORK FORCE ADMINISTRATION DISPATCH IN STANDARDIZED PRICING GUIDE WORK TYPES WITH FIELD REPORT CODE (FRC) REFERENCES & PRIORITIES

CONTENTS

SECTION IV STANDARD WORKTYPE BY FUNCTION

SECTION V CENTER SPECIFIC WORKTYPES

SECTION I GENERAL INFORMATION

1.01 INTRODUCTION: Work type standardization outlined in this document is the standard for WFA-DI and Control which has been adopted by the corporation. Regional standardization was prompted by the following initiatives:

A. BENCHMARKING: Standardization will allow the corporation to do benchmarking across the region. Without standardization, which enables valid work and task comparisons, this task would be impossible.

B. FORCE SIZING: The force sizing model which replaced the old Plansize model will require extracts from WFA. Without strict adherence to these standards and other standardization relating to how work is loaded and priced, we would be unable to accurately extract the data needed. This inability will lead to incorrect headcount projections and possibly hurt the fields' ability to respond to service requirements of our customers.

C. NEW CENTERS: As a result of re-engineering a number of new centers have been implemented. Standardization of work types will help insure that work gets to the center/work group which needs to respond. Without standardization it would be extremely difficult for large regional centers to effectively track work sent to the field or other centers.

1.02 CHANGES TO THIS DOCUMENT: This document updates the non BSP issue H, issued in December 1998. Changes and additions will be high-lighted and on occasion marked with an ▒*▒ . High-lighting may also be used for emphasis such as in the case of High capacity work types.

1.03 BellSouth Telecommunications listing of surveillance, analysis, maintenance, provisioning, control and administrative centers.

- ACAC Access Carrier Advocacy Center
- AINC Advanced Intelligent Network Center
- BRC Business Repair Center
- CIA Company Initiated Activity Center
- DCSC Data Customer Support Center
- ESC Escalation Center (WMC)
- IPP Independent Payphone Provider
- LMC Link Maintenance Center
- NISC Network Infrastructure Support Center
- NPRC Network Provisioning Roadblock Center
- NRC Network Reliance Center
- NSC Network Service Center
- NSDC Network Switch and Data Center
- PAR Proactive Analysis & Repair
- PLC Pulse Link Center
- RRC Residence Repair Center
- RTOC Real Time Operations Center
- TSAC Test System Administration Center
- UNE Unbundled Network Elements (CLECs)
- WMC Work Management Center

1.04 GENERAL DESCRIPTION: Each standard work type detailed in this document has been given a description, a standard Work Code, Priority and Field Report Code (FRC). These are all components of the pricing guides and as with the standard work type, they are standards as well. Deviation from standard work codes, priorities and FRCs will not be allowed.

NOTE: All references to FRC's of R have been removed.

SECTION II FIELD REPORTING CODE (FRC) DESCRIPTION:

FIELD REPORTING CODE DEFINITION
DESCRIPTION OF EQUIPMENT

2.01 14W/P DESCRIPTION OF INTEROFFICE TESTING OF MESSAGE TRUNKS - PRE-SERVICE & IN-SERVICE:

W - All work associated with testing in service message trunks is charged to this FRC.

NOTE: This code is not used to charge time for labor spent repairing a trunk. Repair charges will be coded to the FRC associated with the defective equipment.

P - All work associated with testing new trunks prior to being placed into service.

NOTE: If a technician spends time running the CAROT COTC test on new trunks this effort will be coded 14P.

2.02 24W/P INTEROFFICE TESTING OF SPECIAL SERVICES PRE-SERVICE & IN-SERVICE:

W - All work associated with testing in service ANALOG and DIGITAL special service circuits.

NOTE: This code is not to be used to charge time for labor spent repairing a special service circuit. Repair charges will be coded to the FRC associated with defective equipment.

P - All work associated with pre-service testing of new special service circuits.

2.03 57M/C/X ANALOG CIRCUIT EQUIPMENT:

M - All work associated with analog circuit equipment maintenance is charged to this FRC(57M).

NOTE: All routine work scheduled and performed on analog circuit equipment will be coded to this FRC code(57M).

2.03 57M/C/X ANALOG CIRCUIT EQUIPMENT:

M - Coding time for provisioning services on analog circuit equipment is charged to this FRC(57M).

1. WorkTypes used for loading Field to Field Transfers and removal of Plug-in equipment without replacement will be charged to the appropriate FRC (57M) and the current PICS Estimate #.

C - is used in conjunction with an equipment engineering Estimate # or Job Order # that authorizes additions or change out of analog equipment.

2. The placement of plug-in equipment used in provisioning analog services is charged to FRC (57C) with the current PICS Estimate #.

X - This code is used in conjunction with an equipment engineering Estimate # or Job Order # when analog circuit equipment is being removed. Time charges for this effort will be made to FRC (57X).

57M/C/X Analog Data - Service Codes:

FD, GD, ND, SS, LF, LG, LN, DU, LP, AA, AM, NL, WJ, WL, WN, WP, WQ, AID, CLD, CVD, CWD, CXD, EQD, FXD, LAD, PAD, PXD, TT, VMD, OSD, RTD, WXD, ZDD

Examples of Analog Data Equipment:

ATMS 52A Responder	Loc Test Desk Loudspeaker Telephone unit	
Bridge Lifting Unit	MDF Talk Trunk	Return Loss Term.CP26
Bridge 4W 6WY 600 211AF	MF Signal Gen. Unit	Sig Range Extend Unit
F Signal 4W E/M Sig Unit	MFT Bay	SMAS MN Connector
K-Pad Mounting-211AF	M90-ACC Terminate Shelf	

2.04 67M/C/X RADIO SYSTEMS TERRESTRIAL MICROWAVE:

M - All work associated with terrestrial microwave maintenance is charged to this FRC.

NOTE: All routine work scheduled and performed on terrestrial microwave equipment will be coded to this FRC code (67M).

M - Coding time for provisioning services on terrestrial microwave systems.

1. WorkTypes used for loading Field to Field Transfers and Removal of Plug-in equipment without replacement will be charged to the appropriate FRC (67M) and current PICS Estimate.

C - is used in conjunction with an equipment engineering estimate # or Job Order # that authorizes additions or change out of Terrestrial Microwave equipment.

2. The placement of plug-in equipment (PICS) used in provisioning services is charged to FRC (67C) along with the current PICS Estimate #

X - This code is used in conjunction with an equipment engineering Estimate # or Job Order # when equipment is being removed/retired from the microwave site. Time charges for the removal will be to FRC (67X).

Examples of Terrestrial Microwave Equipment:

Base Station BB Hi Gain
Adapter Waveguide
IF Amplifier Mounting Assembly

2.05 7TM INTEROFFICE FACILITY ASSIGNMENT & CIRCUIT LAYOUT:

All charges associated with tie pair assignments in the WMC provisioning group will be charged to FRC (7TM).

2.06 74T INTEROFFICE TESTING FACILITIES COMBINED EXPENSE

All charges for performing maintenance testing on interoffice T-Carrier facilities. Charges for clearing troubles found as a result of the testing will go to the applicable maintenance FRC.

2.07 157M/C/X DIGITAL DATA SYSTEMS (DDS):

M - All maintenance work charged to Digital Data Systems will be charged to this FRC (157M).

M - Coding time for provisioning services on Digital Data Systems is charged to this FRC(157M).

1. WorkTypes for loading Field to Field Transfers and Removal of Plug-in equipment without replacement will be charged to the appropriate FRC (157M)& the current PICS Estimate #.

C - is used in conjunction with an equipment engineering Estimate # or Job Order # that authorizes additions or change out of Digital Data Systems.

2. The placement of PICS plug-in equipment used in provisioning services is charged to FRC (157C) along with the current PICS Estimate #.

X - FRC (157X) code is reported along with an equipment engineering Estimate # or Job Order # when Digital Data Systems equipment is being removed/retired from the C. O.

A. DIGITAL DATA - SERVICE CODES:

DA, DC, DP, DQ, DR, DS, DW, DY, XA, XB, XG, XH, XE, XR, YN, HA, HB

B. MULTIPLEXED HIGH CAPACITY SERVICES - SERVICE CODES:
All customer purchased digital carrier services; TC, T1, and channelized Megalink.

C. NON-MULTIPLEXED HIGH CAPACITY SERVICES - SERVICE CODES:

DB, DF, DH, HC, HE, HF, HG, HD, IP, WB, WE, WF, DG, HH, HS, HI, HL, (includes non-channelized Megalink)

D. ACCUPULSE - SVC CODE: PC **E.** COLAN - SVC CODE: ID
F. PULSELINK - SVC CODES: QD, QS, QU
G. SYNCHRONET - SVC CODES: HP, HQ, HR, HW

2.08 167M/C/X OTHER RADIO FACILITIES - NON CELLULAR EQUIPMENT:

M - All work associated with other radio maintenance is charged to this FRC (167M).

NOTE: All routine work scheduled and performed on other radio equipment will be coded to this FRC (167M).

M - Coding time charges for provisioning on other radio systems.

1. WorkTypes used for loading Field to Field Transfers & Removal of Plug-in equipment without replacement charged to the appropriate FRC (167M)& current PICS Estimate #.

C - is used in conjunction with an equipment engineering Estimate # or Job Order # that authorizes additions or change out of radio facilities non-cellular equipment.

2. The placement of plug-in equipment (PICS) used in provisioning services is charged to FRC (167C) along with the current PICS estimate #.

X - FRC (167X) is reported along with an equipment engineering Estimate # or Job Order # when equipment is being removed/retired from the radio site.

Examples of Other Radio Facilities - Non - Cellular Equipment:

Transmitter Radio	Paging Station	Paging Synthesizer	
6DB Antenna	Antenna-cellular	870-896MHZ	Wave Guide

2.09 77/377/117 CENTRAL OFFICE SWITCHING EQUIPMENT: M/C/X

M - All work associated with switch maintenance is charged to this FRC.

NOTE: All routine preventive maintenance work scheduled and performed on central office switch equipment will be coded to one of these FRC (77/377/117M).

M - Coding time charges for POTS provisioning work on the frame.

1. WorkTypes used for loading Field to Field Transfers and Removal of Plug-in equipment without replacement will be charged to the appropriate FRC (77/377/117M) and the current PICS Estimate #.

C - FRC(77/377/117C) is used in conjunction with a equipment engineering Estimate # or Job Order # that authorizes central office growth and conversion projects. An example of central office growth is adding a Trunk Switch frame, Switch Module, etc.

NOTE: All charges associated with an office conversion will be charged to the capital account "C". This includes all translations work associated with preparing the switch for conversion.

2. The placement of PICS plug-in equipment used in provisioning services is charged to FRC (77/377/117C) along with the current PICS Estimate #. X FRC(77/377/117X) is reported along with an equipment engineering Estimate # or Job Order # when equipment is being removed/retired from a central office.

Examples of Central Office Types:

117M/C/X ELECTROMECHANICAL SWITCH - OPERATOR SERVICES:
Cross Bar ACD AABS

77M/C/X ANALOG STORED PROGRAM SWITCHES:
1A ESS

377M/C/X DIGITAL SWITCHES:

5 ESS Host and Remote	SL-10 Packet Switch and Rapid Shelf	ROCKWELL
DMS-100 Host and Remote	Stromberg DCO	DMS-10
Seimens EWSD		

2.10 257M/C/X PAIR GAIN EQUIPMENT:

M - All work associated with maintenance on pair gain systems is charged to FRC(257M).

NOTE: All routine work scheduled and performed on central office pair gain equipment will be coded to FRC(257M).

M - Coding time charges for POTS provisioning frame work.

1. WorkTypes used for loading Field to Field Transfers and Removal of Plug-in equipment without replacement will be charged to the appropriate FRC (257M) and current PICS Estimate #.

C - FRC(257C) is used in conjunction with an equipment engineering Estimate # or Job Order # that authorizes additions or change out of pair gain equipment.

2. The placement of pair gain plug-in equipment (PICS) used in provisioning service is charged to FRC (257C) along with the current PICS Estimate #.

X - FRC(257X) is reported along with an equipment engineering Estimate # or Job Order # when pair gain equipment is being removed/retired from the central office.

Examples of Pair Gain Equipment:

SLC-96 Central Office Terminal Equipment SLC-96 Universal
DDM-1000 Pair Gain Terminal Controller(PGTC)

2.11 357M/C/X DIGITAL CIRCUIT EQUIPMENT:

M - All work associated with maintenance on digital systems/multiplexers is charged to this FRC(357M).

M - Coding provisioning time charges for cross connecting digital systems/multiplexers(357M).

1. WorkTypes used for loading Field to Field Transfers and Removal of Plug-in equipment without replacement will be charged to the appropriate FRC (357M) and the annual PICS Estimate #.

C - FRC(357C) is used in conjunction with an equipment engineering Estimate # or Job Order # that authorizes additions or change out of digital circuit equipment.

2. The placement of plug-in equipment (PICS) used in provisioning services is charged to FRC (357C) along with the current PICS Estimate #.

X - FRC(357X) is reported along with an equipment engineering Estimate # or Job Order # when digital circuit equipment is being removed/retired from the central office.

Examples of Digital Circuit Equipment:

DACS I, II, III, IV
M90 Multiplexer
M560 Multiplexer
LTS-21130 Multiplexer
LTS-3139 Multiplexer
LTS-1565 Multiplexer
ACORN Hub Unit
D3 Carrier
D4 Carrier
D5 Carrier

SECTION III MEMORYCALL TROUBLE REPORTS

3.01 PROCEDURES FOR THE PROPER CLOSING AND CODING OF MEMORYCALL TROUBLE REPORTS

WORKTYPE	CODE	DESCRIPTION
CRVMB	SP	Used for NON-Regulated Customer Mailbox troubles; closed to FRC 377M, Disp Code 1101
CRVML	SP	Regulated SMDI periphery troubles. Closed to FRC 377M; disposition code 1102.
CRVMR	SP	for Regulated SMDI link troubles and closed to FRC 357M.

To understand how to properly close out MemoryCall trouble tickets, the following instructions should be followed:

1. Based upon a MemoryCall end user customer trouble, the initial LMOS/WFA ticket would be entered as MemoryCall (1101) or SMDI (1102) NON-Regulated trouble.

2. If the C.O. or Center determines that the trouble is NON-Regulated (items 1 & 2 below), then that ticket should be closed out with the correct 1101 or 1102 disposition codes.

3. If the trouble is determined to be in the Regulated area (items 3-6 below), then the initial NON-Regulated MemoryCall trouble ticket should be closed to the appropriate 1101/1102 disposition codes. The time reported should only be the time taken to determine that the trouble was not in the NON-Regulated area.

4. A new WFA C.O./Center ticket should be opened with a 05XX code disposition. Once the trouble is cleared and the ticket closed, the COUs should close the individual MemoryCall customer trouble with the appropriate 1101 or 1102 (items 1-6 below).

3.01 MEMORYCALL TROUBLE REPORTS - CLOSE OUT - CODING

Instructions for properly coding MemoryCall trouble tickets:

1. For a MemoryCall end user customer trouble with the MemoryCall System (BTI/OCTEL), the C.O. ticket should be closed to code 1101. The individual customer ticket should be closed to code 1101 by the _CAC. This is NON-Regulated work (CRVMB).

2. For any MemoryCall end user customer trouble attributed to SMDI periphery (202T modems, cords, cables or terminal equipment), the C.O. ticket should be closed to code 1102. The individual ticket should be closed to code 1102 by the _CAC. This is NON-Regulated work (CRVML).

3. For any MemoryCall end user customer trouble attributed to a SMDI problem including the 829 data sets and SMDI link, the I&M ticket should be issued on the FDDZ circuit and CHECKED to code 04XX. The individual customer ticket should be closed to code 1102 by the _CAC. This is Regulated work (CRVMR).

4. For any MemoryCall end user customer trouble attributed to a SMDI problem including C.O. 202T modems to the I/O port, the C.O. ticket should be issued on the FDDZ circuit and closed to code 05XX. The individual customer ticket should be closed to code 1102 by the _CAC. This is Regulated work (CRVMR).

5. For any MemoryCall end user customer trouble attributed to a multi-line hunt group problem including C.O. translations, frame wiring, central office equipment, the C.O. ticket should be issued on the FDDC circuit and closed to the 05XX Code. The individual customer ticket should be closed to code 1101 by the _CAC. This is Regulated work CRRES/CRBUS.

6. For any MemoryCall end user customer trouble attributed to C.O. Switch translations for MemoryCall (i.e. Message Waiting Tone, CFDA, CFBL, CFV), the Center ticket should be closed to 05XX. The individual customer ticket should be closed to code 05XX by the _CAC. This is Regulated work (CRRES/CRBUS).

In closing the WFA ticket to disposition codes 1101 or 1102 (items 1 & 2), the code 1101 or 1102 should be entered in field "FST D" on the WFADI COMPL (DITSC) screen. The Cause Code should b entered in field "FST C".
For regulated codes (05XX, 07XX, etc.), normal close out procedures should be used. Reports where no trouble is located/isolated should not be closed to anything other than TOK (07XX or Found OK IN (08XX).

SECTION IV STANDARD WORK TYPE BY FUNCTION

4.01 TRAVEL TIME:

Travel time is normally driven by the rover turf and associated travel matrix in WFA/DI. The ability to load oneself a travel request is available utilizing the work type shown below.

WORK TYPE	WORK CODE	PRI	FRC CODE	WORK DESCRIPTION
TRVL	TV	99	TRVL	Travel Time

4.02 TRIK WORK:

Field TRIK work time will contain "only" those functions which must be done on some set interval (daily, weekly, or monthly) and are not required equipment maintenance.
Every effort should be made to insure that repetitive items are not being created as filler work. This activity will not be allowed.

1. Spanline patch check.
2. Package out-dated proprietary documentation for shipment as required.
3. Update motor vehicle logs.
4. Perform COIM inventory.

Examples of Work Types for Repetitive work requests.

WORK TYPE	WORK CODE	PRI	FRC CODE	WORK DESCRIPTION
TCDOE	RW	20	77/377M	Pull/Process Defective OE List
TCB**	RW/DT	30	77/377M	2 units / 15 Minutes per Break
TCPAT	RW	21	357M	SPAN LINE PATCH CHECK
TCSTR	RW	20	77/377M	CLEAN STORE ROOM
TCVHC	RW	20	77/377M	UPDATE MOTOR VEHICLE LOG
TCVHM	RW	20	77/377M	VEHICLE MAINTENANCE
TCOIM	RW	25	77/377M	Perform COIM INVENTORY
TCTSI	RW	30	77/377M	Annual Test Set Inventory
TCSMS	RW	30	77/377M	Remote Test Group SMAS Repair

4.03 PROVISIONING WORKTYPE STANDARDS

Provisioning work items are grouped by the type of service to be provisioned and the activity, i.e. Provision - Specials, Trunk, and Carrier - Add, Disconnect, and Rearrange/Rename. The first three characters of the work type are mandatory and deviation from this will not be permitted. Provisioning functions are based on those that are Service Order and NON-Service order driven.

WORK TYPE	CODE	DESCRIPTION
Service Order Driven		
P S_ _ _	PR	Provision Special Service
P C_ _ _	PR	Provision Carrier
P T_ _ _	PR	Provision Trunk
NON-Service Order Driven		
P E_ _ _	PR	Provision Special Service
P B_ _ _	PR	Provision Carrier
P L_ _ _	PR	Provision Trunk

Provisioning Work Types built in the pricing guide, are constructed to provide a description of the work to be done. A brief explanation of how these standard worktypes for provisioning are constructed is detailed in the matrix shown below.

POSITIONS	**1**	**2**	**3**	**4**	**5**	
Example WKTYP:	**P**	**S**	**A**	**F**	**E**	
MEANING?						
PROVISION	*					**P:**
SPECIAL		*				**S:**
ADD			*			**A:**
FRAME				*		**F:**
EQUIPMENT					*	**E:**

Definition: Provision Special Add Frame with Equipment:

4.03 PROVISIONING WORKTYPE STANDARDS

Now, let's define the numbered positions:
Five positions being the maximum (P1 - P5):

P	S	A	F	Y
⇓	⇓	⇓	⇓	⇓
1	2	3	4	5

P1. **<P>** = PROVISION

	NSO	SO	
P2.	<E>	<S>	Special
	<L>	<T>	Trunk
	<B>	<C>	Carrier

P3. **<A>** Add
<D> Disconnect
<R> Rearrange and/or Rename

P4. <A> Add
<C> COTC
<D> Disconnect
<D> Digital Carrier
<E> Equipment (misc. C.O.)
<F> Frame cross connect
<F> File Order
<R> Related(use for related order)
<R> Review Order
<X> Translations; CO Carrier/Trunk/Switch Specials
<H> HICAP Work Type

P5. <E> With equipment
<C> Center Location (File, Screen, & Review steps)
<D> Digital Carrier
<O> Office Location (File, Screen, & Review steps)
<O> Order (use for related order)
<S> Switch
<T> Test
<Y> Generated when frame count is non zero and equipment count is zero. Use with the following step types:
CTRY TSTY FRMY TSTY MSCY
<Z> Generated when frame count is non zero and equipment count is non zero. Use with the following step types:
CTRZ FRMZ TSTZ TSTYZ MSCYZ
<X> Translations, DACS
<H> HICAP Work Type (if 4th character IN USE)

NOTE 1: Designations NSO and SO relate to Non Service Order(company originated) and Service Order (customer originated) driven provisioning work.

4.03 PROVISIONING WORKTYPE STANDARDS

NOTE 2: When building the pricing guide for provisioning it is required that the CDOC and WORD columns which are designated C & W be populated with the options shown in this document. Option B is used with carrier orders and provides the WA and CD pages of the word document (there are no A and Z pages with carrier orders). Option D provides the CDOC WA and CID pages of the CDOC document. These may be distributed with the LWTR if so desired.

NOTE 3: Establishment of provisioning "PRIORITIES" is critical. If the priority scheme established in any center is not properly established due date can be missed. In all cases the priorities for work types used in service order driven step tables should be higher than those established for work types used in non service order step tables. You do not want to build a scheme that can block the loading of customer orders.

OPTIONS FOR WORK TYPE POSITIONS 4 & 5:

1. There may be some situations which will have positions 4 and 5 designated as critical dates and will thus vary from the work type scheme described above. REMEMBER that beginning December 15, 1994 DVA will be dropped as a valid report date and will no longer be tracked. DOP/IAD will also be eliminated at this time. In these situations the worktypes will be constructed as shown below:

WKTYP POS 4	WKTYP POS 5	DEFINITION
D	V	DVA
P	T	Plant Test Date
D	D	Due Date
W	T	WOT
<H>	**<H>**	**"H" in either position indicates HICAP work type**

2.0 Another option for positions 4 & 5 allows you to use numeric when creating DAC's work types. An example of this would be PSA01, which would represent a special add on DAC's K01 in the location being loaded. This could be especially helpful in those locations which have multiple DAC's locations.

PROVISIONING WORK TYPE STANDARDS

SPECIAL SERVICE PROVISIONING:

SO				NSO			
WKTYP	**C**	**W**	**PRI**	**WKTYP**	**PRI**	**FRC**	**DESCRIPTON**
PSAH	**D**		**20**	**PEAH**	**24**	**77/377M**	**ADD HC spec**
PSA	D		20	PEA	24	77/377M	Add special
PSAF	D		20	PEAF	24	77/377M	Add frame
PSAFY	B		20	PEAFY	24	77/377M	Add frm only
PSAFZ	B		20	PEAFZ	24	77/377M	Add frm /W EQP
PSAE	D		20	PEAE	24	77/377C	Add with eqp
PSAD	D		20	PEAD	24	357C	Add Digital CXR
PSAX	D		20	PEAX	24	77/377M	Add Xtrans NISC
PSAXD	D		20	PEAXD	24	357M	Add XTRANS DAC's
PSTA			**20**			**77/377M**	**WMC gen PR Test Ast**
PSDH	D		20	PEDH	24	77/377M	Disconnect HICAP
PSD	D		20	PED	24	77/377M	Disconnect SpecS
PSDF	D		20	PEDF	24	77/377M	Disconnect frame
PSDFY	B		20	PEDFY	24	77/377M	Disc frame only
PSDFZ	B		20	PEDFZ	24	77/377M	Disc frame w/EQP
PSDE	D		20	PEDE	24	77/377M	Disc W/equipment
PSDD	D		20	PEDD	24	357M	Disc with Dig CXR
PSDX	D		20	PEDX	24	77/377M	Disc XTRANS NISC
PSDXD	D		20	PEDXD	24	357M	Disc Xtrans DACs
PSRH	D		20	PERH	24	77/377M	Rea/Rename HICAP
PSR	D		20	PER	24	77/377M	Rea/Rename SPECS
PSRAF	D		20	PERAF	24	77/377M	Rea/Ren add frm
PSRAY	B		20	PERAY	24	77/377M	Rea/Ren frm only
PSRAZ	B		20	PERAZ	24	77/377M	RR/Ren frm w/EQP
PSRAE	D		20	PERAE	24	77/377C	Rea/Ren add EQP
PSRAD	D		20	PERAD	24	357C	RR/Ren add Dig CXR
PSR**TL**	D		20	PER**TL**	24	77/377C	Rea/Ren add **TLP**
PSR**PL**	D		20	PER**PL**	24	77/377C	Rea/Rename **Plug**
PSRX	D		20	PERX	24	77/377M	RR/Ren A/D XTRAN
PSRXD	D		20	PERXD	24	357M	RR/Ren A/D DACS
PSRDF	D		20	PERDF	24	77/377M	Rea/Ren disc frm
PSRDY	D		20	PERDY	24	77/377M	RR/Rn disc FRM only
PSRDZ	D		20	PERDZ	24	77/377M	RR/Rn disc FRM/EQ
PSRDE	D		20	PERDE	24	77/377M	RR/Rn disc EQP
PSRDD	D		20	PERDD	24	77/377M	RR/Rn disc Dig CXR
PSRVW	D		20	PERVW	24	77/377M	Review CO/ CTR
PSRVH	D		20	PERVH	24	77/377M	Review HICAP -

PROVISIONING WORK TYPE STANDARDS

SPECIAL SERVICE PROVISIONING:

SO			NSO			
PSCAN	D	20	PECAN	24	77/377M	Cancel CO/ CTR
PSCAH	D	20	PECAH	24	77/377M	Cancel HC CO/CTR

MESSAGE TRUNK PROVISIONING - Analog/Digital:

SO				NSO			
WKTYP	**C**	**W**	**PRI**	**WKTYP**	**PRI**	**FRC**	**DESCRIPTION**
PTA	D		20	PLA	24	77/377M	Add trunk
PTAF	D		20	PLAF	24	77/377M	Add frame
PTAFY	D		20	PLAFY	24	77/377M	Add frame only
PTAFZ	D		20	PLAFZ	24	77/377M	Add frm w/EQP
PTAE	D		20	PLAE	24	77/377C	Add equipment
PTAD	D		20	PLAD	24	357C	Add Digital CXR
PTAX	D		20	PLAX	24	77/377M	Add Xtrans NISC
PTAXD	D		20	PLAXD	24	357M	Add Xtrans DAC's
PTACT	D		20	PLACT	24	14P	Add COTC test
PTTA			20			77/377M	WMC gen test assist
PTD	D		20	PLD	24	77/377M	Disconnect trunk
PTDF	D		20	PLDF	24	77/377M	Disconnect frame
PTDFY	D		20	PLDFY	24	77/377M	Disc frame only
PTDFZ	D		20	PLDFZ	24	77/377M	Disc frame w/EQP
PTDE	D		20	PLDE	24	77/377M	Disconnect EQP
PTDD	D		20	PLDD	24	357M	Disc DIG CXR
PTDX	D		20	PLDX	24	77/377M	Disc Xtrans NISC
PTDXD	D		20	PLDXD	24	357M	Disc Xtran DAC's
PTDCT	D		20	PLDCT	24	14P	Disc COTC FCT
PTR	D		20	PLR	24	77/377M	Rea/Rename trunk
PTRAF	D		20	PLRAF	24	77/377M	Rea/Ren add frm
PTRAY	D		20	PLRAY	24	77/377M	RR/Rn add frm ON
PTRAZ	D		20	PLRAZ	24	77/377M	RR/Rn add frm/EQ
PTRAE	D		20	PLRAE	24	77/377C	RR/Rn add E/EQP
PTRAD	D		20	PLRAD	24	357C	RR/Rn add DIG CXR
PTRX	D		20	PLRX	24	77/377M	RR/RN A/D NSC-XLT
PTRXD	D		20	PLRXD	24	357M	RR/Rn A/D DACS XLT
PTRTL	D		20	PLRTL	24	77/377M	RR/Rn add TLP

PROVISIONING WORK TYPE STANDARDS

MESSAGE TRUNK PROVISIONING - Analog/Digital:

SO				NSO			
WKTYP	**C**	**W**	**PRI**	**WKTYP**	**PRI**	**FRC**	**DESCRIPTION**
PTRPL	D		20	PLRPL	24	77/377C	Rea/Rename plug
PTRDY	D		20	PLRDY	24	77/377M	RR/Rn Disc frame
PTRDZ	D		20	PLRDZ	24	77/377M	RR/Rn disc.FRM&EQP
PTRDE	D		20	PLRDE	24	77/377M	RR/Rn disc EQP.
PTRDD	D		20	PLRDD	24	357M	RR/Rn disc DIG CXR
PTRVW	D		20	PLRVW	24	77/377M	Review CO/CTR
PTCAN	D		20	PLCAN	24	77/377M	Cancel CO/CTR

CARRIER PROVISIONING:

SO				NSO			
WKTYP	**C**	**W**	**PRI**	**WKTYP**	**PRI**	**FRC**	**DESCRIPTION**
PCAH	B		20	PBAH	23	357M	Add HICAP CXR
PCA	B		20	PBA	23	357M	Add carrier
PCAF	B		20	PBAF	23	357M	Add frame
PCAFY	B		20	PBAFY	23	357M	Add frame only
PCAFZ	B		20	PBAFZ	23	357M	Add frame w/EQP
PCAE	B		20	PBAE	23	357C	Add equipment
PCAD	B		20	PBAD	23	357C	Add DIG CXR
PCAX	D		20	PBAX	23	357M	Add Xtrans NISC
PCAXD	D		20	PBAXD	23	357M	Add Xtrans DAC's
PCTST	B		20	PBTST	23	357M	Test Carrier
PCTA			20			357M	WMC gen test assist
PCDH	B		20	PBDH	23	357M	Disc HICAP CXR
PCD	B		20	PBD	23	357M	Disc carrier
PCDF	B		20	PBDF	23	357M	Disconnect frame
PCDFY	B		20	PBDFY	23	357M	Disc frame only
PCDFZ	B		20	PBDFZ	23	357M	Disc frm w/EQP
PCDE	B		20	PBDE	23	357M	Disc eqp/DIG CXR
PCDD	B		20	PBDD	23	357M	Disc dig carrier
PCDX	D		20	PBDX	23	357M	Disc Xtrans NISC
PCDXD	D		20	PBDXD	23	357M	Disc Xtran DAC's
PCRH	B		20	PBRH	23	357M	Rea/Rename HICAP
PCR	B		20	PBR	23	357M	Rea/Rename CXR
PCRAF	B		20	PBRAF	23	357M	Rea/Ren add frm

PROVISIONING WORK TYPE STANDARDS

CARRIER PROVISIONING:

SO				NSO			
WKTYP	**C**	**W**	**PRI**	**WKTYP**	**PRI**	**FRC**	**DESCRIPTION**
PCRAY	B		20	PBRAY	23	357M	RR/Rn add frm ON
PCRAZ	B		20	PBRAZ	23	357M	RR/Rn add fr/EQP
PCRAE	B		20	PBRAE	23	357C	RR/Rn add eqp
PCRAD	B		20	PBRAD	23	357C	RR/Rn add D CXR
PCRX	B	D	20	PBRX	23	357M	RR/Rn A/D N.XLT
PCRXD	D		20	PBRXD	23	357M	RR/RR A/D D XLT
PCRTL	B		20	PBRTL	23	357M	RR/Rn add TLP
PCRPL	B		20	PBRPL	23	357C	RR/Rn plug step
PCRDF	B		20	PBRDF	23	357M	RR/Rn disc. FRM
PCRDY	B		20	PBRDY	23	357M	RR/Rn dis frm ON
PCRDZ	B		20	PBRDZ	23	357M	RR/Rn dis frm/EQ
PCRDE	B		20	PBRDE	23	357M	RR/RN disc. EQP
PCCAN	B		20	PBCAN	23	357M	Cancel CO/ CTR
PCCAH	B		20	PBCAH	23	357M	Cancel HC CO/CTR
PCTST	B		20	PBTST	23	357M	Test Carrier Order

SLC PROVISIONING:

Use variations of the following carrier work types to build work requests for SLC 'add', 'delete', or 'rename/rearrange' activity:

PBAxx	23	DT/PR	Provision CXR - NON SO (SLC <add>)
PBDxx	23	DT/PR	Provision CXR - NON SO (SLC <disc>)
PBRxx	23	DT/PR	Provision CXR - NON SO (SLC - REA/RN

variable fields used to describe specific SLC work activity
Use "DT" for demand loaded work and "PR" with 'DIOE" screen.
USE CORRECT "FRC" WITH EACH WORK TYPE

THE FOLLOWING IS THE RECOMMENDED SCHEME FOR WORK TYPES USED FOR NON-INVENTORIED - NON- INTEGRATED SLC PROVISIONING

WORK TYPE		PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
PBASL	23	DT	357M		ADD NON S.O SLC
PBATU	23	DT	357M		SLC TURNUP NON S.O.
PBAXS	23	DT	357M		XTRANS NON S. O SLC
PBDSL	23	DT	357M		DISC NON S.O SLC
PBDXS	23	DT	357M		DISC XTRANS NON S. O SLC
PBRSL	23	DT	357M		REA/RNAME NON S.O SLC
PBRXS	23	DT	357M		RR/RN TRANS NON S. O SLC

FRAME PROVISIONING:

Frame Work being done by ET's or FA's will be loaded out using only the worktypes listed below. The first section contains the worktypes to be used for non-CICO loading of frame work. The second set of worktypes contains the worktypes driven by CICO.

Standard Frame WorkTypes used for demand loading:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
SOPBT	21	FR	77/377M	CTAP Place Back Tap
SORBT	21	FR	77/377M	CTAP Remove Back Tap
SOVBT	21	FR	77/377M	CTAP Verification
SOCTP	21	FR	77/377M	CTAP Coils In & Coils Out
SPCTS	19	FR	77/377M	CTAP Test Assist
SOTAP	19	FR	77/377M	Open in Test: TAP Program
SORTN	23	FR/RW	77/377M	Dead Jumpers, Coils, Material Handling, ETLs
SOJAM	21	FR	77/377M	JAMS -Jumper Administration (COSMIC)
SOIMC	20	FR/RW	77/377M	Speaker/Telephone Document-Log E-6025
SOVFY	23	FR	77/377M	Frame Verify -Work REQUEST
SODPC	20	FR	77/377M	DIP Creation
SODPB	20	FR	77/377M	DIP Break
SOFRx	20	FR/RW	77/377M	Desk Work, Filing, OPN WSL, Retest E1
SONPK	20	FR/RW	77/377M	CPC, Admins,ACTS, Mtc.Cuts
SOPAK	20	FR	77/377M	NON CICO - S. Order Work
SOPIP	20	FR/RW	77/377M	PIPSO Activity S. Order
SOCVR	20	FR/RW	77/377M	Frame Coverage
SOIMR	20	FR/RW	77/377M	Speaker Relief
CRFRM	19	FR	77/377M	Frame Cus. Trouble Report
SONPR	20	FR	77/377M	Cosmos Nonpak, Relief, Late Coverage in an Enhanced CICO Office. Should be Assigned to One Person.
MSCHK	23	FR/RW	77/377M	COSMOS TIE PR ADMIN

Enhanced COSMOS In CIMAP Out (CICO / BITTS) Standard WorkTypes:

ADS	**19**	**FR**	**77/377M**	**ADSL FRAME PROVISIONING**
CH	20	FR	77/377M	Changes
CPC	20	FR	77/377M	N/T/C Spec.CPC in Orders
CPO	20	FR	77/377M	D/F Spec. CPC Out Orders
HOT	**19**	**FR**	**77/377M**	**Maintenance Cuts (ADSL TEMP)**
IDP	20	FR	77/377M	Disconnect Left In
IN	20	FR	77/377M	Straight N/T
INA	20	FR	77/377M	N/T with LST/ LST Go Ahead
IND	20	FR	77/377M	N/T with Disconnects
LET	20	FR	77/377M	Line Equipment Transfer
LNP	**19**	**FR**	**77/377M**	**LOCAL NUMBER PORTABILITY**
ODP	20	FR	77/377M	ODIP Admin Message
OUT	20	FR	77/377M	Straight Disconnects
PAK	20	FR	77/377M	All Work Packages
RDP	20	FR	77/377M	N/T/C Re-Use Left In
SOHOT	**19**	**FR**	**77/377M**	**S.O. WORK BACK HOT**
UNE	**19**	**FR**	**77/377**	**UNBUNDLED NETWORK ELEMENTS**

4.04 C.O. CONVERSIONS/GROWTH/CN WORK:

Conversion and growth work will be generated in one of two ways, demand or repetitive. These worktypes will be constructed using the basic formats shown below and no deviation will be permitted. A wild card of **x** is permitted to differentiate between **power, toll**, etc. Example, For a power growth job use work type of **GRDTP** where P=power.

Work Types to be used for Conversion/Growth/Vendor Trial/CN & PCN/Generic load activity:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
CONVERSION				
CVDTx	10	DT	77/377C	Demand Ticket Conversion: Report-Est./Job Order/TEO #
CVRWx	10	RW	77/377C	Repetitive Work Conversion: Report-Est./Job Order/TEO#
GROWTH				
GRDTx	10	DT	77/377/357C	Demand Request Growth Work: Report-Est./Job Order/TEO#
GRRWx	10	RW	77/377/357C	Repetitive req Growth Work: Report-117/257/Est./Job Report-Est./Job Order/TEO#
VENDOR				
VNDTx	10	DT	77/377M	Demand Request Vendor Trial
VNRWx	10	RW	77/377M	Repetitive Req Vendor Trial
GENERIC LOAD				
GNDTx	10	DT	77/377M	Demand Request Generic Load
GNRWx	10	RW	77/377M	Repetitive Req Generic Load
CHANGE NOTICES				
CNPDx	10	DT	77/377M	Demand Req Plug-in Chg. Notice
CNPRx	10	RW	77/377M	Repetitive Request Plug-in
CNHDx	10	DT	77/377M	Demand Request Hardwired
CNHRx	10	RW	77/377M	Repetitive Request Hardwired

NOTE: Examples differentiate between Plug-in and Hardwired activities. For requests for CN work, the WMC staff should use the CN/PCN # in the Tracking Key field of the DIREQ which will allow tracking and control of CN's.

4.05 UNION/COMPANY MEETINGS/TRAINING:

1. Attending QWL meeting.
2. Grievance meetings and other union activities approved by the company and union.

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
QWL	30	XX	FC-5534	Quality of Work Life Meeting
UNA	30	XX	UA	Union Activity - NON Paid
UNP	30	XX	FC-5533	Union Grievance Meeting- Paid
TRNG	30	XX	FC-5535	Formal Training

MEETINGS/MISCELLANEOUS - NON PROVISIONING - NON MAINTENANCE REQUESTS:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
MEET	30	XX	FC-5532	Meeting (use tracking key)

Request(s) used to schedule meetings will use the worktype shown below. In every instance one of the standard tracking keys will be inserted into the tracking key field of the work request.

MEETING TYPE	TRACKING KEY	FRC CODE
General Supervisory Meetings	SUPMTG	FC-5532
Safety Meetings	SAFMTG	
Central Office Tours	COTOUR	
United Way Meetings	UWMTG	
Savings Bond Meetings	SAVMTG	
Svc. Anniversaries	ANVMTG	
Blood drives	BLDMTG	
Pioneer Meeting/Function	PIONEER	
Jury Duty	JURYDUTY	

4.06 MISCELLANEOUS WORK REQUESTS:

Miscellaneous work request will be constructed as detailed below and only for those things described below.

1. Verification of central office equipment for engineering and/or PICS inventories.

2. Assigning ET's to special interdepartmental projects which require less than 3 consecutive working days to complete. An example would be to assign a technician to work with marketing on a customer problem. Any work request issued under this category to cover working on an inter-departmental assignment should provide sufficient detail of the activity to satisfy audit requirements.

3. Assignment of technicians to work with maintenance engineers on a bona fide trouble condition, etc.. Any work request issued under this category should reference the equipment trouble ticket and number issued to identify the original trouble condition.

4. Assignment of technicians to assist Staff/Re-Engineering/Special Studies to gather necessary information.

Standard Maintenance Related Miscellaneous Work

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
MSOJT	30	DT	77/377M	ON THE JOB TRAINING
MSPIC	30	DT	FC-5539	CO Office/PICS Verification
MSENG	30	DT	77/377/ 117/257	Assist Maintenance Engineers
MSSTF	30	DT	77/377M	Assist Staff/Re-ENG Studies
MSMKT	30	DT	77/377M	Assist Marketing
MSSWG	30	DT	77/377M	Switch Gear Test
MSSMD	30	DT	77/377M	Create & Ship SMDR Tape
MSBRU	30	DT	77/377M	Bill Reconcile dump(DBRT)
MSIMM	40	DT/RW	257M	SIMM Administrative Activity
MSPRJ	30	DT/RW	77/377M	MISCELLANEOUS PROJECTS
MSVFY	**30**	**DT**	**77/377M**	**DATABASE RECONCILE (CO EQP /FAC)**

4.07 EBAC STANDARD WORK TYPES:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
TMAMC	18	DT	77/377M	EBAC HIGH PRIORITY
TMAMI	20	DT	77/377M	EBAC IC TRANSLATIONS COMPLETION
TMAML	20	DT	77/377M	EBAC IC LOW PRIORITY
TMAMT	20	DT	77/377M	IC TRUNK GRP INQUIRY
TMATH	18	DT	77/377M	MATV HIGH PRIORITY
TMATL	25	DT	77/377M	MATV LO PRIORITY
TMEBC	18	DT	77/377M	EBAC TROUBLE

4.08 EQUIPMENT TROUBLE TICKETS:

Equipment trouble tickets will flow to the WMC from one of several centers. The vast majority of equipment trouble tickets should flow to the WMC from the NRC. The creation of equipment trouble tickets by the WMC or Field technicians WILL BE THE EXCEPTION NOT THE RULE.

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
EAMAx	10	SP	77/377M	AMA Trouble
ECOMx	10	SP	77/377M	Common Equipment Trouble
ENETx	10	SP	77/377M	Network Trouble
EFACx	10	DL	57/357M	Facility Trouble
EPWRx	05	SP	77/377M	Power Plant Trouble
EOTHx	19	SP	77/377M	Other Equipment Trouble
ECRTx	20	DT	77/377M	Remote Test SMAS Trouble
ESLCx	19	DL	257M	SLC Trouble
ERADx	19	NT	67R/M	Radio Trouble Cellular
ERADN	19	NT	167M	Radio Trouble Non-CELL
EMLTx	20	SP	77/377M	MLT Trouble
CODES	**19**	**NT**	**77/377M**	**Codes Collect TBL**

X = wildcard is used for out-of-hours tours; E = Evening; N = Night.

4.09 DIGITAL FACILITY ASSIGNMENTS

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
SISLC	20	DT	77/377M	DFA-IDLC ACT or RT MOVE

SECTION V CENTER SPECIFIC WORK TYPES:

5.01 ACCESS CARRIER ADVOCACY CENTER (ACAC) - MAINTENANCE and PROVISIONING:

Maintenance Work Types used for troubles flowing from ACAC to the NISC only.

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
SPLIR	19	IC	77/377M	RCMAG Trouble
NDSIR	19	IC	77/377M	RCMAG Trouble

Maintenance Work Types used for troubles flowing from ACAC to the WMC only.

SPLI3	15	IC	357M	DS3 TBL-Clearing Time <1 Hour
SPLI1	15	IC	357M	DS1 TBL-Clearing Time <1 Hour
SPLII	15	IC	77/377M	Maintenance Tst Assist (IMED)
SPLIE	19	IC	77/377M	MTCE Tst Assist (NON IM)
SPLIM	19	IC	77/377M	Non SVC Aff TBL (No CUST Report) Loadable Next Day
CXRI3	15	IC	357M	DS3 TBL Clearing Time <1 Hour
CXRI1	15	IC	357M	DS1 TBL Clearing Time <1 Hour
CXRIP	15	IC	357M	Request For Patch (Immediate)
CXRIE	19	IC	357M	MTCE Tst Assist (Not IMED)
CXRIM	19	IC	357M	Non SVC Aff TBL (No CUST Report) Loadable Next Day
HISI3	15	IC	357M	HICAP SPEC-DS3 Trbl/Clear Tm <1hr
HISI1	15	IC	357M	HICAP SPEC - DS1 Trbl/Clear Tm <1hr
HISII	15	IC	357M	HC SPECIAL-Tst Assist (IMED)
HISIE	19	IC	357M	HC SPEC-Tst Assist (N IMED)
HISIM	19	IC	357M	HICAP SPEC - Non Service Affecting Loadable Next Day)
HICI3	15	IC	357M	HC CXR -DS3 Trbl Clear Tm < 1 Hour
HICI1	15	IC	357M	HC CXR -DS1 Trbl Clear Tm < 1 Hour
HICIP	15	IC	357M	HICAP CARRIER - IMED DISP
HICIE	19	IC	357M	HC CXR- Tst Ast (NO IMED)
HICIM	19	IC	357M	HICAP CXR - Non Service Affecting Loadable Next Day)

5.01 ACCESS CARRIER ADVOCACY CENTER (ACAC)

Maintenance Work Types used for troubles flowing from ACAC to the NISC or WMC

MSGIE	16	IC	77/377M	SVC Affect Trbl Clear Time <4hr
MSGIN	19	IC	77/377M	Non Ckt or Non Line Specific
MSGII	15	IC	77/377M	SVC Affect Trble (Immediate)
NDSIZ	19	IC	77/377M	Sing Line or WATS Trbl <3 Hrs Network Trbl Loadable Next Day
SPLIS	17	IC	77/377M	Sing Line, DDS,WATS-Clear Tm <3 HRS

Provisioning Work Types used for handing off from ACAC to the NISC only.

NDSPL	20	IC	77/377M	RCMAG Assist
SPLPL	20	IC	77/377M	RCMAG Assist

Provisioning Work Types used for handing off from ACAC to the WMC only.

CXRAH	19	NT	357M	CDA Install Tst Assist (Immediate)
CXRPD	21	IC	357M	Install Tst Assist (Not Immediate)
CXRPI	20	IC	357M	Install Tst Assist (Immediate)
CXRPP	21	IC	357M	Appointment (PTD & DD)
HICAH	19	NT	77/377M	CDA Install Tst Assist (Immediate)
HICPD	21	IC	357M	HC CARRIER- Install Tst Asst. (not Immed)
HICPI	19	IC	357M	HC CARRIER- Install Tst Assist (IMED)
HICPP	19	IC	357M	HC CARRIER- Appt(PTD & DD)
HISAH	19	NT	77/377M	CDA Install Tst Assist (Immediate)
HISPA	19	IC	357M	HC SPECIAL- Appt(PTD & DD)
HISPD	21	IC	357M	HC SPECIAL- Install Tst Asst(Not Imed)
HISPI	19	IC	357M	HC SPECIAL- Install Tst Asst. (Immediate)
MSGPD	21	IC	77/377M	Install Tst Assist (Not Immediate)
NDSPD	21	IC	77/377M	Install Tst Assist (Not Immediate)
SPLAH	19	NT	77/377M	CDA Install Tst Assist (Immediate)
SPLPD	21	IC	77/377M	Install Tst Assist (Not Immediate)

Provisioning Work Types - Hand Off from ACAC to either NISC or WMC.

MSGPA	21	IC	77/377M	Appointment (PTD & DD)
MSGPI	20	IC	77/377M	Install Tst Assist IMED
NDSAP	19	FR	77/377M	SLI APPT REQUEST
NDSPA	21	IC	77/377M	Appointment (DD & PTD)
NDSPI	20	IC	77/377M	Install Tst Assist IMED
SPLPA	21	IC	77/377M	Appointment (PTD & DD)
SPLPI	20	IC	77/377M	Install Tst Assist IMED

5.02 UNBUNDLED NETWORK ELEMENTS SUPPORT FOR CLECS:

*****CO-LOCATED WITH ACAC AND USES STANDARD ACAC WORK TYPES*****

See CICO / BITTS work types for UNE frame provisioning!!

NOTE: To return LMOS tickets to the UNE Center: *IST 173 (LEC) ROUTE 101*
For additional LMOS & WFAC routing information, consult M&Ps.

5.03 BUSINESS REPAIR CENTER (BRC) - MAINTENANCE and PROVISIONING:

Maintenance WorkTypes passed by the Business Repair Center (BRC)

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
				SPECIALS
HISD1	15	NT	357M	HC SPECIAL- DS1 Trbl Clear Tm < 1 Hour
HISD3	15	NT	357M	HC SPECIAL- DS3 Trbl Clear Tm < 1 Hour
HISTA	19	NT	357M	HICAP SPEC - Test Assist- ALL SPC. SVCS
HISVD	**19**	**NT**	**357M**	**HICAP VIDEO SERVICES**
SPLD0	18	NT	357M	DS0 - 4 hour clearing times
SPLD1	15	NT	357M	DS1 - 1.5 Hr clr time ex: DH,DG,HG)
SPLD3	15	NT	357M	DS3 - 1 hr clr tm ex: HD,HE,HF,HI)
SPLMA	15	NT	357M	URGENT REQUEST-<1 Hr clr tm
SPLTA	19	NT	77/377M	Routine MTCE test assist- ALL SPC. SVCS
SPLXL	19	NT	77/377M	Translations trouble
				MESSAGE
MSGCO	19	TR	77/377M	All other customers >4 hour clear time
MSGIC	18	IC	77/377M	IC/BASELINE customers <4 hour clear time
MSGTA	19	TR	77/377M	MTCE test assist <4 Hours clear time
				CARRIER
CXRD1	15	DL	357M	Carrier > 1.5 hour clr time
CXRD3	15	DL	357M	Urgent Request clr tm -<1 hr
CXRTA	20	DL	357M	Routine Mtce. Test Assist CXR
HICD1	15	DL	357M	HC CXR -DS1 Tbl Clr Tm < 1 HR
HICD3	15	DL	357M	HC CXR -DS3 Tbl Clr Tm < 1 HR
HICTA	19	DL	357M	HICAP CARRIER - Test Assist

5.03 BUSINESS REPAIR CENTER (BRC) - MAINTENANCE and PROVISIONING:

Maintenance Work Types passed by the Business Repair Center (BRC)

NON-DESIGN

NDSIS	19	ND	77/377M	Non Design ISDN Trouble
NDSMS	19	ND	77/377M	Non Design Trouble - ALL OTHER SERVICES

MISCELLANEOUS

MSCAL	20	NT	77/377M	Misc. Ticket Pseudo- ALL SERVICES

Provisioning Work Types (test assist) - Business Repair Center (BRC)

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
			SPECIALS	
HISAH	19	NT	357M	CDA TEST ASSIST - HC SPL
HISAP	19	NT	357M	HICAP SPECL - Appt(PTD & DD)
HISIA	19	NT	357M	HC SPECIAL -Tst Assist (IMED)
HISIH	21	NT	357M	HC SPECIAL -Install Tst ASST (not Immed)
SPLAH	19	NT	77/377M	CDA TEST ASSIST
SPLAP	19	NT	77/377M	Appointment (PTD - DD)
SPLIA	19	NT	77/377M	Urgent Test Assist (Immediate)
SPLIH	21	NT	77/377M	Install Tst Assist (Not IMED)
			MESSAGE	
MSGAP	19	TR	77/377M	Coordinated Appt (PTD - DD)
MSGIA	19	TR	77/377M	Msg. Trk Pr. Tst Asst. (<4 HRS)
MSGIH	21	TR	77/377M	Install Tst Assist (NOT Immediate)
			CARRIER	
CXRAH	19	NT	357M	CDA TEST ASSIST
CXRAP	19	DL	357M	Coordinated Appt (PTD - DD)
CXRIA	19	DL	357M	CXR Test Assist (<4 Hours)
CXRIH	21	DL	357M	Install Tst Assist (Not Immediate)
CXRPR	20	DL	357M	Installation TURN UP
HICAH	19	NT	357M	CDA TEST ASSIST
HICIA	19	DL	357M	HC CXR - CXR Tst Asst. <4 HRS

5.03 BUSINESS REPAIR CENTER (BRC)

Provisioning Work Types (test assist) passed by the Business Repair Center (BRC)

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
			CARRIER	
HICAP	19	DL	357M	HC CXR -Appointment PTD &DD)
HICIH	21	DL	357M	HC CXR - Install Tst Assist (NOT IMMED)
HICPR	20	DL	357M	HC CXR - Installation TURN UP
			NON-DESIGN	
NDSIA	20	ND	77/377M	Non-Design Tst Assist - ALL SERVICES
			MISCELLANEOUS	
MSCIA	20	NT	77/377M	Misc. Provisioning- Pseudo All SERVICES

5.04 TEST SYSTEMS ADMINISTRATION CENTER (TSAC) MAINTENANCE

Maintenance Work Types used for troubles flowing from TSAC/BRC to the WMC only.

MSGR1	19	NT	57/357M	Test Sys Trouble Immediate
MSGR2	19	NT	57/357M	Test Sys Trouble <= 2 HOURS
MSGR3	20	NT	57/357M	Test Sys Trouble <= 4 HOURS
MSGR4	21	NT	57/357M	Test Sys Trouble <= 24 HOURS
MSGC1	19	NT	57/357M	Test Sys Trouble Immediate
MSGC2	19	NT	57/357M	Test Sys Trouble <= 2 HOURS
MSGC3	20	NT	57/357M	Test Sys Trouble <= 4 HOURS
MSGC4	21	NT	57/357M	Test Sys Trouble <= 24 HOURS

5.05 RESIDENCE REPAIR CENTER (RRC) - MAINTENANCE and PROVISIONING:

The following codes are used by the LMOS/DI Taskmate interface:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
CRBUS	19	ND	77/377M	Business Customer Report
CRCAR	19	ND	77/377M	Carrier Trouble Report
CRCCH	19	ND	77/377M	Coin Charge Trouble Report
CRCCP	19	ND	77/377M	Coin CPE Trouble Report
CRCNT	19	ND	77/377M	Centrex Trouble Report
CRDAT	19	ND	77/377M	Data Trouble Report
CRMOB	19	ND	77/377M	Mobile Trouble Report
CRPBX	19	ND	77/377M	PBX Trouble Report
CRRES	19	ND	77/377M	Residence Customer Report
CRRUR	19	ND	77/377M	Rural Trouble Report
CRSST	19	ND	77/377M	Special Services Report
CRUNC	19	ND	77/377M	Unclassified Trouble Report
CRVDO	19	ND	77/377M	Video Trouble Report
CRVMB	15	SP	77/377M	Voice Message System(VMS)/MemCall (MCI)
CRWAT	19	ND	77/377M	WATS Customer Report

NOTE: All coin work types deleted except CRCCP (IPP CENTER)

REGULATED Customer Mailbox Troubles

CRVML	15	SP	77/377M	Voice Message System (VMS) NON-REGULATED SMDI Link Interface Card Troubles
CRVMR	15	SP	77/377M	Voice Message System (VMS) REGULATED SMDI Link Troubles

Read the enclosed M&P found in Section 1, Pages 10 and 11 for details on proper reporting of REGULATED and NON-REGULATED time charges associated with VMS troubles.

5.06 LINK MAINTENANCE CENTER (LMC) - MTCE & PROV

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
MSGL1	15	NT	357M	LMC Handoff Clear In < 1 Hour
MSGLM	19	NT	357M	LMC Handoff Loadable Next Day

5.07 NETWORK RELIABILITY CENTER (NRC) - MTCE & PROV

NRC Switch Maintenance Work Types:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
MSCAB	01	SP	77/377M	Abnormal Condition Report **(Immediate)**
MSCCH	**19**	**SP**	**77/377M**	**CHRONIC trouble Report**
MSCD6	**17**	**SP**	**77/377M**	**POT SVC AFFECTING <=6 HOURS**
MSCD8	**17**	**SP**	**77/377M**	**POT SVC AFFECTING <=8 HOURS**
MSCNS	23	SP	77/377M	NO-Svc. Aff Tbl Rpt <=72 Hrs.
MSCPG	19	SP	77/377M	Programmable Tbl Rpt <=5 DAYS
MSCPM	04	SP	77/377M	Minor Power Equip <= 30 Min.
MSCPS	05	SP	77/377M	Potentially Svc. Affect Report <=90 Min.
MSCPW	04	SP	77/377M	Major Power Equip <= 15 Min.
MSCSA	03	SP	77/377M	Serv Affecting Rpt <=10 Min.
MSCSM	21	SP	77/377M	NON-Svc. Affect Simplex <=24 Hrs.

NRC Facility Maintenance Work Types for TIRKS Inventoried CXR Equipment:

CXR00	01	DL	357M	Abnormal Report **IMED**
CXR10	03	DL	357M	Service Affect Rpt <=10 Min.
CXR90	05	DL	357M	Pot Svc. Aff Report <=90 Min.
CXR1D	21	DL	357M	NON-Svc. Aff Special <=24 Hrs.
CXR3D	22	DL	357M	NON-Svc Aff TBL Rpt <=72 Hrs.
CXRCH	**19**	**DL**	**357M**	**CHRONIC trouble Report**

5.07 NETWORK RELIABILITY CENTER (NRC

NRC Facility Maintenance Work Types for TIRKS Inventoried CXR Equipment:

HIC00	03	DL	357M	HC - ABNORMAL Immediate
HIC10	03	DL	357M	HC - SVC AFFECT <= 10 MIN
HIC90	05	DL	357M	HC - POT SVC AFF <= 90 MIN
HIC1D	21	DL	357M	HC - N.SVC AF SMPX<= 72 HOURS
HIC3D	22	DL	357M	HC - NO SVC. AFF <= 72 HRS
HICCH	**19**	**DL**	**357M**	**CHRONIC trouble Report**

NRC Facility Maintenance Work Types For TIRKS NON-Inventoried Equipment:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
MSC00	01	DL	357M	Abnormal Condition Rpt **(Immediate)**
MSC10	03	DL	357M	Service Affect Rpt <=10 Min.
MSC90	05	DL	357M	Pot Svc. Affect RPT <=90 Min.
MSCCD	05	SP	357M	Dehydrat Alarm <= 120 Min.
MSC1D	21	DL	357M	NO-Svc. Aff. simplex <=24 HRS
MSC3D	22	DL	357M	NO-Svc. Aff Tbl Rpt <=72 HRS

5.08 NETWORK INFRASTRUCTURE SUPPORT CENTER (NISC) - MAINTENANCE and PROVISIONING:

TCG Maintenance Work Types:

Manual / TRUMP initiated trunk trouble tickets passed from WFA/C to WFA/DI will utilize the following Work Types. These troubles will include EAS/Toll/Auxiliary/Service Circuit trunks. In addition 911, DID, PULSELINK, ETN, and other trunks designed for "unique networks and services".

Message Trunk Maintenance Troubles Both TRUMP/Manual - Standard Work Types

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
MSGAX	**22**	**TR**	**77/377M**	**AUX TRKS (RA,IR, OPR SVCS)**
MSGHP	19	TR	77/377M	High Priority Trunk Trbl
MSGT1	25	TR	77/377M	Msg. Trunk Trouble (<72 Hours)
MSCJC	25	TR	77/377M	Junctor Trouble (<72 Hours)
MSGOC	19	TR	77/377M	Independent Co. (<4 Hours)
MSGSS	19	TR	77/377M	Switched Special Svcs (DID)
MSGSV	25	TR	77/377M	Service CKT Trbl (<72 Hours)
MSGCT	22	TR	77/377M	Common Transport Trunk Group (CTTG) Trouble (<8 Hours)
MSCRA	19	TR	77/377M	Recorded Announce Tbl(<4 HRS
MSGTA	19	TR	77/377M	Mtce. Tst Asst. (<4 Hours)
MSGE9	10	TR	77/377M	E911 Trunk Trouble **IMED**
MSCMS	25	TR	77/377M	TIRKS Non-Invent Eqp <72 HRS

CAROT Trouble - Standard Work Types

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
MSCEQ	28	TR	77/377M	ROTL/RESPONDER Trbl <4 HRS
MSGBS	30	TR	77/377M	CAROT BUSY Trble (<72 Hours)
MSGHD	25	TR	77/377M	CAROT Hi & Dry Trbl <72 HRS
MSGQ1	**30**	**TR**	**77/377M**	**CAROT Q1 Trbl <72 HRS**
MSGQ2	**30**	**TR**	**77/377M**	**CAROT Q2 Trbl <72 HRS**

5.08 NETWORK INFRASTRUCTURE SUPPORT CENTER (NISC) - MAINTENANCE and PROVISIONING:

Message Trunk Provisioning - Standard Work Types

MSCPE	25	TR	77/377M	Prov of No-Invent Eqp <24 HRS
MSGAP	19	TR	77/377M	Coordinated Appt (PTD - DD)
MSGIA	19	TR	77/377M	Msg. Trk Prov Tst Asst. <4 HRS
MSGNS	25	TR	77/377M	Single circuit trbl <24 HRS
MSGNT	25	TR	77/377M	Msg. Trk Prov Tst Asst. <24HRS

Manual Trunk Readings - Standard Work Types

NTTMP	31	RW	14W	Routinely Scheduled Manual Trunk Readings
NTMPM	31	DT	14W	Demand Loaded Trunk Readings

Carrier Test Assist - Standard Work Types

CXRAP	19	DL	357M	Coord Appointment (PTD - DD)
CXRIA	19	DL	357M	CXR Tst Assist (<4 Hours)
CXRTA	20	DL	357M	CXR Routine Mtce Test Assist

NISC Translations - C.O. Maintenance Referrals

NISMV	19	DT	77/377M	NISC MATV Maintenance Request
NISTA	19	DT	77/377M	NISC Maintenance test assist
NISTP	19	DT	77/377M	NISC Switch Back-up Request

5.08 NETWORK INFRASTRUCTURE SUPPORT CENTER (NISC) - MAINTENANCE and PROVISIONING:

Line and Number Administration:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
LET	20	FR	77/377M	Line Equipment Transfer
LNDT	20	DT	77/377M	Dial Transfer Project
LNEC	20	DT	77/377M	ESSX Conversion Project
LNLB	20	DT	77/377M	Switch Load Balance
LNLC	20	DT	77/377M	Line Card Administration
LNLG	20	DT	77/377M	Loop/Ground Start Change
LNOE	20	DT	77/377R	Defective OE's
SISLC	**20**	**DT**	**77/377M**	**DFA - IDLC ACTIVITY or RT MOVE**
SODPB	20	FR	77/377M	DIP Break
SODPC	20	FR	77/377M	DIP Creation

RCMAG TRANSLATIONS

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
NDSIR	19	IC	77/377M	RCMAG TROUBLE
NDSIS	19	ND	77/377M	ISDN TROUBLE
NDSPL	20	IC	77/377M	RCMAG ASSIST
NDSPT	20	IC	77/377M	TRANSLATION ASSIST
SORTT	20	DT	77/377M	JAMS - Jumper Admn/COSMIC Frames (RCMAG)
SPLAH	19	NT	77/377M	CDA TST AST SPL IM
SPLDO	18	NT	77/377M	DSO 4HR CLR TIME
SPLIA	19	NT	77/377M	WFAC TROUBLE TICKET
SPLIH	21	NT	77/377M	INST TST ASST NON IMMED
SPLIR	19	IC	77/377M	RCMAG TROUBLE
SPLPD	21	IC	77/377M	INST TEST ASSIST IMMED
SPLPL	20	IC	77/377M	RCMAG ASSIST
SPLPR	19	IC	77/377M	OLEC RCF PROV ASST
SPLTT	19	NT	77/377M	SPECIAL TBL TKT
SPLXL	19	NT	77/377M	TRANSLATIONS TROUBLE
SSCTT	19	NT	77/377M	SPECIAL TBL TKT
TMBIS	19	DT	77/377M	IBIS CASE

5.08 NETWORK INFRASTRUCTURE SUPPORT CENTER (NISC) - MAINTENANCE and PROVISIONING:

RCMAG WORK TYPES

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
SOINA	19	DT/ND	77/377M	Holding for go-ahead
SONIT	19	DT/ND	77/377M	Not In Translations
SOWIT	19	DT/ND	77/377M	Wrong In Translations
SOSIT	19	DT/ND	77/377M	Still In Translations
SOWAT	19	DT/ND	77/377M	Watch Alert

COMPLEX TRANSLATIONS (CTG)

OPERATOR SERVICES Trouble - Standard Work Types

WORK TYPE	PRI CODE	WORK CODE	FRC	WORK DESCRIPTION
OPRIL	15	ND	77/377M	TRBL.RPT.IMMED.
OPTBL	19	ND	77/377M	TRBL.RPT.NEXT DAY

Work types in the NISC will be five characters in length and will only apply to work loaded in the NISC.

Character 1: switch type, (**1** = 1A; **2** = 2B ESS; **3** = DMS 100/200; **4** = DMS REMOTES; **5** = 5ESS; **6** = 5ESS REMOTES; **7** = STROMBERG; **8** =STROMBERG REMOTES; **9**= EWSD; **0** = DMS10).

Character 2 & 3: Work Function

Character 4 & 5: xx Wild Cards for NISC; xx = COSMOS Wire Center

1A ESS WORK TYPES

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
1AAxx	20	DT/RW	77/377M	NPA / NEW / CHANGE
1AIxx	20	DT		AIN SERVICES
1BBxx	20	DT/RW		900 / NEW / CHANGE
1ECxx	20	DT/RW		Trouble Found by ▒ ECS▒
1EExx	20	DT/RW		COS / NEW / CHANGE
1FAxx	20	DT/RW		FEATURE / SERVICE ACTIVATION
1FFxx	20	DT/RW		LAND TO MOBILE
1GGxx	20	DT/RW		WATS NPA / NEW / CHANGE
1HHxx	20	DT/RW		NXX / NEW / CHANGE
1IAxx	20	DT/RW		FNPANXX / INTRALATA/NEW/CHG
1IBxx	20	DT/RW		Trouble referred by ▒ IBIS▒
1ISxx	20	DT/RW		ISDN SERVICES (PRI)
1KKxx	20	DT/RW		FGD IXC / NEW / CHANGE
1LPxx	19	DT		LNP OPN NXX / END OFC
1LQxx	19	DT		LNP ACT QUERY / TND
1MAxx	20	DT/RW		WORK REQUEST - ▒ MATV▒ DEMAND TEST
1MBXX	20	DT/RW		MANUAL DEMAND TEST
1MDXX	20	DT/RW		WORK REQUEST - ▒ NON-MATV▒ DEMAND TEST
1MMXX	20	DT/RW		FGB IXC / NEW / CHANGE
1MRXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ ROUTINE TESTING
1MSXX	20	DT/RW		MATV TROUBLE
1MTXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ DEMAND TESTING
1MWxx	20	DT/RW		ASSIGN MILLIWAT TEST NUMBER
1NLUP	20	DT		NAILUP
1NXTR	18	SP		TRANSLATIONS TROUBLE REFERRAL
1PPxx	20	DT/RW		ESSX / COMPLEX / NEW
1SIxx	20	DT		SERVICE INQUIRY
1SSxx	20	DT/RW		ESSX / SIMPLE / CHANGE
1TTxx	20	DT/RW		ESSX DUMPS
1YYxx	20	DT/RW		OFFICE CONVERSION ACTIVITY

DMS 100/200 WORK TYPES:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
3AAxx	20	DT/RW	77/377M	NPA / NEW / CHANGE
3AIxx	20	DT		AIN SERVICES
3BBxx	20	DT/RW		900 / NEW / CHANGE
3ECxx	20	DT/RW		Trouble Found by ▒ ECS▒
3EExx	20	DT/RW		COS / NEW / CHANGE
3FAxx	20	DT/RW		FEATURE / SERVICE ACTIVATION
3FFxx	20	DT/RW		LAND TO MOBILE
3GGxx	20	DT/RW		WATS NPA / NEW / CHANGE
3HHxx	20	DT/RW		NXX / NEW / CHANGE
3IAxx	20	DT/RW		FNPANXX / INTRALATA/NEW/CHG
3IBxx	20	DT/RW		Trouble referred by ▒ IBIS▒
3ISxx	20	DT/RW		ISDN SERVICES (PRI)
3KKxx	20	DT/RW		FGD IXC / NEW / CHANGE
3LPxx	19	DT		LNP OPN NXX / END OFC
3LQxx	19	DT		LNP ACT QUERY / TND
3MAxx	20	DT/RW		WORK REQUEST - ▒ MATV▒ DEMAND TEST
3MBXX	20	DT/RW		MANUAL DEMAND TEST
3MDXX	20	DT/RW		WORK REQUEST - ▒ NON-MATV▒ DEMAND TEST
3MMXX	20	DT/RW		FGB IXC / NEW / CHANGE
3MRXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ ROUTINE TESTING
3MSXX	20	DT/RW		MATV TROUBLE
3MTXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ DEMAND TESTING
3MWxx	20	DT/RW		ASSIGN MILLIWAT TEST NUMBER
3NLUP	20	DT		NAILUP
3NXTR	18	SP		TRANSLATIONS TROUBLE REFERRAL
3PPxx	20	DT/RW		ESSX / COMPLEX / NEW
3SIxx	20	DT		SERVICE INQUIRY
3SSxx	20	DT/RW		ESSX / SIMPLE / CHANGE
3TTxx	20	DT/RW		ESSX DUMPS
3YYxx	20	DT/RW		OFFICE CONVERSION ACTIVITY

DMS 100/200 REMOTE WORK TYPES:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
4AAxx	20	DT/RW	77/377M	NPA / NEW / CHANGE
4AIxx	20	DT		AIN SERVICES
4BBxx	20	DT/RW		900 / NEW / CHANGE
4ECxx	20	DT/RW		Trouble Found by ▒ ECS▒
4EExx	20	DT/RW		COS / NEW / CHANGE
4FAxx	20	DT/RW		FEATURE / SERVICE ACTIVATION
4FFxx	20	DT/RW		LAND TO MOBILE
4GGxx	20	DT/RW		WATS NPA / NEW / CHANGE
4HHxx	20	DT/RW		NXX / NEW / CHANGE
4IAxx	20	DT/RW		FNPANXX / INTRALATA/NEW/CHG
4IBxx	20	DT/RW		Trouble referred by ▒ IBIS▒
4ISxx	20	DT/RW		ISDN SERVICES (PRI)
4KKxx	20	DT/RW		FGD IXC / NEW / CHANGE
4LPxx	19	DT		LNP OPN NXX / END OFC
4LQxx	19	DT		LNP ACT QUERY / TND
4MAxx	20	DT/RW		WORK REQUEST - ▒ MATV▒ DEMAND TEST
4MBXX	20	DT/RW		MANUAL DEMAND TEST
4MDXX	20	DT/RW		WORK REQUEST - ▒ NON-MATV▒ DEMAND TEST
4MMXX	20	DT/RW		FGB IXC / NEW / CHANGE
4MRXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ ROUTINE TESTING
4MSXX	20	DT/RW		MATV TROUBLE
4MTXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ DEMAND TESTING
4MWxx	20	DT/RW		ASSIGN MILLIWAT TEST NUMBER
4NLUP	20	DT		NAILUP
4NXTR	18	SP		TRANSLATIONS TROUBLE REFERRAL
4PPxx	20	DT/RW		ESSX / COMPLEX / NEW
4SIxx	20	DT		SERVICE INQUIRY
4SSxx	20	DT/RW		ESSX / SIMPLE / CHANGE
4TTxx	20	DT/RW		ESSX DUMPS
4YYxx	20	DT/RW		OFFICE CONVERSION ACTIVITY

5ESS WORK TYPES

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
5AAxx	20	DT/RW	77/377M	NPA / NEW / CHANGE
5AIxx	20	DT		AIN SERVICES
5BBxx	20	DT/RW		900 / NEW / CHANGE
5ECxx	20	DT/RW		Trouble Found by ▒ ECS▒
5EExx	20	DT/RW		COS / NEW / CHANGE
5FAxx	20	DT/RW		FEATURE / SERVICE ACTIVATION
5FFxx	20	DT/RW		LAND TO MOBILE
5GGxx	20	DT/RW		WATS NPA / NEW / CHANGE
5HHxx	20	DT/RW		NXX / NEW / CHANGE
5IAxx	20	DT/RW		FNPANXX / INTRALATA/NEW/CHG
5IBxx	20	DT/RW		Trouble referred by ▒ IBIS▒
5ISxx	20	DT/RW		ISDN SERVICES (PRI)
5KKxx	20	DT/RW		FGD IXC / NEW / CHANGE
5LPxx	19	DT		LNP OPN NXX / END OFC
5LQxx	19	DT		LNP ACT QUERY / TND
5MAxx	20	DT/RW		WORK REQUEST - ▒ MATV▒ DEMAND TEST
5MBXX	20	DT/RW		MANUAL DEMAND TEST
5MDXX	20	DT/RW		WORK REQUEST - ▒ NON-MATV▒ DEMAND TEST
5MMXX	20	DT/RW		FGB IXC / NEW / CHANGE
5MRXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ ROUTINE TESTING
5MSXX	20	DT/RW		MATV TROUBLE
5MTXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ DEMAND TESTING
5MWxx	20	DT/RW		ASSIGN MILLIWAT TEST NUMBER
5NLUP	20	DT		NAILUP
5NXTR	18	SP		TRANSLATIONS TROUBLE REFERRAL
5PPxx	20	DT/RW		ESSX / COMPLEX / NEW
5SIxx	20	DT		SERVICE INQUIRY
5SSxx	20	DT/RW		ESSX / SIMPLE / CHANGE
5TTxx	20	DT/RW		ESSX DUMPS
5YYxx	20	DT/RW		OFFICE CONVERSION ACTIVITY

5ESS REMOTE WORK TYPES:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
6AAxx	20	DT/RW	77/377M	NPA / NEW / CHANGE
6AIxx	20	DT		AIN SERVICES
6BBxx	20	DT/RW		900 / NEW / CHANGE
6ECxx	20	DT/RW		Trouble Found by ▒ ECS▒
6EExx	20	DT/RW		COS / NEW / CHANGE
6FAxx	20	DT/RW		FEATURE / SERVICE ACTIVATION
6FFxx	20	DT/RW		LAND TO MOBILE
6GGxx	20	DT/RW		WATS NPA / NEW / CHANGE
6HHxx	20	DT/RW		NXX / NEW / CHANGE
6IAxx	20	DT/RW		FNPANXX / INTRALATA/NEW/CHG
6IBxx	20	DT/RW		Trouble referred by ▒ IBIS▒
6ISxx	20	DT/RW		ISDN SERVICES (PRI)
6KKxx	20	DT/RW		FGD IXC / NEW / CHANGE
6LPxx	19	DT		LNP OPN NXX / END OFC
6LQxx	19	DT		LNP ACT QUERY / TND
6MAxx	20	DT/RW		WORK REQUEST - ▒ MATV▒ DEMAND TEST
6MBXX	20	DT/RW		MANUAL DEMAND TEST
6MDXX	20	DT/RW		WORK REQUEST - ▒ NON-MATV▒ DEMAND TEST
6MMXX	20	DT/RW		FGB IXC / NEW / CHANGE
6MRXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ ROUTINE TESTING
6MSXX	20	DT/RW		MATV TROUBLE
6MTXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ DEMAND TESTING
6MWxx	20	DT/RW		ASSIGN MILLIWAT TEST NUMBER
6NLUP	20	DT		NAILUP
6NXTR	18	SP		TRANSLATIONS TROUBLE REFERRAL
6PPxx	20	DT/RW		ESSX / COMPLEX / NEW
6SIxx	20	DT		SERVICE INQUIRY
6SSxx	20	DT/RW		ESSX / SIMPLE / CHANGE
6TTxx	20	DT/RW		ESSX DUMPS
6YYxx	20	DT/RW		OFFICE CONVERSION ACTIVITY

STROMBERG WORK TYPES:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
7AAxx	20	DT/RW	77/377M	NPA / NEW / CHANGE
7AIxx	20	DT		AIN SERVICES
7BBxx	20	DT/RW		900 / NEW / CHANGE
7ECxx	20	DT/RW		Trouble Found by ▒ ECS▒
7EExx	20	DT/RW		COS / NEW / CHANGE
7FAxx	20	DT/RW		FEATURE / SERVICE ACTIVATION
7FFxx	20	DT/RW		LAND TO MOBILE
7GGxx	20	DT/RW		WATS NPA / NEW / CHANGE
7HHxx	20	DT/RW		NXX / NEW / CHANGE
7IAxx	20	DT/RW		FNPANXX / INTRALATA/NEW/CHG
7IBxx	20	DT/RW		Trouble referred by ▒ IBIS▒
7ISxx	20	DT/RW		ISDN SERVICES (PRI)
7KKxx	20	DT/RW		FGD IXC / NEW / CHANGE
7LPxx	19	DT		LNP OPN NXX / END OFC
7LQxx	19	DT		LNP ACT QUERY / TND
7MAxx	20	DT/RW		WORK REQUEST - ▒ MATV▒ DEMAND TEST
7MBXX	20	DT/RW		MANUAL DEMAND TEST
7MDXX	20	DT/RW		WORK REQUEST - ▒ NON-MATV▒ DEMAND TEST
7MMXX	20	DT/RW		FGB IXC / NEW / CHANGE
7MRXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ ROUTINE TESTING
7MSXX	20	DT/RW		MATV TROUBLE
7MTXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ DEMAND TESTING
7MWxx	20	DT/RW		ASSIGN MILLIWAT TEST NUMBER
7NLUP	20	DT		NAILUP
7NXTR	18	SP		TRANSLATIONS TROUBLE REFERRAL
7PPxx	20	DT/RW		ESSX / COMPLEX / NEW
7SIxx	20	DT		SERVICE INQUIRY
7SSxx	20	DT/RW		ESSX / SIMPLE / CHANGE
7TTxx	20	DT/RW		ESSX DUMPS
7YYxx	20	DT/RW		OFFICE CONVERSION ACTIVITY

STROMBERG REMOTE WORK TYPES:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
8AAxx	20	DT/RW	77/377M	NPA / NEW / CHANGE
8AIxx	20	DT		AIN SERVICES
8BBxx	20	DT/RW		900 / NEW / CHANGE
8ECxx	20	DT/RW		Trouble Found by ▒ ECS▒
8EExx	20	DT/RW		COS / NEW / CHANGE
8FAxx	20	DT/RW		FEATURE / SERVICE ACTIVATION
8FFxx	20	DT/RW		LAND TO MOBILE
8GGxx	20	DT/RW		WATS NPA / NEW / CHANGE
8HHxx	20	DT/RW		NXX / NEW / CHANGE
8IAxx	20	DT/RW		FNPANXX / INTRALATA/NEW/CHG
8IBxx	20	DT/RW		Trouble referred by ▒ IBIS▒
8ISxx	20	DT/RW		ISDN SERVICES (PRI)
8KKxx	20	DT/RW		FGD IXC / NEW / CHANGE
8LPxx	19	DT		LNP OPN NXX / END OFC
8LQxx	19	DT		LNP ACT QUERY / TND
8MAxx	20	DT/RW		WORK REQUEST - ▒ MATV▒ DEMAND TEST
8MBXX	20	DT/RW		MANUAL DEMAND TEST
8MDXX	20	DT/RW		WORK REQUEST - ▒ NON-MATV▒ DEMAND TEST
8MMXX	20	DT/RW		FGB IXC / NEW / CHANGE
8MRXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ ROUTINE TESTING
8MSXX	20	DT/RW		MATV TROUBLE
8MTXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ DEMAND TESTING
8MWxx	20	DT/RW		ASSIGN MILLIWAT TEST NUMBER
8NLUP	20	DT		NAILUP
8NXTR	18	SP		TRANSLATIONS TROUBLE REFERRAL
8PPxx	20	DT/RW		ESSX / COMPLEX / NEW
8SIxx	20	DT		SERVICE INQUIRY
8SSxx	20	DT/RW		ESSX / SIMPLE / CHANGE
8TTxx	20	DT/RW		ESSX DUMPS
8YYxx	20	DT/RW		OFFICE CONVERSION ACTIVITY

EWSD WORK TYPES:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
9AAxx	20	DT/RW	77/377M	NPA / NEW / CHANGE
9AIxx	20	DT		AIN SERVICES
9BBxx	20	DT/RW		900 / NEW / CHANGE
9ECxx	20	DT/RW		Trouble Found by ▒ ECS▒
9EExx	20	DT/RW		COS / NEW / CHANGE
9FAxx	20	DT/RW		FEATURE / SERVICE ACTIVATION
9FFxx	20	DT/RW		LAND TO MOBILE
9GGxx	20	DT/RW		WATS NPA / NEW / CHANGE
9HHxx	20	DT/RW		NXX / NEW / CHANGE
9IAxx	20	DT/RW		FNPANXX / INTRALATA/NEW/CHG
9IBxx	20	DT/RW		Trouble referred by ▒ IBIS▒
9ISxx	20	DT/RW		ISDN SERVICES (PRI)
9KKxx	20	DT/RW		FGD IXC / NEW / CHANGE
9LPxx	19	DT		LNP OPN NXX / END OFC
9LQxx	19	DT		LNP ACT QUERY / TND
9MAxx	20	DT/RW		WORK REQUEST - ▒ MATV▒ DEMAND TEST
9MBXX	20	DT/RW		MANUAL DEMAND TEST
9MDXX	20	DT/RW		WORK REQUEST - ▒ NON-MATV▒ DEMAND TEST
9MMXX	20	DT/RW		FGB IXC / NEW / CHANGE
9MRXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ ROUTINE TESTING
9MSXX	20	DT/RW		MATV TROUBLE
9MTXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ DEMAND TESTING
9MWxx	20	DT/RW		ASSIGN MILLIWAT TEST NUMBER
9NLUP	20	DT		NAILUP
9NXTR	18	SP		TRANSLATIONS TROUBLE REFERRAL
9PPxx	20	DT/RW		ESSX / COMPLEX / NEW
9SIxx	20	DT		SERVICE INQUIRY
9SSxx	20	DT/RW		ESSX / SIMPLE / CHANGE
9TTxx	20	DT/RW		ESSX DUMPS
9YYxx	20	DT/RW		OFFICE CONVERSION ACTIVITY

DMS 10 WORK TYPES:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
0AAxx	20	DT/RW	77/377M	NPA / NEW / CHANGE
0AIxx	20	DT		AIN SERVICES
0BBxx	20	DT/RW		900 / NEW / CHANGE
0ECxx	20	DT/RW		Trouble Found by ▒ ECS▒
0EExx	20	DT/RW		COS / NEW / CHANGE
0FAxx	20	DT/RW		FEATURE / SERVICE ACTIVATION
0FFxx	20	DT/RW		LAND TO MOBILE
0GGxx	20	DT/RW		WATS NPA / NEW / CHANGE
0HHxx	20	DT/RW		NXX / NEW / CHANGE
0IAxx	20	DT/RW		FNPANXX / INTRALATA/NEW/CHG
0IBxx	20	DT/RW		Trouble referred by ▒ IBIS▒
0ISxx	20	DT/RW		ISDN SERVICES (PRI)
0KKxx	20	DT/RW		FGD IXC / NEW / CHANGE
0LPxx	19	DT		LNP OPN NXX / END OFC
0LQxx	19	DT		LNP ACT QUERY / TND
0MAxx	20	DT/RW		WORK REQUEST - ▒ MATV▒ DEMAND TEST
0MBXX	20	DT/RW		MANUAL DEMAND TEST
0MDXX	20	DT/RW		WORK REQUEST - ▒ NON-MATV▒ DEMAND TEST
0MMXX	20	DT/RW		FGB IXC / NEW / CHANGE
0MRXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ ROUTINE TESTING
0MSXX	20	DT/RW		MATV TROUBLE
0MTXX	20	DT/RW		TROUBLE FOUND BY ▒ MATV▒ DEMAND TESTING
0MWxx	20	DT/RW		ASSIGN MILLIWAT TEST NUMBER
0NLUP	20	DT		NAILUP
0NXTR	18	SP		TRANSLATIONS TROUBLE REFERRAL
0PPxx	20	DT/RW		ESSX / COMPLEX / NEW
0SIxx	20	DT		SERVICE INQUIRY
0SSxx	20	DT/RW		ESSX / SIMPLE / CHANGE
0TTxx	20	DT/RW		ESSX DUMPS
0YYxx	20	DT/RW		OFFICE CONVERSION ACTIVITY

5.09 NETWORK SERVICE CENTER (NSC) - MAINTENANCE:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
TMNSC	19	SP	77/377M	Network Svc CNTR (NSC) TBL
TMSES	19	TR	77/377M	Service Eval System (SES)TBL

5.10 NETWORK SWITCHING and DATA CENTER (NSDC)- MAINTENANCE:

MSCCT	10	TR	77/377M	Common Transport Trunk Group **(Immediate)**
MSCE9	02	TR	77/377M	E911 Trk Trouble **(Immediate)**
MSCIC	15	TR	77/377M	IC CXR Blockage - **(Immediate dispatch)**
MSCMT	19	TR	77/377M	Msg. Trunk - Not Immed <=1.5 Days Clr Tm
MSCSV	19	TR	77/377M	Svc.Circuit -Not Immed <=2 Days Clear Tm
MSCXL	19	SP	77/377M	Translations Trouble <=1.5 Days Clear Tm

IMPORTANT: ***ALARM ALL WORK TYPES DESIGNATED IMMEDIATE DISPATCH***

5.11 PROACTIVE ANALYSIS and REPAIR (PAR) - MAINTENANCE:

PARAL	19	SP	77/377M	ALIT Trouble
PARNT	19	SP	77/377M	NO Test Trunk Trouble
PAROS	18	SP	77/377M	OOS PREDICTOR Reports- **IMED**
PARSA	19	SP	77/377M	Service Affect PREDICTOR RPT

5.12 PULSE LINK CENTER (PLC) - MAINTENANCE:

PLDDS	15	SP	377M	DDS Trouble
PLDP1	19	SP	377M	DPN100 Trouble
PLDP5	19	SP	377M	DPN50 Trouble
PLINK	15	SP	377M	Service Affect PREDICTOR RPT
PLISD	18	SP	377M	ISDN Trouble Report

5.13 INFORMATION TECHNOLOGY TRANSPORT CENTER (RTOC) - MAINTENANCE:

MSCB1	15	NT	377M	BBG Priority 1 - Imed Dispatch
MSCB2	18	NT	377M	BBG Priority 2 - <= 2 Hours
MSCB3	19	NT	377M	BBG Priority 3 - <= 12 Hours
MSCB4	19	NT	377M	BBG Maintenance Test Assist
MSCC1	15	NT	377M	Priority 1 - **Imed** Dispatch
MSCC2	18	NT	377M	Priority 2 - <= 2 Hours
MSCC3	19	NT	377M	Priority 3 - <= 12 Hours

MSCC4	19	NT	377M	Maintenance Test Assist

5.14 OPERATOR SVCS & BUSINESS/RESIDENCE TROUBLE TICKETS:

Operator Services and Business/Residence center troubles for tops positions and equipment, #5ACD/Rockwell ACD positions and equipment, and AIS equipment and positions.

Customer/Operator Services Trouble Ticket - Standard Work Types

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
CSAC**x**	19	SP	77/377M	Customer SVCS ACD Trbl RPT
CSTER	19	SP	77/377M	Cust SVCS Terminal (CRT) TBL
TOPSA	15	SP	117M	OPR SVCS TRBL RPT ABNORMAL - IMMEDIATE
TOPSP	19	SP	117M	OPR SVCS TRBL RPT POT.SERV AFF. < 24 HRS
TOPSN	23	SP	117M	OPR SVCS TRBL RPT NON SERV AFF. < 72 HRS
TOPSD	23	SP	117M	OPR SVCS TRBL RPT APPOINTMENT
SPLCS	19	SP	77/377M	Terminal Trouble (CRT)

5.15 ADVANCED INTELLEGENT NETWORK CENTER (AINC) - MAINTENANCE:

NOTE! The following work types are to be loaded in the "NISC" & "AINC" centers ONLY!! DO NOT LOAD IN ANY REGION COFWG CENTER/LOCATION PRICING TABLE (DIPRC)****
SERVICES:

MSCAD	19	SP	377M	ADSI....Call Waiting Deluxe
MSCAP	19	SP	377M	BAP..Basic AIN Programmability
MSCAW	19	SP	377M	Adwatch
MSCCL	19	SP	377M	Crisis Link
MSCCN	19	SP	377M	CNAM....Caller ID Deluxe
MSCCP	19	SP	377M	Call Patterns
MSCDR	19	SP	377M	Data Reach
MSCFC	19	SP	377M	Flexible Call Forwarding
MSCLL	19	SP	377M	Local Link
MSCOC	19	SP	377M	Office Connect
MSCSR	19	SP	377M	Smart Route
MSCZC	19	SP	377M	ZipConnect WC & ZIP ROUTING

AIN CENTER FUNCTIONS:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
AINAL	21	SP	377M	Analysis
AINBS	21	SP	377M	BellSouth Software Load
AINPF	21	SP	377M	Platform Software Load
AINCB	21	SP	377M	Convergent Backup
AINNB	21	SP	377M	NetPilot Backup
AINPR	21	SP	377M	AIN Provisioning
AINSU	21	SP	377M	AIN BBS Support
AINXL	21	SP	377M	AIN Translation Support
AINTB	21	SP	377M	AIN Basic Support(Help Desk)
AINTR	30	XX	FC5535	AIN Training
AINMT	30	XX	FC5532	Meeting
AINSM	21	SP	377M	SMS Platform Trouble
AIN25	21	NT	357M	X25 Link Trouble
AINSC	21	SP	377M	SCP Platform Trouble

5.16 INDEPENDENT PAY PHONE CENTER

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
CRCCP	19	ND	77/377M	DIVERSIFIED COIN SVC Analysis

5.17 ESCALATION CENTER (WMC) WORK TYPES

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
CXRE1	15	NT	77/377M	1ST LEV ESCALATION TO CO/FWG VIA WFA/DI
CXRE2	10	NT	77/377M	2ND LEV ESCALATION TO CO/FWG VIA WFA/DI
CXRE3	03	NT	77/377M	3RD LEV ESCALATION TO CO/FWG VIA WFA/DI
CXRF1	15	ND	77/377M	1ST LEV ESCALATION TO SS I&M VIA WFA/DO
CXRF2	10	ND	77/377M	2ND LEV ESCALATION TO SS I&M VIA WFA/DO
CXRF3	03	ND	77/377M	3RD LEV ESCALATION TO SS I&M VIA WFA/DO
HICE1	15	NT	77/377M	1ST LEV ESCALATION TO CO/FWG VIA WFA/DI
HICE2	10	NT	77/377M	2ND LEV ESCALATION TO CO/FWG VIA WFA/DI
HICE3	03	NT	77/377M	3RD LEV ESCALATION TO CO/FWG VIA WFA/DI
HICF1	15	ND	77/377M	1ST LEV ESCALATION TO SS I&M VIA WFA/DO
HICF2	10	ND	77/377M	2ND LEV ESCALATION TO SS I&M VIA WFA/DO
HICF3	03	ND	77/377M	3RD LEV ESCALATION TO SS I&M VIA WFA/DO
HISE1	15	NT	77/377M	1ST LEV ESCALATION TO CO/FWG VIA WFA/DI
HISE2	10	NT	77/377M	2ND LEV ESCALATION TO CO/FWG VIA WFA/DI
HISE3	03	NT	77/377M	3RD LEV ESCALATION TO CO/FWG VIA WFA/DI
HISF1	15	ND	77/377M	1ST LEV ESCALATION TO SS I&M VIA WFA/DO
HISF2	10	ND	77/377M	2ND LEV ESCALATION TO SS I&M VIA WFA/DO
HISF3	03	ND	77/377M	3RD LEV ESCALATION TO SS I&M VIA WFA/DO
NDSE1	15	NT	77/377M	1ST LEV ESCALATION TO CO/FWG VIA WFA/DI
NDSE2	10	NT	77/377M	2ND LEV ESCALATION TO CO/FWG VIA WFA/DI
NDSE3	03	NT	77/377M	3RD LEV ESCALATION TO CO/FWG VIA WFA/DI
NDSF1	15	ND	77/377M	1ST LEV ESCALATION TO SS I&M VIA WFA/DO
NDSF2	10	ND	77/377M	2ND LEV ESCALATION TO SS I&M VIA WFA/DO
NDSF3	03	ND	77/377M	3RD LEV ESCALATION TO SS I&M VIA WFA/DO
MSCE1	15	NT	77/377M	1ST LEV ESCALATION TO CO/FWG VIA WFA/DI
MSCE2	10	NT	77/377M	2ND LEV ESCALATION TO CO/FWG VIA WFA/DI
MSCE3	03	NT	77/377M	3RD LEV ESCALATION TO CO/FWG VIA WFA/DI
MSCF1	15	ND	77/377M	1ST LEV ESCALATION TO SS I&M VIA WFA/DO
MSCF2	10	ND	77/377M	2ND LEV ESCALATION TO SS I&M VIA WFA/DO
MSCF3	03	ND	77/377M	3RD LEV ESCALATION TO SS I&M VIA WFA/DO
MSGE1	15	NT	77/377M	1ST LEV ESCALATION TO CO/FWG VIA WFA/DI
MSGE2	10	NT	77/377M	2ND LEV ESCALATION TO CO/FWG VIA WFA/DI
MSGE3	03	NT	77/377M	3RD LEV ESCALATION TO CO/FWG VIA WFA/DI
MSGF1	15	ND	77/377M	1ST LEV ESCALATION TO SS I&M VIA WFA/DO
MSGF2	10	ND	77/377M	2ND LEV ESCALATION TO SS I&M VIA WFA/DO
MSGF3	03	ND	77/377M	3RD LEV ESCALATION TO SS I&M VIA WFA/DO
SPLE1	15	NT	77/377M	1ST LEV ESCALATION TO CO/FWG VIA WFA/DI
SPLE2	10	NT	77/377M	2ND LEV ESCALATION TO CO/FWG VIA WFA/DI
SPLE3	03	NT	77/377M	3RD LEV ESCALATION TO CO/FWG VIA WFA/DI
SPLF1	15	ND	77/377M	1ST LEV ESCALATION TO SS I&M VIA WFA/DO
SPLF2	10	ND	77/377M	2ND LEV ESCALATION TO SS I&M VIA WFA/DO
SPLF3	03	ND	77/377M	3RD LEV ESCALATION TO SS I&M VIA WFA/DO

5.18 DATA CUSTOMER SUPPORT CENTER (DCSC) WORK TYPES:

DIGITAL SERVICES GROUP (DSG)

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION	WKGRP
NDSAB	19	NT	377M	Bus Class - ADSL Trouble	ET
NDSAF	19	ND	377M	Non Des ADSL Frame Trouble (Use for Load Coil, ANAC, Dial Tone Test, DSLAM Port Change)	FA
NDSAI	15	NT	377M	Non Des ADSL Install Trouble (Use for retest of modem sync)	ET
NDSAM	19	NT	377M	Non Design ADSL MTCE Trouble	ET

INFRASTRUCTURE GROUP

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
MSGIF	16	TR	377M	MSG TRUNK TEST ASSIST- IMMEDIATE
SPLIF	16	NT	377M	SPECIAL TEST ASSIST -IMMEDIATE

5.19 PROGRAM IMPACTS AND TECHNOLOGY DEPLOYMENT:

Program Impacts may be either regional or area. These situations represent deployment of new technology or services being introduced into the network. These deployments generally rolled out in an aggressive manner and add work content which directly impacts the field work load over and above what may normally be expected. The methodology for constructing work types for loading and tracking this work is detailed below:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
PIRxx	10	RW/DT	R136C3	Program Impact Regional
PIAxx	10	RW/DT	R136C3	Program Impact Area

Examples of WorkTypes which can be constructed for regional deployments.

PIRAI	10	RW/DT	R133C3	Program Impact - AIN Adv Int Net
PIRCS	10	RW/DT	R129C3	Program Impact CCSAC CONV
PIRGR	10	RW/DT	R136C3	Program Impact DMS-100 Data GRM
PIRIS	10	RW/DT	R135C3	Program Impact ISDN CONV
PIRS7	10	RW/DT	R131C3	Program Impact CCS7 Conversion
PIRSO	10	RW/DT	R134C3	Program Impact SONET CONV
PIRTS	10	RW/DT	R130C3	Program Impact Touchstar

Examples of WorkTypes which can be constructed for local Program Impacts.

PIA10	10	RW/DT	R137C3	Program Impact-10 Digit DIAL
PIALD	10	RW/DT	R137C3	Program Impact Local Dial Plan North Carolina

5.20 PREVENTATIVE MAINTENANCE - EQUIPMENT/POWER/TOLL TRANSMISSION ROUTINES:

Standard Work Types - Central Office Routines:

Unless otherwise noted, priorities for unique routines are to be assigned in accordance to the priority given the particular routine group. Critical backup tape routines are to be assigned the priority identified for the particular routine.

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
E0000	10	PM	77/377M	5ESS BK UP FC SET
E0001	10	PM	77/377M	5ESS DIST BKUP TAPE
E0034	10	PM	77/377M	5ESS DAT TAPE OFC SET
E0608	10	PM	77/377M	1A SR TAPE OFC SET
E0609	10	PM	77/377M	1A SR TAPE RT STO
E0620	10	PM	77/377M	1A UPDATE ROOT PARTITION
E0621	10	PM	77/377M	1A OFC SET & RT STO
E1001	10	PM	77/377M	4E SR TAPE OFC SET
E1002	10	PM	77/377M	4E SR TAPE RT STO
E1003	10	PM	77/377M	4E APS TAPE OFC SET
E1004	10	PM	77/377M	4E APS TAPE RT STO
E2603	10	PM	77/377M	DMS10 BK UP OFC SET
E2604	10	PM	77/377M	DMS10 BK UP RT STO
E2712	10	PM	77/377M	DMS100 OFC IMAGE TO SLM DSK
E2714	10	PM	77/377M	DMS100 COPY IMAGE SLM TO SLM
E2715	10	PM	77/377M	DMS100 COPY IMAGE SLM TO RT STO
E2717	10	PM	77/377M	DMS100 ENET IMAGE TO SLM
E2718	10	PM	77/377M	DMS100 LIM IMAGE TO SLM
E2719	10	PM	77/377M	DMS100 LIU7 IMAGE TO SLM
E2912	10	PM	77/377M	DMS100/200 OFC IMAGE TO SLM
E2914	10	PM	77/377M	DMS100/200 IMAGE SLM TO SLM
E2915	10	PM	77/377M	DMS100/200 IMAGE SLM TO RT STO
E2917	10	PM	77/377M	DMS100/200 ENET IMAGE TO SLM
E2918	10	PM	77/377M	DMS100/200 LIM IMAGE TO SLM
E2919	10	PM	77/377M	DMS100/200 LIU7 IMAGE TO SLM
E3111	10	PM	77/377M	DMS200 OFC IMAGE SLM TO SLM
E3113	10	PM	77/377M	DMS100/200 COPY IMAGE SLM TO SLM

5.20 PREVENTATIVE MAINTENANCE - EQUIPMENT/POWER/TOLL TRANSMISSION ROUTINES:

Standard Work Types - Central Office Routines:

WORK TYPE	PRI	WORK CODE	FRC CODE	WORK DESCRIPTION
E3114	10	PM	77/377M	DMS100/200 COPY IMAGE SLM-RT STO
E3116	10	PM	77/377M	DMS200 ENET IMAGE TO SLM
E3117	10	PM	77/377M	DMS200 LIM IMAGE TO SLM
E3118	10	PM	77/377M	DMS200 LIU7 IMAGE TO SLM
E5000	10	PM	77/377M	SC DC0 $FIL SYS BKUP OFC SET
E5001	10	PM	77/377M	SC DC0 $FIL SYS BKUP RT STO
E5100	10	PM	77/377M	SC RNS $FIL SYS BKUP OFC SET
E5101	10	PM	77/377M	SC RNS $FIL SYS BKUP RT STO
E5400	10	PM	77/377M	SIEMENS EWSD APS BKUP OFC SET
E5401	10	PM	77/377M	SIEMENS EWSD APS BKUP RT STO

Central Office Routine Groups:

WORK Type Range	PRI Range	WORK CODE	FRC CODE	WORK DESCRIPTION
B0000 – 9999	40 –50	PW/PM	77/377M	BLDG PREVENTIVE MTCE
E0000 – 9999	30 –50	PM	77/377M	1A/2B/5E/DMS10/DMS200/ ROCKWELL/SEIMENS/ERICSSON/ STROMBERG/FUJITSU
M0000 – 9999	50 – 70	PW/PM	77/377M	MISC PREVENTIVE MAINTENANCE
P0000 – 9999	25 – 35	PM	117M/257M	POWER EQUIPMENT
S0000 – 9999	30 – 35	PW/PM	77/377M	SAFETY
T0000 – 9999	30 –50	PW/PM	257M/357M	TRANSMISSION/TOLL EQUIPMENT
Z0000 – 9999	20 – 90	PW/PM	VARIABLE	LOCAL – NON STANDARD – ROUTINES

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WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
ADS	BITTS	19	FR	ADSL INSTALLATION	FR	*
AIN25	NT	21	AIN	X.25 Link Trbl	MTCE	
AINAL	SP	21	AIN	Analysis	MTCE	
AINBS	SP	21	AIN	BellSouth Software Load	MTCE	
AINCB	SP	21	AIN	Convergent Back-Up	MTCE	
AINMT	XX	30	AIN	Meeting	MISC	
AINNB	SP	21	AIN	NetPilot Back-Up	MTCE	
AINPF	SP	21	AIN	Platform Software Load	MTCE	
AINPR	SP	21	AIN	AIN Provisioning	MTCE	
AINSC	SP	21	AIN	Scp Platform Trbl	MTCE	
AINSM	SP	21	AIN	Sms Platform Trbl	MTCE	
AINSU	SP	21	AIN	AIN BBS Support	MTCE	
AINTB	SP	21	AIN	AIN Basic Support (Help Desk)	MTCE	
AINTR	XX	30	AIN	AIN Training	MISC.	
AINXL	SP	21	AIN	AIN Translations Support	MTCE	
Bxxxx	PM	**	SYS	Bldg Prv Mtc. Xxxx = 00- 9999 PRI 40-50	PMTC	
CDDD	DT	19	INNS	Short Interval Order Notice	PR	*
CH	FR	20	CICO	Changes	FRM	
CNHDx	DT	10	MAN	Demand Req Hardwired Chg. Notice	FRM	
CNHRx	RW	10	SYS	Repetitive Req Hardwired Chg. Notice	REP	
CNPDx	DT	10	MAN	Demand Req Plug-In Change Notice	FRM	
CNPRx	RW	10	SYS	Repetitive Req Plug-In Change Notice	REP	
CODES	NT	19	MAN	CODES COLLECTOR TROUBLE	MTCE	
CPC	FR	20	CICO	N/T/C Specials CPC Inward	FRM	
CPO	FR	20	CICO	D/F Specials CPC Outward	FRM	
CRBUS	ND	19	RRC/BRC	Business Trbl Rpt	MTCE	*
CRCAR	ND	19	RRC/BRC	CXR Trbl Rpt	MTCE	*
CRCCH	ND	19	RRC/BRC	Coin Charge Trbl Rpt	MTCE	*
CRCCP	ND	19	IPP	CPE Coin Trbl Rpt	MTCE	*
CRCNT	ND	19	RRC/BRC	Centrex Trbl Rpt	MTCE	*
CRDAT	ND	19	RRC/BRC	Data Trbl Rpt	MTCE	*
CRFRM	FR	19	MAN	Frame Customer Trbl. Report	MTCE	*

CRMOB	ND	19	RRC/BRC	Mobile Trbl Rpt	MTCE	*

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WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
CRPBX	ND	19	RRC/BRC	PBX Trbl Rpt	MTCE	*
CRRES	ND	19	RRC/BRC	Residence Trbl Rpt	MTCE	*
CRRUR	ND	19	RRC/BRC	Rural Trbl Rpt	MTCE	*
CRSST	ND	19	RRC/BRC	SS Telephone Trbl Rpt	MTCE	*
CRUNC	ND	19	RRC/BRC	Unclassified Trbl Rpt	MTCE	*
CRVDO	ND	19	RRC/BRC	Video Trbl Rpt	MTCE	*
CRVMB	SP	15	RRC/BRC	VMS Trbl Non Reg.	MTCE	*
CRVML	SP	15	RRC/BRC	VMS SMDI Non Erg	MTCE	*
CRVMR	SP	15	RRC/BRC	VMS Regulated Trbl	MTCE	*
CRWAT	ND	19	RRC/BRC	WATS Trbl Report	MTCE	*
CSACx	SP	19	OSF	Customer Svc "ACD" Trbl	MTCE	*
CSTER	SP	19	OSF	Customer Svc Terminal Trbl	MTCE	*
CVDTx	DT	10	MAN	Demand Ticket Conversion	DEM	
CVRWx	RW	10	SYS	Repetitive Work Conversion	REP	
CXR00	DL	1	NRC	Facility Abnormal Svc - Immediate	MTCE	*
CXR10	DL	3	NRC	Service Aff Rpt <=10min	MTCE	*
CXR1D	DL	21	NRC	Non-Svc Aff <=24hr	MTCE	
CXR3D	DL	22	NRC	Non-Svc Aff <=72hr	MTCE	
CXR90	DL	5	NRC	Potentially Svc Aff <=90min	MTCE	*
CXRAH	NT	19	CDA/ITS	CDA Instl Tst Asst. Immediate	PROV	*
CXRAP	DL	19	BRC	Appt (PTD & DD)	PROV	*
CXRAP	DL	19	TCG	Carrier Appointment (PTD - DD)	PROV	*
CXRCH	DL	19	NRC	Chronic Trouble Report	MTCE	*
CXRD1	DL	15	BRC	CXR Clr Time <1.5hr	MTCE	*
CXRD3	DL	15	BRC	CXR Urgent Req Clr Time <1hr	MTCE	*
CXRE1	NT	15	ACAC/BRC	1st Level Escalation CO FWG	MT/PR	*
CXRE2	NT	10	ACAC/BRC	2nd Level Escalation CO FWG	MT/PR	*
CXRE3	NT	03	ACAC/BRC	3rd Level Escalation CO FWG	MT/PR	*
CXRF1	NT	15	ACAC/BRC	1st Level Escalation SS I&M	MT/PR	*
CXRF2	NT	10	ACAC/BRC	2nd Level Escalation SS I&M	MT/PR	*

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WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
CXRF3	NT	03	ACAC/BRC	3rd Level Escalation SS I&M	MT/PR	*
CXRI1	IC	15	ACAC	Ds1 Trbl Clr Time <1hr	MTCE	*
CXRI3	IC	15	ACAC	Ds3 Trbl Clr Time <1hr	MTCE	*
CXRIA	DL	19	BRC/TCG	CXR Tst Asst. <4hr	PROV	*
CXRIE	IC	19	ACAC	MTCE Test Assist Not Immediate	MTCE	*
CXRIH	DL	21	BRC	Instl Tst Asst. Not Immediate	PROV	
CXRIM	IC	19	ACAC	Non Svc Affecting Trbl/Load Next Day	MTCE	*
CXRIP	IC	15	ACAC	Request Patch Immediate	MTCE	*
CXRPD	IC	21	ACAC	Instl Tst Asst. Not Immediate	PROV	
CXRPI	IC	20	ACAC	Instl Tst Asst. Immediate	PROV	
CXRPP	IC	21	ACAC	Appointment (PTD & DD)	PROV	
CXRPR	DL	20	BRC	Instl Turn-Up	PROV	
CXRTA	DL	20	BRC	CXR Rtn MTCE. Tst Asst.	MTCE	
CXRTA	DL	20	TCG	Maintenance Test Assist <24hours	MTCE	
EAMAx	SP	10	MAN	AMA Trouble	MTCE	*
ECOMx	SP	10	MAN	Common Equipment Trouble	MTCE	*
ECRTx	DT	20	MAN	Remote Test SMAS Trouble	MTCE	
EFACx	DL	10	MAN	Facility Trouble	MTCE	*
EMLTx	SP	20	MAN	MLT Trouble	MTCE	
ENETx	SP	10	MAN	Network Trouble	MTCE	*
EOTHx	SP	19	MAN	Other Equipment Trouble	MTCE	*
EPWRx	SP	5	MAN	Power Plant Trouble	MTCE	*
ERADN	NT	19	MAN	Radio Trouble Non-Cellular	MTCE	*
ERADx	NT	19	MAN	Radio Trouble(Cellular)	MTCE	*
ESLCx	DL	19	MAN	SLC Trouble	MTCE	*
Exxxx	PM	**	SYS	SW. EQ (** **See guidelines**)	PMTC	
GNDTx	DT	10	MAN	Demand Request Generic Load	DEM	
GNRWx	RW	10	SYS	Repetitive Request Generic Load	REP	
GRDTx	DT	10	MAN	Demand Request Growth Work	DEM	
GRRWx	RW	10	SYS	Repetitive Request Growth Work	REP	
HIC00	DL	03	NRC	Hicap Trouble- Abnormal Immed	MTCE	*
HIC1D	DL	21	NRC	HC Trbl - N Svc AFF Smplx <= 72 HRS	MTCE	*

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WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
HIC10	DL	03	NRC	Hicap Trouble - Svc Aff <= 10	MTCE	*
HIC3D	DL	03	NRC	HC Trouble - non Svc AFF <= 72 HRS	MTCE	*
HIC90	DL	05	NRC	Hicap Trouble - Svc Aff <=90	MTCE	*
HICAH	NT	19	CDA/ITS	CDA Instl Tst Asst. Immediate -CXR	PROV	*
HICAP	DL	19	BRC	Hicap CXR Appt (PTD & DD)	PROV	*
HICCH	DL	03	NRC	HICAP CHRONIC	MTCE	*
HICD1	DL	15	BRC	Hicap CXR Ds1 Trbl Clr Time <1hr	MTCE	*
HICD3	DL	15	BRC	Hicap CXR Ds3 Trbl Clr Time <1hr	MTCE	*
HICE1	NT	15	ACAC/BRC	1st Level Escalation CO FWG	MT/PR	*
HICE2	NT	10	ACAC/BRC	2nd Level Escalation CO FWG	MT/PR	*
HICE3	NT	03	ACAC/BRC	3rd Level Escalation CO FWG	MT/PR	*
HICF1	NT	15	ACAC/BRC	1st Level Escalation SS I&M	MT/PR	*
HICF2	NT	10	ACAC/BRC	2nd Level Escalation SS I&M	MT/PR	*
HICF3	NT	03	ACAC/BRC	3rd Level Escalation SS I&M	MT/PR	*
HICI1	IC	15	ACAC	Hicap CXR Ds1 Clr Time <1hr	MTCE	*
HICI3	IC	15	ACAC	Hicap CXR Ds3 Clr Time <1hr	MTCE	*
HICIA	DL	19	BRC	Hicap CXR Tst Asst. <4hr	PROV	*
HICIE	IC	19	ACAC	Hicap CXR Tst Asst. Not Immediate	PROV	
HICIH	DL	21	BRC	Hicap CXR Tst Asst. Not Immediate	PROV	
HICIM	IC	19	ACAC	Hicap CXR N Svc Affect /Load Nxt Day	MTCE	
HICIP	IC	15	ACAC	Hicap CXR Req Dispatch Immediate	MTCE	*
HICPD	IC	21	ACAC	Hicap CXR Instl Tst Asst. Not Immediate	PROV	
HICPI	IC	19	ACAC	Hicap CXR Instl Tst Asst. Immediate	PROV	*
HICPP	IC	19	ACAC	Hicap CXR Appt (PTD & DD)	PROV	*
HICPR	DL	20	BRC	Hicap CXR Instl Turn-Up	PROV	
HICTA	DL	19	BRC	Hicap CXR Tst Asst.	MTCE	*
HISAH	NT	19	CDA/ITS	CDA Instl Tst Asst. Immediate - Spec	PROV	*
HISAP	NT	19	BRC	Hicap Special Appt (PTD & DD)	PROV	*
HISD1	NT	15	BRC	Hicap Special DS1 Clr Time <1hr	MTCE	*
HISD3	NT	15	BRC	Hicap Special DS3 Clr Time <1hr	MTCE	*
HISE1	NT	15	ACAC/BRC	1st Level Escalation CO FWG	MT/PR	*

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WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
HISE2	NT	10	ACAC/BRC	2nd Level Escalation CO FWG	MT/PR	*
HISE3	NT	03	ACAC/BRC	3rd Level Escalation CO FWG	MT/PR	*
HISF1	NT	15	ACAC/BRC	1st Level Escalation SS I&M	MT/PR	*
HISF2	NT	10	ACAC/BRC	2nd Level Escalation SS I&M	MT/PR	*
HISF3	NT	03	ACAC/BRC	3rd Level Escalation SS I&M	MT/PR	*
HISI1	IC	15	ACAC	Hicap Special DS1 Trbl Clr Time <1hr	MTCE	*
HISI3	IC	15	ACAC	Hicap Special DS3 Clr Time <1hr	MTCE	*
HISIA	NT	19	BRC	Hicap Special Tst Asst. Immediate	PROV	*
HISIE	IC	19	ACAC	Hicap Special Tst Asst. Not Immediate	MTCE	
HISIH	NT	21	BRC	Hicap Specl Instl Tst Asst. Not IMMED	PROV	
HISII	IC	15	ACAC	Hicap Special Tst Asst. Immediate	MTCE	*
HISIM	IC	19	ACAC	Hicap Spec Non Svc Aff/Load Nxt Day	MTCE	
HISPA	IC	19	ACAC	Hicap Special Appt (PTD & DD)	PROV	*
HISPD	IC	21	ACAC	Hicap Special Instl Tst Asst. Not	PROV	
HISPI	IC	19	ACAC	Hicap Special Instl Tst Asst. Immediate	PROV	*
HISTA	NT	19	BRC	Hicap Special Tst Asst.	MTCE	*
HISVD	NT	15	BRC	VIDEO SVCS	MTCE	*
HOT	FR	19	CICO	Maintenance Cuts **(ADSL)**	FRM	*
IDP	FR	20	CICO	Disconnect Left-In	FRM	
IN	FR	20	CICO	Straight N/T	FRM	
INA	FR	20	CICO	N/T With LST Or LST Go-Ahead	FRM	
IND	FR	20	CICO	N/T With Disconnects	FRM	
LET	FR	20	CICO	Line Equip Transfer	FRM	
LNDT	DT	20	LNA	Dial Transfer Project	DEM	
LNEC	DT	20	LNA	ESSX Conversion Project	DEM	
LNLB	DT	20	LNA	Switch Load Balance	DEM	
LNLC	DT	20	LNA	Line Card Administration	DEM	
LNLG	DT	20	LNA	Loop/Gnd ST Change	DEM	
LNOE	DT	20	LNA	DEFECTIVE OEs	DEM	
LNP	FR	19	BITTS	FRAME Local Number Portability	FRM	*
MEET	XX	30	MAN	Meeting(Use Tracking Key)	MISC	
MSBRU	DT	30	MAN	DBRT Dump/Billing Recon.	DEM	

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WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
MSC00	DL	1	NRC	Non-Inv Abnormal Rpt – Immediate	MTCE	*
MSC10	DL	3	NRC	Service Aff Rpt <=10min	MTCE	*
MSC1D	DL	21	NRC	Non-Svc Aff Simplex <=24hr	MTCE	
MSC3D	DL	22	NRC	Non-Svc Aff Rpt <=72hr	MTCE	
MSC90	DL	5	NRC	Potentially Svc Aff <=90min	MTCE	*
MSCAB	SP	1	NRC	Abnormal Condition - Immediate	MTCE	*
MSCAD	SP	19	AIN	ADSI Call Waiting Deluxe	MTCE	
MSCAL	NT	20	BRC	Misc. Tkt/Pseudo All Services	MTCE	
MSCAP	SP	19	AIN	BAP....Basic AIN Programmability	MTCE	
MSCAW	SP	19	AIN	ADWatch	MTCE	
MSCB1	NT	15	IT/BBG	BBG - Priority 1 (Immediate)	MTCE	*
MSCB2	NT	18	IT/BBG	BBG - Priority 2 <2hours	MTCE	*
MSCB3	NT	19	IT/BBG	BBG - Priority 3 <12hours	MTCE	*
MSCB4	NT	19	IT/BBG	BBG - Maintenance Test Assist	MTCE	*
MSCC1	NT	15	IT/TNSPT	Priority 1 (Immediate)	MTCE	*
MSCC2	NT	18	IT/TNSPT	Priority 2 <2hours	MTCE	*
MSCC3	NT	19	IT/TNSPT	Priority 3 <12hours	MTCE	*
MSCC4	NT	19	IT/TNSPT	Maintenance Test Assist	MTCE	*
MSCCD	SP	5	NRC	Cable Dehydrator Alarm <=2hr	MTCE	*
MSCCH	SP	19	NRC	Chronic Trouble Report	MTCE	*
MSCCL	SP	19	AIN	Crisis Link	MTCE	*
MSCCN	SP	19	AIN	CNAM Caller ID Deluxe	MTCE	
MSCCP	SP	19	AIN	Call Patterns	MTCE	
MSCCT	TR	10	NSDC	Common Transport Trk Grp (Immediate)	MTCE	*
MSCD6	SP	17	NRC	Pot Svc Aff - <= 6 hours	MTCE	*
MSCD8	SP	17	NRC	Pot Svc Aff - <= 8 hours (AMA Tape)	MTCE	*
MSCDR	SP	19	AIN	Data Reach	MTCE	
MSCE1	NT	15	ACAC/BRC	1st Level Escalation CO FWG	MT/PR	*
MSCE2	NT	10	ACAC/BRC	2nd Level Escalation CO FWG	MT/PR	*
MSCE3	NT	03	ACAC/BRC	3rd Level Escalation CO FWG	MT/PR	*
MSCE9	TR	2	NSDC	E911 Trunk Trouble (Immediate)	MTCE	*
MSCEQ	TR	28	TCG	ROTL/Responder Trbl <4hours	MTCE	

Section VI - Glossary of BellSouth Standard WorkTypes

WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
MSCF1	NT	15	ACAC/BRC	1st Level Escalation SS I&M	MT/PR	*
MSCF2	NT	10	ACAC/BRC	2nd Level Escalation SS I&M	MT/PR	*
MSCF3	NT	03	ACAC/BRC	3rd Level Escalation SS I&M	MT/PR	*
MSCFC	SP	19	AIN	Flexible Call Forwarding	MTCE	
MSCHK	FR/RW	23	MAN/SYS	COSMOS TCG MISSCHK Admin	FRM	
MSCIA	NT	20	BRC	Misc. Prov/Pseudo All Services	PROV	
MSCIC	TR	15	NSDC	IC Blockage (Immediate)	MTCE	*
MSCJC	TR	25	TCG	Junctor Trbl <72hours	MTCE	
MSCLL	SP	19	AIN	Local Link	MTCE	
MSCMS	TR	25	TCG	TIRKS Non-Inventoried Eqp <72hours	MTCE	
MSCMT	TR	19	NSDC	Msg. Trk <1.5days (Not Immediate)	MTCE	
MSCNS	SP	23	NRC	Non-Svc Aff <=72hr	MTCE	
MSCOC	SP	19	AIN	Office Connect	MTCE	*
MSCPE	TR	25	TCG	Prov Non-Inventoried Eqp <24hours	MTCE	
MSCPG	SP	19	NRC	Programmable Trbl Rpt <=5days	MTCE	
MSCPM	SP	4	NRC	Minor Pwr <=30Min>	MTCE	*
MSCPS	SP	5	NRC	Potentially SVC AFF <=90min.	MTCE	*
MSCPW	SP	4	NRC	Major Pwr Eqp <=15Min.	MTCE	*
MSCRA	TR	19	TCG	Recorded ANNC Trbl <4hours	MTCE	*
MSCSA	SP	3	NRC	Service Affecting <=10min.	MTCE	*
MSCSM	SP	21	NRC	Non-Svc Aff Simplex <=24hr	MTCE	
MSCSR	SP	19	AIN	Smart Route	MTCE	*
MSCSV	TR	19	NSDC	Svc Ckt <2days (Not Immediate)	MTCE	
MSCXL	SP	19	NSDC	Translation Trbl <1.5days	MTCE	
MSCZC	SP	19	AIN	Zipconn Wire Ctr Or Zip Code Routing	MTCE	
MSENG	DT	30	MAN	Assist Tec Sup; MTCE Eng.; Etc	DEM	
MSGAP	TR	19	BRC	Appt (PDT & DD)	MTCE	*
MSGAP	TR	19	TCG	Msg. Trk Appointment(PDT - DD)	PROV	*
MSGAX	**TR**	22	**TCG**	AUX TRKS (RA,IR, OPR SVCS)	MTCE	
MSGBS	TR	30	TCG	Carot Busy Trbl <72hours	MTCE	
MSGC1	NT	19	BRC	Test Access Trbl (Immediate)	MTCE	*
MSGC2	NT	19	BRC	Test Access Trbl <2hours	MTCE	*

Section VI - Glossary of BellSouth Standard WorkTypes

WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
MSGC3	NT	20	BRC	Test Access Trbl <4hours	MTCE	
MSGC4	NT	21	BRC	Test Access Trbl <24hours	MTCE	
MSGCO	TR	19	BRC	All Other Cuts. Clr Time <4hr	MTCE	*
MSGCT	TR	22	TCG	Common Transport Trk Grp <8hours	MTCE	
MSGE1	NT	15	ACAC/BRC	1st Level Escalation CO FWG	MT/PR	*
MSGE2	NT	10	ACAC/BRC	2nd Level Escalation CO FWG	MT/PR	*
MSGE3	NT	03	ACAC/BRC	3rd Level Escalation CO FWG	MT/PR	*
MSGE9	TR	10	TCG	E911 Trunk Trbl (Immediate)	MTCE	*
MSGF1	NT	15	ACAC/BRC	1st Level Escalation SS I&M	MT/PR	*
MSGF2	NT	10	ACAC/BRC	2nd Level Escalation SS I&M	MT/PR	*
MSGF3	NT	03	ACAC/BRC	3rd Level Escalation SS I&M	MT/PR	*
MSGHD	TR	25	TCG	CAROT Hi & DRI	MTCE	
MSGIA	TR	19	BRC	Msg. Trk Test Asst. <4hr	MTCE	*
MSGIA	TR	19	TCG	Msg. Trk Prov Test Assist <4hours	MTCE	*
MSGIC	IC	18	BRC	IC/Baseline Cust. Clear Time <4hr	MTCE	*
MSGIE	IC	16	ACAC	Svc Affecting Trbl Clear Time <4hr	MTCE	*
MSGIF	**TR**	**16**	**DCSC**	**TEST ASST - Immediate**	**MTCE**	*
MSGIH	TR	21	BRC	Msg. Trk Test Asst. Not Immediate	PROV	
MSGII	IC	15	ACAC	Svc Affecting Trbl Immediate	MTCE	*
MSGIN	IC	19	ACAC	Non Ckt/Line Trbl/Load Next Day	MTCE	
MSGL1	NT	15	LMC	LMC Hand-Off Clr Time <1hr	MTCE	*
MSGLM	NT	19	LMC	LMC Hand-Off Load Next Day	MTCE	
MSGNS	TR	25	TCG	Single Ckt Trbl <24hours	MTCE	
MSGNT	TR	25	TCG	Msg. Trk Prov Test Assist <24hours	PROV	
MSGOC	TR	19	TCG	Independent Comp Trbl <4hours	MTCE	*
MSGPA	IC	21	ACAC	Appt (PDT & DD)	PROV	
MSGPD	IC	21	ACAC	Instl Test Asst. Not Immediate	PROV	
MSGPI	IC	20	ACAC	Instl Test Asst. Immediate	PROV	
MSGQ1	TR	30	TCG	Carot Q1 Trbl <72hours	MTCE	
MSGQ2	TR	30	TCG	Carot Q2 Trbl <72hours	MTCE	
MSGR1	NT	19	TSAC	Test Access Trbl (Immediate)	MTCE	*
MSGR2	NT	19	TSAC	Test Access Trbl <2hours	MTCE	*

MSGR3	NT	20	TSAC	Test Access Trbl <4hours	MTCE	
MSGR4	NT	21	TSAC	Test Access Trbl <24hours	MTCE	

Section VI - Glossary of BellSouth Standard WorkTypes

WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
MSGSS	TR	19	TCG	Switched Special Svc Trbl(DID)	MTCE	*
MSGSV	TR	25	TCG	Service Ckt Trbl <72hours	MTCE	
MSGT1	TR	25	TCG	Msg. Trunk Trbl <72hours	MTCE	
MSGTA	TR	19	TCG/BRC	Maintenance Test Assist <4hours	MTCE	*
MSIMM	DT/RW	40	MAN/SYS	SIMM Admin Activity	DEM	
MSMKT	DT	30	MAN	Assist Marketing	DEM	
MSOJT	DT	30	MAN	On The Job Training	DEM	
MSPIC	DT	30	MAN	Co PICS Verification	DEM	
MSPRJ	DT/RW	30	MAN	Project Work	DEM	
MSSMD	DT	30	MAN	Create/Ship SMDR Tape	DEM	
MSSTF	DT	30	MAN	Assist Staff/Spec Studies	DEM	
MSSWG	DT	30	MAN	Switch Gear Test	DEM	
MSVFY	**DT**	**30**	**MAN**	**TIRKS/ WFA Database Reconciliation**	**MAN**	
Mxxxx	PM	**	SYS	MISC PM Xx = 00 To 9999 - PRI 50- 70	PMTC	
NDSAB	NT	19	DSG	Business Class ADSL MTCE TBL	MTCE	*
NDSAF	ND	19	DSG	Non Design ADSL FRAME TBL	MTCE	*
NDSAI	NT	15	DSG	Non Design ADSL Install. TBL	MTCE	*
NDSAM	NT	19	DSG	Non Design ADSL MTCE TBL	MTCE	*
NDSAP	FR	19	UNE	SL1 APPT REQUEST	FRM	*
NDSIA	ND	20	BRC	Non Design Test Asst. All Services	PROV	
NDSIR	IC	19	ACAC	RCMAG Trouble	MTCE	*
NDSIS	ND	19	BRC	Non Design Isdn Trbl	MTCE	*
NDSIZ	IC	19	ACAC	Non Desgn Sgl Line/Wats Clr Time <3hr	MTCE	*
NDSMS	ND	19	BRC	Non Design All Other Trbl	MTCE	*
NDSPA	IC	21	ACAC	Appt (PDT & DD)	PROV	
NDSPD	IC	21	ACAC	Instl Test Asst. Not Immediate	PROV	
NDSPI	IC	20	ACAC	Instl Test Asst. Immediate	PROV	
NDSPL	IC	20	ACAC	RCMAG Assist	PROV	
NDSPT	IC	20	ACAC	Translations Assist	PROV	
NISMV	DT	19	NISC	NISC - MATV MTCE Request	MTCE	

NISTA	DT	19	NISC	NISC MTCE Test Assist	MTCE	
NISTP	DT	19	NISC	NISC Switch Back-Up Request	MTCE	
NTMPM	DT	31	TCG	Demand Loaded Trunk Readings	MTCE	
NTTMP	RW	31	TCG	Scheduled Manual Trunk Readings	MTCE	
ODP	FR	20	CICO	ODIP Admin Message	FRM	

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WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
OUT	FR	20	CICO	Straight Disconnects	FRM	
OPRIL	ND	15	NISC / OPR	TRBL.RPT.IMMED.	MTCE	*
OPTBL	ND	19	NISC	TRBL.RPT.NEXT DAY	MTCE	*
PAK	FR	20	CICO	All Work Packages	FRM	
PARAL	SP	19	PAR	"ALIT" Trbl	MTCE	
PARNT	SP	19	PAR	"No Test Trk" Trbl	MTCE	
PAROS	SP	18	PAR	OOS Predictor Reports (Immediate)	MTCE	*
PARSA	SP	19	PAR	Svc Affect Predictor Report	MTCE	*
PBxxx	PR	23	SYS	Provisioning Carrier -- Non So	PROV	
Pbxxx	DT	23	MAN	Provisioning SLC -- Non So	PROV	
PCxxx	PR	20	SYS	Provisioning Carrier	PROV	
PExxx	PR	24	SYS	Provisioning Special -- Non So	PROV	
PIAxx	RW/DT	10	SYS/MAN	Program Impact Area	DEM	
PIRxx	RW/DT	10	SYS/MAN	Program Impact Regional	DEM	
PLDDS	SP	15	PLC	DDS Trbl	MTCE	*
PLDP1	SP	19	PLC	Dpn100 Trbl	MTCE	*
PLDP5	SP	19	PLC	Dpn50 Trbl	MTCE	*
PLINK	SP	15	PLC	Svc Affect Predictor Trbl	MTCE	*
PLISD	SP	18	PLC	ISDN Trbl Report	MTCE	*
PLxxx	PR	24	SYS	Provisioning Trunk -- Non So	PROV	
PSxxx	PR	20	SYS	Provisioning Special Service	PROV	
PTxxx	PR	20	SYS	Provisioning Trunk	PROV	
Pxxxx	PM		SYS	POWER PM X= 0 To 9999 PRI 25 - 35	PWR	
QWL	XX	30	MAN	Quality Of Work Life Mtg.	MISC.	
RDP	FR	20	CICO	N/T/C Re-Use Left In	FRM	
SISLC	DT	20	LNA	Integrated SLC/ Move or Turn-up -DFA	DEM	
SOCTP	FR	21	CIA	CIA Coils In And Coils Out	FRM	

SOCVR	FR/RW	20	SYS/MAN	Frame Coverage	FRM	
SODPB	FR	20	MAN	Dip Break	FRM	

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WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
SODPC	FR	20	MAN	Dip Creation	FRM	
SOFR	FR/RW	20	MAN	Frame Rout- Desk Work, Filing, Opns	FRM	
SOHOT	FR	19	BITTS	WORK BACK HOT - ALARMED	FRM	*
SOIMC	FR/RW	20	SYS/MAN	Speaker/Tel. - Log E6025	FRM	
SOIMR	FR/RW	20	SYS/MAN	Speaker Relief	FRM	
SOINA	ND/DT	19	RCMAG	Holding For Go-Ahead	MTCE	*
SOJAM	FR	21	MAM	Jams - Jumper Administration (Cosmic)	FRM	
SONIT	ND/DT	19	RCMAG	Not In Translations	MTCE	*
SONPK	FR/RW	20	MAN	CPC, Admin, Acts, MTCE. Cuts	FRM	
SONPR	FR	20	MAN	CICO NISC/WMC PAK/Relief/ Late Cov	FRM	
SOPAK	FR	20	MAN	NON CICO - SO Work	FRM	
SOPBT	FR	21	CIA	CIA Place Back Tap	FRM	
SOPIP	FR/RW	20	SYS/MAN	PIPSO Activity SO	FRM	
SORBT	FR	21	CIA	CIA Remove Back Tap	FRM	
SORTN	FR/RW	23	SYS/MAN	Frame Routines; Dead Jumpers, Coils	FRM	
SORTT	DT	20	MAN	RCMAG ROUTINE	FRM	
SOSIT	ND/DT	19	RCMAG	Still In Translations	MTCE	
SOTAP	FR	19	TAP	Open In Testing Tap Program	FRM	*
SOVBT	FR	21	CIA	CIA Verification	FRM	
SOVFY	FR	23	MAN	Frame Verification/ Work Req.	FRM	
SOWAT	ND/DT	19	MAN	Watch Alert	FRM	*
SOWIT	ND/DT	19	RCMAG	Wrong In Translations	MTCE	*
SPCTS	FR	19	CIA	CIA Appointment - Special Svcs	FRM	*
SPLAH	NT	19	CDA/ITS	CDA Instl Test Asst. Immediate	PROV	*
SPLAP	NT	19	BRC	Appt (PDT & DD)	PROV	*
SPLCS	SP	19	OSF	Terminal Trbl (CRT)	MTCE	*
SPLD0	NT	18	BRC	DS0 Clr Time <4hr	MTCE	*
SPLD1	NT	15	BRC	DS1 Clr Time <1.5hr	MTCE	*
SPLD3	NT	15	BRC	DS3 Clr Time <1hr	MTCE	*
SPLI1	IC	15	ACAC	Ds1 Trbl Clr Time <1hr	MTCE	*
SPLI3	IC	15	ACAC	Ds3 Trbl Clr Time <1hr	MTCE	*
SPLIA	NT	19	BRC	All Services Test Asst. Immediate	PROV	*

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WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
SPLIE	IC	19	ACAC	MTCE. Test Assist Not Immediate	MTCE	
SPLIF	**NT**	**16**	**DCSC**	**MTCE. Test Assist Immediate**	**MTCE**	
SPLIH	NT	21	BRC	Instl Test Asst. Not Immediate	PROV	
SPLII	IC	15	ACAC	Maintenance Test Assist Immediate	MTCE	*
SPLIM	IC	19	ACAC	Non Svc. Affecting Trbl/Load Next Day	MTCE	
SPLIR	IC	19	ACAC	RCMAG Trouble	MTCE	*
SPLIS	IC	17	ACAC	Single Line/DDS/WATS Clr Time <3hr	MTCE	*
SPLMA	NT	15	BRC	Urgent Req. <1hr	MTCE	*
SPLPA	IC	21	ACAC	Appt (PDT & DD)	PROV	
SPLPD	IC	21	ACAC	Instl Test Asst. Not Immediate	PROV	
SPLPI	IC	20	ACAC	Instl Test Asst. Immediate	PROV	
SPLPL	IC	20	ACAC	RCMAG Assist	MTCE	
SPLPR	IC	19	ACAC	RCMAG – OLEC RCF Prov Assist	PROV	*
SPLTA	NT	19	BRC	Routine MTCE Test Asst.	MTCE	*
SPLTT	NT	19	DEF	RCMAG – DEFAULT WORK TYPE	MTCE	*
SPLXL	NT	19	BRC	Translations Trouble	MTCE	*
SSCTT	NT	19	DEF	RCMAG – DEFAULT WORK TYPE	MTCE	*
TCxxx	RW/DT	30	SYS/MAN	Trik Work Co Tech.	MISC.	
TMAMC	DT	18	EBAC	EBAC High Pri	MTCE	*
TMAMI	DT	20	EBAC	EBAC IC Translations Comp	MTCE	
TMAML	DT	20	EBAC	EBAC IC LOW PRI	MTCE	
TMAMT	DT	20	EBAC	IC Trunk Grp Inq	MTCE	
TMATH	DT	18	EBAC	MATV High Pri	MTCE	*
TMATL	DT	25	EBAC	MATV Low Pri	MTCE	
TMBIS	DT	20	RCMAG	IBIS CASE	MISC	*
TMEBC	DT	18	EBAC	EBAC Trouble	MTCE	*
TMNSC	SP	19	NSC	Network Service Center (NSC) Trbl	MTCE	*
TMSES	TR	19	NSC	Service Evaluation System (SES) Trbl	MTCE	*
TOPSA	SP	15	OSF	Operator Svc Trbl-Abnormal Immediate	MTCE	*
TOPSD	DT	23	OSF	Operator Svc Demand Appt	MTCE	
TOPSN	SP	23	OSF	Operator Svc Trbl < 72 Hr Commit	MTCE	
TOPSP	SP	19	OSF	Operator Svc Trbl <24 Hour Commit	MTCE	*

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WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
TRNG	XX	30	MAN	Formal Training	MISC	
TRVL	TV	99	SYS/MAN	Travel Time	MISC	
Txxxx	PM		SYS	Trans/Toll PM X = 0 To 9999 PRI 30 - 50	PMTC	
UNA	XX	30	MAN	Union Activity - Non-Paid	MISC	
UNE	FR	19	BITTS	FRAME UNBUNDLED LOOP	FRM	*
UNP	XX	30	MAN	Union Grievance Mtg. - Paid	MISC	
VNDTx	DT	10	MAN	Demand Request Vendor Trial	DEM	
VNRWx	RW	10	SYS	Repetitive Request Vendor Trial	REP	
XLAII	ND	15	OSF	Service Affecting Trbl (Immediate)	MTCE	*
XLAIN	ND	19	OSF	Trouble Report (Next Day)	MTCE	
XLAPP	ND	20	OSF	Appointment (Next Day)	PROV	
XLATA	ND	19	OSF	Test Assist (Immediate)	MTCE	*
yAAxx	DT/RW	20	NISC	NPA /New/Change	DEM	
yAIxx	DT	20	NISC	AIN SERVICES	DEM	
yBBxx	DT/RW	20	NISC	900 /New/Change/0+ Permit	DEM	
yECxx	DT/RW	20	NISC	Trouble Found By "ECS"	MTCE	
yEExx	DT/RW	20	NISC	COS / New/Change	DEM	
yFAxx	DT/RW	20	NISC	Feature / Service Activation	DEM	
yFFxx	DT/RW	20	NISC	Land To Mobile	DEM	
yGGxx	DT/RW	20	NISC	WATS NPA / New /Change	DEM	
yHHxx	DT/RW	20	NISC	NXX / New /Change	DEM	
yIAxx	DT/RW	20	NISC	F NPA NXX/Intralata / New/Change	DEM	
yIBxx	DT/RW	20	NISC	Trouble Referred By "IBIS"	MTCE	
1ISxx	DT	20	NISC	ISDN SERVICES (PRI)	DEM	
yKKxx	DT/RW	20	NISC	FGD IXC / New/Change	DEM	
yLPxx	DT	19	NISC	LNP OPN NXX / END OFC	DEM	
yLQxx	DT	19	NISC	LNP ACT QUERY / TND	DEM	
yMAxx	DT/RW	20	NISC	MATV/ Demand Test - Work Request	DEM	
yMBxx	DT/RW	20	NISC	Operational Test Call - Work Request	DEM	
yMDxx	DT/RW	20	NISC	Non-MATV/ Demand Test - Work Request	DEM	
yMMxx	DT/RW	20	NISC	FGB IXC/ New/Change	DEM	
yMSxx	DT/RW	20	NISC	MATV Trouble	MTCE	
yMTxx	DT/RW	20	NISC	Trouble Found By "MATV"	MTCE	

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WK TYP	CODE	PRI	ORIG	DESCRIPTION	CAT	ALM
yMWxx	DT/RW	20	NISC	Assign Milliwat Test Number	DEM	
1NLUP	DT	20	NISC	NAILUP	DEM	
1NXTR	SP	18	NISC	TRANSLATIONS TROUBLE REFERRAL	MTCE	
yPPxx	DT/RW	20	NISC	ESSX /Complex/ New	DEM	
1SIxx	DT	20	NISC	SERVICE INQUIRY	DEM	
ySSxx	DT/RW	20	NISC	ESSX /Simple/ Change	DEM	
yTTxx	DT/RW	20	NISC	ESSX Dumps	DEM	
yYYxx	DT/RW	20	NISC	CO Conversion Activity	DEM	
Zxxxx	PM	**	SYS	LOCAL PM Xx = 0 To 9999 PRI 20 - 99	PMTC	

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NOTES:				**ORIGINATOR**		
			ACAC	Access Customer Advocacy Center		
			AIN	Advanced Intelligent Ntwk Ctr		
			BBG	IT Broadband Transport CTR		
			CIA	Company Initiated Activity Ctr		
			DCSC	Data Customer Support Center		
			EBAC	Equipment Billing Accuracy Center		
			IPP	Independent Pay Phone Center		
			LMC	LMC = Link MTCE Ctr		
			LNA	Line & Number		
			NISC	Network Infrastructure Surveillance Center		
			NRC	Network Reliability Center		
			OSF	Operator Svc / Business Repair		
			PAR	Proactive Analysis & Repair		
			PLC	Pulse Link Ctr		
			RCMAG	Recent Change Administration		
			RRC/BRC	Residence Repair Ctr Business Repair Center		
			TCG	Trunk Control Group		
			TSAC	Test Systems Administration Center		
			UNE	Unbundled Network Elements (Competitive Local Exchange - CLEC)		

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June 30, 2000

VIA FEDERAL EXPRESS

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Atlanta, Georgia 30309

Re: *In re: Investigation Into Pricing of Unbundled Network Elements*
Docket No. 990649-TP

Dear Jim:

Enclosed are BellSouth Telecommunications, Inc.'s Responses and Objections to AT&T's Fourth Set of Requests for Production of Documents and Fourth Set of Interrogatories.

Yours very truly,

Bennett L. Ross

Bennett L. Ross
(22)

Enclosures

CERTIFICATE OF SERVICE
Docket No. 990649-TP

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via U.S. Mail and Federal Express (#) this 30th day of June, 2000 to the following:

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Investigation into Pricing of Unbundled Network Elements	)	Docket No. 990649-TP
	)	Filed: June 30, 2000

BELLSOUTH TELECOMMUNICATIONS, INC.'S OBJECTIONS AND RESPONSES TO AT&T'S FOURTH REQUEST FOR PRODUCTION OF DOCUMENTS

GENERAL OBJECTIONS

BellSouth Telecommunications, Inc. ("BellSouth" or "Company") asserts the following general objections to the Fourth Request for Production of Documents served by AT&T Communications of the Southern States, Inc. ("AT&T") on May 19, 2000.

1. BellSouth objects to the requests to the extent that such requests seek to impose an obligation on BellSouth to respond on behalf of subsidiaries, affiliates, or other persons that are not parties to this case on the grounds that such requests are overly broad, unduly burdensome, oppressive, and not permitted by applicable discovery rules.

2. BellSouth has interpreted AT&T's requests to apply to BellSouth's regulated intrastate operations in Florida and will limit its responses accordingly. To the extent that any request is intended to apply to matters other than Florida intrastate operations subject to the jurisdiction of the Commission, BellSouth objects to such request to produce as irrelevant, overly broad, unduly burdensome, and oppressive.

3. BellSouth objects to each and every request and instruction to the extent that such request or instruction calls for information which is exempt from discovery by

virtue of the attorney-client privilege, work product privilege, or other applicable privilege.

4. BellSouth objects to each and every request insofar as the request is vague, ambiguous, overly broad, imprecise, or utilizes terms that are subject to multiple interpretations but are not properly defined or explained for purposes of these requests. Any responses provided by BellSouth in response to AT&T's requests will be provided subject to, and without waiver of, the foregoing objection.

5. BellSouth objects to each and every request insofar as the request is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

6. BellSouth objects to AT&T's discovery requests, instructions and definitions, insofar as they seek to impose obligations on BellSouth that exceed the requirements of the Florida Rules of Civil Procedure or Florida Law.

7. BellSouth objects to providing information to the extent that such information is already in the public record before the Florida Public Service Commission, or elsewhere.

8. BellSouth objects to each and every request, insofar as it is unduly burdensome, expensive, oppressive, or excessively time consuming as written.

9. BellSouth objects to each and every request to the extent that the information requested constitutes "trade secrets" which are privileged pursuant to Section 90.506, Florida Statutes. To the extent that AT&T's requests proprietary confidential business information which is not subject to the "trade secrets" privilege,

BellSouth will make such information available to counsel for AT&T, consistent with applicable law, subject to any other general or specific objections contained herein.

10. BellSouth is a large corporation with employees located in many different locations in Florida and in other states. In the course of its business, BellSouth creates countless documents that are not subject to Florida Public Service Commission or FCC retention of records requirements. These documents are kept in numerous locations that are frequently moved from site to site as employees change jobs or as the business is reorganized. Therefore, it is possible that not every document will be provided in response to these discovery requests. Rather, BellSouth's responses will provide, subject to any applicable objections, all of the information obtained by BellSouth after a reasonable and diligent search conducted in connection with these requests. BellSouth shall conduct a search of those files that are reasonably expected to contain the requested information. To the extent that the discovery requests purport to require more, BellSouth objects on the grounds that compliance would impose an undue burden or expense. To the extent that AT&T requests herein documents that have previously been produced to other parties in response to previous discovery, then without limiting any of the foregoing objections, BellSouth incorporates herein by reference its objections to that previous discovery.

REQUESTS FOR PRODUCTION

Subject to these General Objections and the Specific Objections stated herein, BellSouth provides the following responses to AT&T's Fourth Requests for Production:

REQUEST NO. 51: For each service, unbundled network element, and feature, function or component of either for which BellSouth will(has) submit(ed) cost studies,

please provide all documents containing information concerning the rate at which automated or mechanized systems reject information and require a review and manual correction. Please include copies of all documents containing the results of any "root-cause" analyses (RCA) and/or studies that BellSouth has completed concerning such rejections.

RESPONSE: The most recent reject data is for the period May 1 through May 31, 2000, which is being provided. Included in this data are the number of rejects by error type and error description.

REQUEST NO. 52: Please provide copies of all documents containing information concerning BellSouth's most recent standardized load and work time records ("LWTR") or similar system) for work force administration ("WFA" or similar system), loop maintenance operation system ("LMOS" or similar system), Actiview (or similar system), and any other applicable work management systems. The LWTR refers to the data which describes the provisioning steps and the time for a technician to perform service provisioning steps including, but not limited to, the following:

- Service Order Process;
- Running a Jumper Wire and terminating a Jumper Wire;
- Setting equipment options (dip switches & software controlled);
- Performing a disconnect (Jumper Wire & Equipment);
- Recent Change Translations (Line & Complex);
- Installing a NID and Drop;
- Cross connecting Feeder to Distribution at FDI (SAI)
- Performing a DS0, DS1, DS3 cross connect using MDF and DSX;

- Performing a DS0, DS1, DS3 cross connect using electronic DCS;
- Placing a plug-in channel unit;
- Removing a channel unit plug-in;
- Performing a BORSCH test;
- Posting order completions;
- Performing a continuity test;
- Posting jeopardies;

RESPONSE: A copy of BellSouth's standard WFA-DI Work Type Table is being provided.

REQUEST NO. 53: Please provide copies of all documents containing job descriptions and wage levels for each of the following job classifications:

- Service Representatives;
- Circuit Provisioning Center (CPC);
- Loop Assignment Center (LAC);
- Frame Attendant;
- Central Office Technician for Switched and Message Translation, Special Services/Private Lines;
- Outside Technician for POTS and ISDN;
- Outside Technician for POTS and ISDN;
- Outside Technician for Special and Private Lines;
- Facility Maintenance Administration Center (FMAC) Technician;
- Recent Change Memory Administration Center (RCMAC) Technician;
- Network Terminal Equipment Center (NTEC) Technician;

- Switching Control Center (SCC) Technician; and
- Special Service Center (SSC) Test Technician

RESPONSE: Documents responsive to this request are being provided.

REQUEST NO. 54: Please provide copies of all documents containing information concerning the imputation of unbundled network element costs, contribution, or prices to establish price floors for BellSouth's retail services.

RESPONSE: BellSouth objects to this request on grounds that information concerning BellSouth's retail operations is not relevant to any issue in this proceeding nor reasonably calculated to lead to the discovery of admissible evidence.

REQUEST NO. 55: Please provide copies of all documents which contain information concerning BellSouth's current Operations Support Systems used to provide service to BellSouth's retail customers.

RESPONSE: BellSouth objects to this request on grounds that information concerning BellSouth's retail operations is not relevant to any issue in this proceeding nor reasonably calculated to lead to the discovery of admissible evidence.

REQUEST NO 56: Please provide a copy of all time and motion studies that BellSouth relied upon to specify labor times associated with non-recurring costs. Please include the date and conditions under which the study(ies) was/were performed. Please include all statistical analyses, statistical recommendations for structuring the study and statistical review for performance of the study including, but not limited to the designed versus performed standard deviation and precision of the effort. Please

provide the name and qualifications of the statistician overseeing the structure and performance of the studies.

RESPONSE: See BellSouth's response to AT&T Fourth Request for Production, Item No. 57. BellSouth's Cost Study Filing dated April 17, 2000 in this proceeding did not utilize statistical data.

REQUEST NO. 57: Please provide a copy of all other inputs or documents that BellSouth relied upon to determine labor times associated with NRCs.

RESPONSE: The attachments listed in the following table are being provided, although BellSouth did not necessarily rely upon all of the information in each of these documents in establishing the labor times reflected in BellSouth's Cost Study Filing dated April 17, 2000.

Attachment No.	Description
1	Installation and Maintenance (I&M) Special Services Installation & Maintenance (SSIM)
2	Work Management Center (WMC)
3	Central Office (CO I&M)
4	Unbundled Network Element Center (UNEC)
5	Plug-In Administration (PICS)
6	Outside Plant Engineering (OSPE)
7	Address and Facility Inventory (AFIG)
8	Circuit Provisioning Group (CPG)
9	Complex Resale Support Group (CRSG)
10	Notes for ULM Service Only
11	Supporting Data for Electronic Service Order and Manual Service Order
12	Supporting Data for LIDB
13	Supporting Data for CCS7
14	Supporting Data for Selective Carrier Routing
15	Supporting Data for CNAM & LNP
16	Supporting Data for SMS Toolkit
17	Supporting Data for Interoffice Facilities, Local Channel, Loop Concentration, Various Local Loops, and Feature Activation
18	Supporting Data for Ports
19	Supporting Data for Line Sharing Splitter
20	Supporting Data for Access to the DCS

Attachment Nos. 1, 15, and 17 contain proprietary information that is being provided subject to the nondisclosure agreement executed by AT&T.

REQUEST NO. 58: Please provide the methodology used to develop the maps shown in Figure 7, Figure 8, Figure 9, Figure 10, and Figure 13 of James W. Stegeman's May 1, 2000 direct testimony. During the May 15, 2000 workshop, Mr. Stegeman stated that this information is contained within the .idb files produced by the models. To date, we have been able to retrieve only portions of the information in the .idb files that can be viewed through the BSTLM audit functions. Therefore, provide any files necessary to retrieve this information from the .idb files, including programs and instructions.

RESPONSE: The attached DNLN_Map.ZIP file contains MapInfo workspaces and supporting files derived from the BSTLM required to produce the maps shown in Figures 7, 8, 9, 10, and 13 contained in Mr. Stegeman's May 1, 2000 testimony. After unzipping the file to a directory location, the workspaces can be opened using MapInfo 5.5 or higher software. MapInfo will prompt the user for assistance in locating relevant files once the workspace has been opened. Once the workspace and its relevant files have been opened, the workspace should be saved in order to retain the identification of the new location.

The figures and associated workspaces are as follows:

Figure	Workspace
7	DNLNFLWMRS0_EntireWC
8	DNLNFLWMRS0_ZoomAA
9	DNLNFLWMRS0_ZoomCSA
10	DNLNFLWMRS0_MSRT
13	DNLNFLWMRS0_MSRT

It should be noted that the data contains no post filing revisions.

REQUEST NO. 59: Please provide the BSTLM source code in an electronic format that can be compiled into an executable version of the BSTLM.

RESPONSE: BellSouth objects to this request on grounds that the source code for the BellSouth Telecommunications Loop Model ("BSTLM") in the format requested by AT&T is not relevant to any issue in this proceeding nor reasonably calculated to lead to the discovery of admissible evidence. BellSouth has already provided AT&T with the source code (albeit in a different format) so that AT&T can adequately review the BSTLM. BellSouth also objects to this request on grounds that it seeks proprietary information, the disclosure of which would commercially disadvantage BellSouth and the disclosure of which cannot be adequately protected by a protective agreement.

Respectfully submitted this 30th day of June, 2000.

BELLSOUTH TELECOMMUNICATIONS, INC.

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REQUEST: To the extent that the labor rates BellSouth uses to estimate the non-recurring costs for unbundled network elements are different from those BellSouth uses to estimate the non-recurring costs for the resale of its services, or are different from the labor rates BellSouth uses to estimate the costs of its retail services for similar functions, please provide a complete explanation of why the labor rates are different.

RESPONSE: BellSouth uses the same labor rates to estimate non-recurring costs for unbundled network elements, resale of services, and retail services for similar functions.

RESPONSE PROVIDED BY:

Charles Lee
Director
3535 Colonnade Parkway
Birmingham, AL 35243

REQUEST: Please provide a summary of all projected collocation revenues for the BellSouth territory broken down by state, floorspace, HVAC, power, supporting structures (shared cable racking, riser, etc), and MDF for each year of the study period.

RESPONSE: BellSouth objects to Item No. 141 of AT&T's Fourth Set of Interrogatories on grounds that information concerning BellSouth's revenues from collocation is not relevant to any issue in this proceeding nor reasonable calculated to lead to the discovery of admissible evidence.

REQUEST: Please provide a summary and breakdown of all projected revenues for services utilizing BellSouth's official services network (corporate Communications) for each year of the study period in sufficient detail as to be able to separate out the revenues attributable to the use of the official network. Please include all services, competitive as well as non-competitive and UNEs.

RESPONSE: BellSouth objects to Item No. 142 of AT&T's Fourth Set of Interrogatories on grounds that information concerning BellSouth's revenues from its official services network is not relevant to any issue in this proceeding nor reasonably calculated to lead to the discovery of admissible evidence.

REQUEST: Please provide the names and background qualifications of all subject matter experts in which BellSouth relied upon to determine the work times associated with NRCs.

RESPONSE: See Attachment Nos. 1 and 2.

RESPONSE PROVIDED BY:

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Birmingham, AL 35243

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Atlanta, Georgia 30375

Work Center/Function	Subject Matter Expert(s)
Access Carrier Advocacy Center (ACAC) or UNE Center (UNEC)	Wayne Lloyd, Glen Miller, Janice Jones
Address & Facility Inventory Group (AFIG)	Jayne Sullivan
Circuit Capacity Management (CCM) Network & Engineering Planning (FG20) Network Plug-In Inventory Control System Administration (PICS)	Bill McAllister
Circuit Provisioning Group (CPG)	Shirley Smith, Diane Martin, Bob Warren
CO Install & Mtce Field – Ckt & Fac (NTEL)	Charles Emery, Dan Stinson
Complex Resale Support Group (CRSG)	Debbie Timmons
Installation & Maintenance – Special Services (SSIM)	Jim McCracken, Gerald Potts
Local Carrier Service Center (LCSC)	Rita Knapp, Paula Murphy, Landra Martin, Phyllis Rogers, Rebecca Wellman
Outside Plant Engineering (OSPE)	Mike Zitzmann, Bill Braxton
Work Management Center (WMC)	Mary Walsh-Bratton, Carol Kines
COWG	Dan Stinson
Customer Network Control Center	Michelle Tatum
Assignment Facility Inventory Group	Shirley Abts
Work Management Center	Lenny Glynn
Installation & Maintenance	Danny Colburn
Interconnection Operations	Carol A. Mahinske
Interconnection Operations	Joe Raney
Interconnection Operations	Cindy Owen
Central Systems Administration	Beverly McDonald
Network Planning and Support	Tom F. Coffield
Product Commercialization Unit	Iris M. Regas
Product Commercialization Unit	George H. Crier
Interconnection Operations	Mary Edwards
Interconnection Operations	Brenda L. Haynes
Network Operations and Support	Virginia L. Norris
Product Commercialization Unit	Ronald L. Thweatt
RCMAG	Frank Eberle
Switch and Trunk Based Translations	Bob Gibson, Bob Warren
BRMC	Connie Coley

Wayne Lloyd – BA in Industrial Management. 3 years with the UNEC.

Glen Miller – 34 years with BellSouth. With the UNEC since 1997.

Janice Jones – Manager, UNEC Support. BS in Urban Science, additional 2 years of Business courses. 26 1/2 years with BellSouth of which one year in the UNEC.

Jayne Sullivan – BA in Business Admin. 29 ½ yrs with BellSouth of which 23 years are in the AFIG.

Bill McAllister – Manager, Network Planning and Support. BS in Civil Engineering. 29 years with BellSouth, of which 14 years as SME for CCM.

Shirley Smith – BellSouth is still gathering this information and will supplement its response accordingly.

Diane Martin – Specialist, Network Operations and Support. Regional CPG SME for xDSL products. 22 years with BellSouth of which 14 years were spent as a Support/Methods Specialist for the Tennessee CPG. Circuit Design Engineer in Tennessee for five years. Current position, CPG Regional SME since 1997. B.S. Degree in Mathematics.

Bob Warren – 35 years with BellSouth. Trunk Based Translations since 1990.

Charles Emery – BellSouth is still gathering this information and will supplement its response accordingly.

Dan Stinson – Specialist, Network Operations and Support. 17 years Central Office Operations and 3 years Switch Line Translations.

Debbie Timmons – Sales Support Director, Interconnection Sales. 28 years with BellSouth as Repair Service Clerk, Dial Bureau Administration support to District Plant Manager, Business Services; converted service orders into dimension PBX translations. Sales and Marketing: Communications Consultant, Account Executive, Systems Manager. Corportae Communications: Manager. Interconnection Sales, Pre-order process of Complex Reslae Service Requests submitted by ALECs.

Jim McCracken – Specialist, Network Operations and Support. 27 years with BellSouth. Associate Degree in Business. Cable Repair and 10 years in SSI&M.

Gerald Potts – Specialist, Interconnection Operations. BS in Liberal Arts. 13 years with BellSouth. Marketing, Network Operations, and Economic Development.

Rita Knapp – BellSouth is still gathering this information and will supplement its response accordingly.

Paula Murphy – Specialist, Interconnection Operations. 21 years with BellSouth. Currently LCSC Staff Manager.

Landra Martin – Manager, Interconnection Operations. 20 years with BellSouth, of which 15 years as SME.

Phillis Rogers – Manager, Interconnection Operations. BA in Business. 15 years with BellSouth of which 2 years in Interconnection Operations.

Rebecca Wellman – BellSouth is still gathering this information and will supplement its response accordingly.

Mike Zitzmann – Specialist, Network Planning and Support. Bachelors in Engineering Science form University of New Orleans. Outside Plant Engineer/Planner – 14 years in Gentilly District, New Orleans, LA. Outside Plant Engineering Staff Support – 13 years to present providing support to Outside Plant Engineering Districts.

Bill Braxton – BS in Physics. 29 ½ years with BellSouth, all in OSPE.

Mary Walsh-Bratton – Specialist, Network Operations and Support. 27 years with BellSouth. Department of Revenue, Operator Services, Business Office, Marketing, and Network Operations.

Carol Kines – BellSouth is still gathering this information and will supplement its response accordingly.

Michelle Tatum – BellSouth is still gathering this information and will supplement its response accordingly.

Shirley Abts – Specialist, Network Planning and Support, 28 years with BellSouth of which 24 years are in Network. Participated in the deployment of LFACs system in Alabama. Staff Manager-Loop Assignment Center Staff. SME-Address and Facility Inventory Group.

Lenny Glynn – Specialist, Network Operations. 23 years with BellSouth. 3 years WMC.

Danny Colburn – BellSouth is still gathering this information and will supplement its response accordingly.

Carol A Mahinske – Manager, Interconnection Operations. BA in English. 30 years with BellSouth, 3 years of which in Interconnection Operations.

Joe Raney - BellSouth is still gathering this information and will supplement its response accordingly.

Cindy Owen – BellSouth is still gathering this information and will supplement its response accordingly.

Beverly McDonald – BellSouth is still gathering this information and will supplement its response accordingly.

Tom F. Coffield – BellSouth is still gathering this information and will supplement its response accordingly.

Iris M Regas – Manager, Customer Operations. 23 years with BellSouth of which 3 years were as a PCU SME.

George H Crier - BellSouth is still gathering this information and will supplement its response accordingly.

Mary Edwards – Specialist, Network Planning and Support. 15 years with BellSouth, of which 4 years in current position.

Brenda L Haynes – BellSouth is still gathering this information and will supplement its response accordingly.

Virginia L Norris – BS in Math Education. 21 years with BellSouth in Network. Staff since 1988.

Ronald L Thweatt – BA in Electronic Engineering. 35 years with BellSouth, 5 years project management. Certified Product Manager.

Frank Eberle – BellSouth is still gathering this information and will supplement its response accordingly.

Bob Gibson – Specialist, Network Operations and Support. 30 years with BellSouth of which 4 years as SME for Switch and Trunk Based Translations.

Connie Coley – Specialist, Network and Carrier. 25 years with BellSouth, one year of which in current position.

BELLSOUTH TELECOMMUNICATIONS, INC.

FPSC DKT NO. 990649-TP

AT&T'S FOURTH REQUEST FOR PRODUCTION OF DOCUMENTS

DECLASSIFIED

POD NO. 53

DOCUMENT NUMBER-DATE
08148 JUL-5 8
FPSC-RECORDS/REPORTING

Job Title: **Service Representative**
Job Title Code: **3355**
Wage Scale: **23**

A. JOB RESPONSIBILITIES

Responsibilities may include but are not limited to the following:

1. Consults with customers to recommend and sell a variety of telecommunications products and/or services to meet customer's needs. Utilizes appropriate sales techniques. Expected to meet sales objectives.

2. Negotiates service order requests from customers and inputs orders via on-line system for installation, removal or changes of telephone service.

3. Serves as the telephone expert to the customer by discussing and handling billing inquiries, product and service inquires, toll and order inquiries, other miscellaneous inquiries, and complaints or customer requests which are related to other departments including referrals to BellSouth entities or other companies.

4. Negotiates billing inquiries and/or adjustments, other inquiries and complaints.

5. Handles telephone and in some cases face-to-face contacts; makes minute-by-minute decisions that will result in customer satisfaction.

6. Collects delinquent bills in some assignments by contacting customers, usually by telephone or either mechanized or self-composed letters.

7. Records data, notations, and/or completes forms via on-line system while communicating with customers by telephone. A headset is usually worn to perform this function.

8. Computes and quotes to customers adjustments, balances and rates.

9. Determines credit and security requirements and extensions of credit.

10. Records appropriate details of service order requests on customer records via on-line system and prepares forms to assure that all customer's request are handled to meet customer commitments.

Job Created: October 1976
Date Revised: November 1997

A. JOB RESPONSIBILITIES (Continued)

11. Handles incoming daily paperwork such as notification of payments, referrals for delinquent accounts or billing reasons, filing service orders, etc. Reads, interprets and implements on-line information, updates to policies, procedures, and operating standards. Handles intra-company calls and requests from other departments.

12. Typing and/or data entry is required in some assignments.

B. BASIC QUALIFICATIONS

Candidates must meet the following minimum qualifications:

Testing	Training	Other Requirements
See Non-Management Job Title Test Matrix and Test Study Guides (www.asisvcs.com/bellsouth/testtips.html)	The following must be satisfactorily completed for title retention: ✓ On-the-job and/or classroom training as required ✓ Predetermined basic training curriculum	✓ Satisfactory performance and attendance in present job. ✓ Satisfactory background investigation.

C. GENERAL WORKING CONDITIONS/PHYSICAL REQUIREMENTS

Successful candidates require the ability to:

- ✓ Work various scheduled tours including day, evening, night and split tours covering Sunday through Saturday with overtime and holiday work as required. Tour length will be 7 1/2 hours. Open-ended scheduling is in effect in some assignments and certain business offices are staffed twenty-four hours a day, seven days a week.
- ✓ Work in a highly controlled environment where strict schedules are followed. Interact with on-line system while communicating with customers.
- ✓ Meet sales and/or service objectives.

D. ADDITIONAL FACTORS TO BE CONSIDERED

- ✓ Experience in public contact work, complaint handling, general service industries or collections work.
- ✓ Ability to speak a second language in some assignments.

Individuals holding this job title may be required to perform the above job duties with or without "reasonable accommodations."

Job Created: October 1976
Date Revised: November 1997

Job Title: **Frame Attendant**
Job Title Code: **1461**
Wage Scale: **24**

A. JOB RESPONSIBILITIES

Responsibilities may include but are not limited to the following:

1. Reviews and interprets service orders or equivalent and follows standard practices.
2. Connects, disconnects, removes, rearranges and maintains wires inside a central office connecting customers' lines with central office equipment.
3. Determines differences in wire and cable colors.
4. Completes work by using hand tools such as pliers, screwdriver, soldering iron and special test equipment.
5. Climbs ladders and performs work assignments aloft.
6. Pulls wire and carries test equipment, wire coils and associated equipment weighing up to 60 pounds.
7. Determines work to be done by reviewing service orders and other Company issued documents.
8. Makes or assists other craft employees in making tests and checks of equipment.
9. Routinely inspects all parts of the frames.
10. Cleans and sweeps up loose wire and other debris.
11. Works alone or with others in a large room with narrow aisles crowded with rows of frame and switching equipment.
12. Places and removes plug-in circuit equipment.
13. Maintains integrity of mechanized and manual records on facility and equipment assignments for plain old telephone service (POTS); and performs data base verifications using computer terminal associated with Operations Support Systems.
14. Tests wire work performed to assure reliable service and identify troubles; tests and analyzes frame trouble reports; corrects or repairs trouble and closes out reports to subscribers.

Job Created: November 1972
Date Revised: November 1997

A. JOB RESPONSIBILITIES (Continued)

15. Handles permanent signals and calling party hold alarms; changes mechanized tapes in some assignments.

16. Follows established safety practices and procedures. Must be able to safely utilize equipment resources to perform specified physical job duties, i.e., satisfies manufacturer's specifications for operation or use of equipment including weight limitations.

17. Drives Company vehicle.

B. BASIC QUALIFICATIONS

Candidates must meet the following minimum qualifications:

Testing	Training	Other Requirements
See Non-Management Job Title Test Matrix and Test Study Guides (www.asisvcs.com/bellsouth/testtips.html)	The following must be satisfactorily completed for title retention: ✓ On-the-job and/or classroom training as required	✓ Satisfactory performance and attendance in present job. ✓ Satisfactory background investigation. ✓ Valid driver's license and ability to drive vehicle with manual shift in some assignments. ✓ Ability to perceive differences in wire and cable colors.

C. GENERAL WORKING CONDITIONS/PHYSICAL REQUIREMENTS

Successful candidates require the ability to:

- ✓ Work various scheduled tours including day, evening and night covering Sunday through Saturday with overtime, call-outs and holiday work as required. Tour length will be 8 hours.
- ✓ Work alone or with others in a large room with narrow aisles crowded with rows of frame equipment.
- ✓ Climb ladders, work aloft, and lift and move equipment weighing up to 60 pounds.

D. ADDITIONAL FACTORS TO BE CONSIDERED

- ✓ Knowledge of service orders.

Individuals holding this job title may be required to perform the above job duties with or without "reasonable accommodations."

Job Created: November 1972
Date Revised: November 1997

Job Title: **Central Office Installation Repair Technician**

Job Title Code: **0545**

Wage Scale: **32**

A. JOB RESPONSIBILITIES

Responsibilities may include but are not limited to the following:

1. Installs and repairs telephone central office equipment.
2. Places wire distributing frames, relay racks, dial switching equipment and power apparatus in locations designated.
3. Installs central office cables to inter-connect various units of equipment.
4. Adjusts relays and other electrical devices to maximum operating efficiency.

(PICS Inventory Teams)

1. Performs Plug-In Equipment Inventories as required in accordance with prevailing inventory procedures.
2. Stencils and labels plug-in equipment for identification purposes.
3. Assists in the establishing of mini-stock locations including setting up plug-in storage facilities.
4. Assists Plug-In Administrator in plug-in recall programs.
5. Lifts and moves loads up to 60 pounds.
6. Follows established safety procedures. Must be able to safely utilize equipment resources to perform specified physical job duties, i.e., satisfies manufacturer's specifications for operation or use of equipment including weight limitations.
7. Drives Company vehicle.

Job Created: September 1949
Date Revised: November 1997

B. BASIC QUALIFICATIONS

Candidates must meet the following minimum qualifications:

Testing	Training	Other Requirements
See Non-Management Job Title Test Matrix and Test Study Guides (www.asisvcs.com/bellsouth/testtips.html)	The following must be satisfactorily completed for title retention: ✓ On-the-job and/or classroom training as required	✓ Satisfactory performance and attendance in present job. ✓ Satisfactory completion of a background investigation. ✓ Valid driver's license and ability to drive vehicle with manual shift in some assignments.

C. GENERAL WORKING CONDITIONS/PHYSICAL REQUIREMENTS

Successful candidates require the ability to:

- ✓ Work various scheduled tours including day, evening and night covering Sunday through Saturday with overtime and holiday work as required. Tour length will be 8 hours.
- ✓ Lift and move loads up to 60 pounds.

D. ADDITIONAL FACTORS TO BE CONSIDERED

- ✓ Experience and/or training in electrical and mechanical fields.

Individuals holding this job title may be required to perform the above job duties with or without "reasonable accommodations."

Job Created: September 1949
Date Revised: November 1997

Job Title: **Outside Plant Technician**
Job Title Code: **2024**
Wage Scale: **30**

A. JOB RESPONSIBILITIES

Responsibilities may include but are not limited to the following:

1. Works with heavy duty power equipment and small tools in the installation, repair and maintenance of outside plant facilities.
2. Loads necessary tools and heavy equipment onto trucks or trailers.
3. Receives work assignments and instructions from supervisor and/or through the use of a computer access terminal.
4. Operates power equipment such as compressors, pumps, blowers, etc., and hydraulic aerial lifts (buckets) and ladders mounted on trucks.
5. Performs construction work such as digging holes, placing poles, placing cable, air pipe and inner duct in various types of conduit systems and open excavations. Unreels, pulls, and strings wire strand and cable from pole to pole; pole to buildings, etc.
6. Determines differences between wire and cable colors.
7. Connects wires and cables to terminals and attaches or detaches various kinds of hardware to wires, cables, buildings or poles.
8. Splices PIC and non-pressurized cable and makes appropriate enclosures.
9. Uses test equipment to check for toxic and explosive gas in manholes, and may have to empty water and other debris from manholes.
10. Dismantles, moves or removes aerial, underground or building wire, cable, associated equipment and hardware.
11. Reviews work orders and Company practices.
12. Works outside in all kinds of weather.
13. Climbs poles, ladders and enters tunnels, buildings, trenches, crawl spaces and manholes to place telephone cables and equipment.

Job Created: September 1949
Date Revised: November 1997

A. JOB RESPONSIBILITIES (Continued)

14. Follows established safety procedures. Must be able to safely utilize equipment resources to perform specified physical job duties, i.e., satisfies manufacturer's specifications for operation or use of equipment including weight limitations.

15. Lifts and moves loads up to 120 pounds.

B. BASIC QUALIFICATIONS

Candidates must meet the following minimum qualifications:

Testing	Training	Other Requirements
See Non-Management Job Title Test Matrix and Test Study Guides (www.asisvcs.com/bellsouth/testtips.html)	The following must be satisfactorily completed for title retention: ✓ On-the-job and/or classroom training as required ✓ SF401 Safe Ladder Handling and Pole Climbing	✓ Satisfactory performance and attendance in present job. ✓ Satisfactory background investigation. ✓ Valid driver's license and ability to drive vehicle with manual shift in some assignments. ✓ May be required to meet DOT rules and regulations including DOT certifications. ✓ Ability to perceive differences in wire and cable colors.

C. GENERAL WORKING CONDITIONS/PHYSICAL REQUIREMENTS

Successful candidates require the ability to:

- ✓ Work various scheduled tours including day, evening and night covering Sunday through Saturday with overtime, call-outs and holiday work as required. Tour length will be 8 hours.
- ✓ Work out of town for varying lengths of time as necessary.
- ✓ Work outside in all kinds of weather.
- ✓ Climb poles, ladders, enter tunnels, buildings, trenches, crawl spaces and manholes.
- ✓ Lift and move loads up to 120 pounds.

D. ADDITIONAL FACTORS TO BE CONSIDERED

- ✓ Experience in electrical and mechanical fields.

Individuals holding this job title may be required to perform the above job duties with or without "reasonable accommodations."

Job Created: September 1949
Date Revised: November 1997

Job Title: **Facility Technician**
Job Title Code: **9118**
Wage Scale: **32**

A. JOB RESPONSIBILITIES

Responsibilities may include but are not limited to the following:

1. Reviews and interprets work orders, circuit diagrams and follows standard practices.
2. Receives work orders and instructions from supervisor and/or computer access terminal.
3. Reviews and analyzes complex schematic drawings to determine work to be done and sequence of tasks.
4. Performs work both inside and outside in connection with providing telephone service between the central office and customer's premises.
5. Requires interfacing with customers on construction installation or repair work.
6. Works with hot metal, tools, digital loop carrier equipment, fiber optic cables, air pressure monitoring systems and associated equipment, color coded and tone identified wires in the connection of wires and cables to other telephone equipment and in connecting cable pairs together.
7. Determines differences in wire and cable colors and audible tones.
8. Prepares newly installed cables, conductors, and fibers preparatory to splicing by removing outer sheath, insulation and fiber coating.
9. Splices cables in aerial, underground, buried, submarine and building configurations, both multiple conductor cable, coaxial cable and fiber optic cable.
10. Identifies conductors in adjoining cable sections, according to diagrams and specifications by means of test signal identified wires or fiber optic test equipment.
11. Operates hydraulic aerial lifts (buckets) and ladders mounted on trucks.
12. Closes splices by enclosing with bolted on waterproof case, thermally applied shrinkable sleeving, or fitting and wiping a lead sleeve over splice opening.

Job Created: August 1986
Date Revised: November 1997

A. JOB RESPONSIBILITIES (Continued)

13. Loads required tools and materials on Company truck or van and drives or rides to work location. May report directly to work location in some cases.

14. Makes necessary tests for toxic and explosive gas before entering manhole and continues tests while working in manhole. May require cleaning manholes before working and after completing assignments.

15. Communicates with other employees about completed work and requests various information regarding work assignments.

16. Repairs, routines and maintains cable plant, fiber optic plant and digital loop carrier equipment.

17. Rearranges other types of plant to conform with cable work and placing and removing cables.

18. Uses test equipment to isolate conductor faults or identify defective or broken fibers.

19. Turns up, routines, troubleshoots and maintains digital carrier equipment and maintains lightwave and metallic terminals.

20. Uses electrical instruments such as 500/573 Cable Locator, 710A/B Resistance Fault Locator, 730/735 Open Fault Locator to verify and determine defects in the cable, conductors and wire.

21. Uses electrical instruments such as span measuring test sets and signal generators to verify and determine defective carrier equipment in subscriber/digital carrier systems.

22. Removes, tests, and replaces plug-in carrier equipment in central office, repeater, and remote terminal locations.

23. Uses computer terminals associated with Operations Support Systems related to work locations.

24. Follows established safety procedures. Must be able to safely utilize equipment resources to perform specified physical job duties, i.e., satisfies manufacturer's specifications for operation or use of equipment including weight limitations.

25. Climbs poles and ladders, works aloft with small tools.

Job Created: August 1986
Date Revised: November 1997

A. JOB RESPONSIBILITIES (Continued)

26. Work outside in all kinds of weather.

27. Lifts and moves loads up to 120 pounds.

28. Drives Company vehicle.

Testing	Training	Other Requirements
See Non-Management Job Title Test Matrix and Test Study Guides (www.asisvcs.com/bellsouth/testtips.html)	The following must be satisfactorily completed for title retention: ✓ On-the-job and/or classroom training as required ✓ SF401 Safe Ladder Handling and Pole Climbing	✓ Satisfactory performance and attendance in present job. ✓ Satisfactory background investigation. ✓ Valid driver's license and the ability to drive vehicle with manual shift in some assignments. ✓ May be required to meet DOT rules and regulations including DOT certifications. ✓ Ability to perceive differences in wire and cable colors and audible tones.

C. GENERAL WORKING CONDITIONS/PHYSICAL REQUIREMENTS

Successful candidates require the ability to:

- ✓ Work scheduled tours covering Sunday through Saturday with overtime, call-outs and holiday work as required. Tour length will be 8 hours.
- ✓ Work outside in all kinds of weather; work in manholes and alone at remote repeater locations, etc. when necessary.
- ✓ Climb poles and ladders; work aloft with small tools; and lift and move loads up to 120 pounds.

D. ADDITIONAL FACTORS TO BE CONSIDERED

- ✓ Experience in electrical, electronic and mechanical fields.

Individuals holding this job title may be required to perform the above job duties with or without "reasonable accommodations."

Job Created: August 1986
Date Revised: November 1997

Job Title: **Switching Equipment Technician**
Job Title Code: **3552**
Wage Scale: **32**

A. JOB RESPONSIBILITIES

Responsibilities may include but are not limited to the following:

1. Reviews and interprets service orders, circuit diagrams, specifications, program documentation associated with electronic systems, and follows standard practices.
2. Performs work assignments and updates record of work activity.
3. Analyzes defects, tests, repairs and maintains telephone switching circuits and equipment in company central offices by using various test equipment.
4. Installs, repairs, adjusts and maintains equipment, such as switches, relays and amplifiers, using small tools.
5. Performs routine equipment maintenance such as inspecting, cleaning, testing and lubricating equipment.
6. Removes or places connections on wire distributing frames and solders wire to terminal lugs following work orders and specifications.
7. Maintains logs on work and item of equipment involved.
8. Maintains telephone switching equipment at both private establishments (hotels and office buildings) and at other than regularly assigned central offices which may require driving a Company vehicle between locations.
9. Tests and analyzes subscriber trouble reports.
10. Works with maintenance centers, field and other forces in connection with central office work.
11. Performs routine checks on central office equipment.
12. Operates and maintains such central office equipment as AC/DC converters, inverters, motors, generators, storage batteries and motor driven apparatus used to furnish or transmit power for telephone operations.
13. Operates complicated electronic and mechanical devices to respond to computer inquiries and updating information.
14. Climbs ladders and performs work assignments aloft.
15. Works in a company central offices among crowded bays of complicated electrical equipment.

Job Created: December 1980
Date Revised: November 1997

A. JOB RESPONSIBILITIES (Continued)

16. Works with gasoline, diesel fuel, oil and battery acid.

17. Follows established safety practices and procedures. Must be able to safely utilize equipment resources to perform specified physical job duties, i.e., satisfies manufacturer's specifications for operation or use of equipment including weight limitations.

18. Drives Company vehicle.

19. Lifts and moves loads up to 60 pounds.

B. BASIC QUALIFICATIONS

Candidates must meet the following minimum qualifications:

Testing	Training	Other Requirements
See Non-Management Job Title Test Matrix and Test Study Guides (www.asisvcs.com/bellsouth/testtips.html)	The following must be satisfactorily completed for title retention: ✓ On-the-job and/or classroom training as required	✓ Satisfactory performance and attendance in present job. ✓ Satisfactory background investigation. ✓ Valid driver's license and ability to drive vehicle with manual shift in some assignments. ✓ Ability to perceive differences in wire and cable colors.

C. GENERAL WORKING CONDITIONS/PHYSICAL REQUIREMENTS

Successful candidates require the ability to:

- ✓ Work various scheduled tours including day, evening and night covering Sunday through Saturday with overtime, call-outs, and holiday work as required. Tour length will be 8 hours.
- ✓ Work among crowded bays of electrical equipment and exposed to gasoline, diesel fuel, oil and battery acid.
- ✓ Climb ladders; perform work aloft; and lift and move loads up to 60 pounds.

D. ADDITIONAL FACTORS TO BE CONSIDERED

- ✓ Experience or training in electrical, electronic or mechanical fields.

Individuals holding this job title may be required to perform the above job duties with or without "reasonable accommodations."

Job Created: December 1980
Date Revised: November 1997

BELLSOUTH TELECOMMUNICATIONS, INC.

FPSC DKT NO. 990649-TP

AT&T'S FOURTH REQUEST FOR PRODUCTION OF DOCUMENTS

POD NO. 57

~~PROPRIETARY~~ redacted

Access to other CNAM Databases:

1999 Usage (Jan. thru Nov., from Sharon Parham)		Adjusted to include BellAtlantic and SBC*	Annualized Costs (incl. BA & SBC)
Total Queries to other dbs	769,087,769	937,895,863	1,022,286,178
Total Charges for Queries	$ 11,196,710.35	$ 13,884,836.65	$ 15,147,094.53
Total Transport Charges	$ 886,368.28	$ 1,256,986.65	$ 1,370,186.16
Total Charges	$ 12,083,078.63	$ 15,140,822.30	$ 16,517,280.89
Total Cost Per Query	$ 0.0157109228	$ 0.0161571789	$ 0.0161571789

* BellAtlantic and SBC assumed to be equal to Ameritech for calculations.

Service Establishment Costs:

Implementation Work (per initial order)			
Implementation Manager's Time:			
Up-front coordination	30 minutes	JFC 0440	
CNARG Update	15 minutes	JFC 0440	
SMS Support Activity:			
Up-front coordination	10 minutes		
INSAC Time:			
Up-front coordination	Per Mary Edwards the numbers used in the last study for initial activities to set up a new customer are still valid.		
Est. Initial PCs - Cust. STP			
Est. Initial PCs - GTW STP			
Est. Initial PCs - [illegible] STP			
[illegible] Screening			
RSAG Time:			
-Setup in SMS/per OCN	30 minutes	JFC3D33	
Andersen Time:			
New Connect:Direct	56 hours		
CNAM to existing Connect: Direct	35 hours		
CNAM to existing FTS	35 hours		
Service Order Activity (per order)			
Initial order (<10 point codes)	20 minutes	JFC 2300	(includes releasing order to correct errors if needed)
Initial order (10-100 point codes)	60 minutes	JFC 2300	(includes releasing order to correct errors if needed)
Initial order (>100 point codes)	480 minutes	JFC 2300	(includes releasing order to correct errors if needed)
Subsqt. order (<10 point codes)	20 minutes	JFC 2300	(includes releasing order to correct errors if needed)
Subsqt. order (10-100 point codes)	60 minutes	JFC 2300	(includes releasing order to correct errors if needed)
Subsqt. order (>100 point codes)	480 minutes	JFC 2300	(includes releasing order to correct errors if needed)
Supervisor's time	1%	JFC 4ATA	
(Note: Each sp in this group receives three weeks training on these type orders)			
Initial Billing Activity			
Entering contract into sys.	180 minutes	JFC 1200	
BBI Mgr. (Harold Alexander)	470 hrs/yr	JFC 1200	
Name Input Activity - Initial Establishment			
CHUI:			
Implementation Mgr.	15 minutes	JFC 0440	
RSAG	30 minutes	JFC3D33	
Trouble Handling/Customer Instruction			
Implementation Mgr.	600 hrs/yr	JFC 0440	(this number is for CLEC accounts only. Avg per call 60 minutes, 50 calls per month.)
RSAG	2000 hrs/yr	JFC3D33	(this number represents total troubles for all types of CNAM customers. CLECs represent approx. 35% of total customers)
SMS Support	900 hrs/yr		(pay grade 58)
INSAC	120 hrs/yr	JFC 4324	
INSAC	380 hrs/yr	JFC 4320	
Billing Service Rep	192 hrs/yr		
Miscellaneous			
CNARG Administration	21 hrs/yr	JFC 0440	
Product Support	120 hrs/yr		(pay grade 58)
CHUI DIALS Charge-Card Renewal	$100 every three years		(this does not include initial setup of DIALS)
GT Changes/Additions	60 hrs/yr	JFC 4324	(this number represents time spent by INSAC making CNARG driven changes to GTTs not associated with new customers - Manager)
GT Changes/Additions	1320 hrs/yr	JFC 4320	(this number represents time spent by INSAC making CNARG driven changes to GTTs not associated with new customers)

NETWORK INSTALLATION OUTSIDE WORK GROUP - BUSINESS (NIOWGB)

Item #2

TECHNICIAN TO X BOX AND/OR BCT OR LST LOCATION

Item Description: Travel time to Cross box and/or BCT or LST Location.

ACTIVITY PROFILE

Begins:

- When technician is ready to begin travel to cross box, pair change or BCT location

May Include:

- Checking vehicle for materials
- Actual driving time to cross box, pair change or BCT location

DOES NOT INCLUDE:

- Time spent on vehicle breakdowns
- Time spent resolving parts discrepancies
- Break or restroom time

Ends:

- When technician arrives at cross box, pair change or BCT location

NOTE: Often procedures dictate that the technician visit the customer's premises before performing these work operations. However, so that the study will be consistent across the region, please make estimates for this work operation as it is described above.

AVERAGE TIME PER OCCURRENCE
(Minutes)

	Item Number	Work Time
Travel from work ctr to the PXJ, BCT, RXJ, LST location (first order of the day)	2.01	27.00
Travel time from last job to the PXJ, RXJ, BCT, LST location	2.02	20.00

NETWORK INSTALLATION OUTSIDE WORK GROUP - BUSINESS (NIOWGB)

Item #4

PLACE AND/OR PERFORM WORK PXJ, RXJ, BCT, LST AS REQUIRED

Item Description: Actual placement and/or removal of cross connect jumpers, performance of line and station transfer work, or breaking of connect through.

ACTIVITY PROFILE

Begins:

- On arrival at PXJ, RXJ, BCT or LST location

May Include:

- Set up time at job site preparing for work operation:
  - Tools, equipment
  - Ladder, placing
  - "Suiting up"
  - Opening/closing cross box, ped., terminal, etc.
- Performance of cross connect, LST or BCT work
- Coordination time
- "Dead time" waiting for assignments, frame, etc. while unable to do other work

DOES NOT INCLUDE:

- Vehicle breakdowns
- Initial travel to work location or trip to customer's premises
- Break or restroom time

AVG. TIME FOR THIS TASK = 32.00 Minutes

Ends:

- With PXJ, RXJ, BCT or LST being completed

AVERAGE TIME PER OCCURRENCE

(Minutes)

	Item Number	Work Time
PXJ	4.01	16.00
BCT/RXJ	4.02	28.00
LST	4.03	60.00

NETWORK INSTALLATION OUTSIDE WORK GROUP - BUSINESS (NIOWGB)

Item #5

CHECK CONTINUITY AND/OR DIAL TONE

Item Description: Check loop pair(s) for continuity and/or dial tone before leaving cross box, LST, PXJ, RXJ, BCT location

ACTIVITY PROFILE

Begins:

- At completion of PXJ, RXJ, BCT, LST operation

May Include:

- Checking for loop continuity to serving central office
- Checking for dial tone and/or ring back as required

DOES NOT INCLUDE:

- Trouble resolution time
- Break or restroom time

Ends:

- With continuity established and dial tone verified, or with failure to achieve the above results

---

AVERAGE TIME PER OCCURRENCE
(Minutes)

Item Number	Work Time
5.00	15.00

NETWORK INSTALLATION OUTSIDE WORK GROUP - BUSINESS (NIOWGB)

Item #6

TROUBLE RESOLUTION

Item Description: Attempt to resolve problems with continuity of the loop or lack of dial tone

ACTIVITY PROFILE

Begins:

- With failure to establish circuit continuity or get dial tone

May Include:

- Time spent testing through CAT or using test equipment
- Time spent on line with IMC or Central Office trying to resolve problem
- Time spent by technician to obtain new pair
- "Dead time" spent waiting for new assignments and not doing any other office work
- Time spent making repairs or making changes in facilities to resolve problem

DOES NOT INCLUDE:

- Break or restroom time
- Time spent on other activity while waiting for new pair assignments

Ends:

- With resolution of loop problems or decision to refer resolution of problem to other group and complete the order at another time

---

AVERAGE TIME PER OCCURRENCE

(Minutes)

Item Number	Work Time
6.00	45.00

NETWORK INSTALLATION OUTSIDE WORK GROUP - BUSINESS (NIOWGB)

Item #11

ESTABLISH AND CONDUCT TEST FROM THE NI

Item Description: Time spent "hooking up" test equipment and performing operational test from the network interface

ACTIVITY PROFILE

Begins:

- With arrival of technician at customer premises or completion of drop and/or NI work if applicable

May Include:

- Time for "set up"
- Time to perform all necessary tests with CAT or test equipment
- Time spent storing test gear after use

Ends:

- With successful completion of tests or the need for trouble resolution

DOES NOT INCLUDE:

- Time for trouble resolution
- Break or restroom time

AVERAGE TIME PER OCCURRENCE
(Minutes)

Item Number	Work Time
11.00	20.00

NETWORK INSTALLATION OUTSIDE WORK GROUP - BUSINESS (NIOWGB)

Item #12

TROUBLE RESOLUTION

Item Description: Time spent in trouble resolution following failure of test performed at the network interface

ACTIVITY PROFILE

Begins:

- With need to resolve problems which caused tests performed at the network interface to fail

May Include:

- All time spent resolving problems in:
  - Cable facilities
  - Drop, protector and/or NI
  - Network terminating wire
- Time spent testing with, or securing additional information from IMC or other centers in resolving problems or making corrections to records
- Travel time associated with trouble resolution

DOES NOT INCLUDE:

- Break or restroom time

Ends:

- With successful resolution of problem or decision to refer trouble to another group and to complete order later

---

AVERAGE TIME PER OCCURRENCE
(Minutes)

Item Number	Work Time
12.00	56.00

NETWORK INSTALLATION OUTSIDE WORK GROUP - BUSINESS (NIOWGB)

Item #16

TECHNICIAN COMPLETES SERVICE ORDER

Item Description: Technician closes out service order on CAT and/or on phone with the IMC

ACTIVITY PROFILE

Begins:

- When technician completes all physical work on order and is ready to begin close out procedure on CAT or with IMC

May Include:

- Placing call on CAT or to the IMC
- Entering close out information into CAT or relating that information to the IMC
- Calling IMC or other centers to correct records in connection with order
- Packing of gear, tools, etc.

DOES NOT INCLUDE:

- Time spent on CAT or on phone with IMC obtaining data on next job *

Ends:

- When the technician returns to truck and is ready to proceed with next job

* While the time the technician spends securing information on the next job is right in the middle of the time interval associated with this Item, it should not be considered part of this interval. It should be considered part of Item #1.

AVERAGE TIME PER OCCURRENCE

(Minutes)

Item Number	Work Time
16.00	19.00

Subject: .DL ADSL SSIM Worktimes
Creator:

53.17

Item 1

TO:
BCC:

Item 2

this is my understanding of our phone conversation:

Both ADSL-Compatible Loops and 2-Wire Unbundled Copper Loops (designed circuit) should contain the same worktime for SSIM technician. This worktime is taken from the TOC study as follows:

AT THE CROSS-BOX
Place PXJ - 16 min.
Check continuity and/or dial tone - 15 min.
Trouble resolution/testing - 13.5 (45 min. 30% of the time)
These times total 44.5 minutes

AT CUSTOMER PREM.
Testing from NI - 20 min.
Trouble resolution/testing - 11.76 (56 min 21% of the time)
Service Order completion - 19 min.
These times total 50.76 min.

X 20 min
50 X. me

TOTAL OF TIME AT CROSSBOX AND CUSTOMER PREM: 95.26 minutes.

Do you see anything above that should be modified/changed/added/deleted? No

These times include sending tones when qualifying pairs, checking for load coils and to see if there is bridge tap close to the customer. (Do these functions fall under testing?) Yes

Also, there is no disconnect time for either UNE. (What about equipment recovery?) No

Thanks for all your assistance.

Response provided by

10/7/99

BELLSOUTH TELECOMMUNICATIONS, INC.

FPSC DKT NO. 990649-TP

AT&T'S FOURTH REQUEST FOR PRODUCTION OF DOCUMENTS

POD NO. 57

Item No. 57
Attachment No. 2
Work Management Center (WMC)

WORK MANAGEMENT CENTER (WMC)

APPLIES TO SL1, ISDN, ADSL, HDSL, UCL
NOT APPLICABLE TO ULM, LQSI

1	NONRECURRING COST STUDY INPUT - VERSION 2.0			—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—			
2	2 WIRE VOICE LOOP - SL1 (non-designed circuit)						
3							
4				DISCONNECT LOCATION LIFE (MOS.):	0		
5							
6	STATE:						
7	COST ELEMENT #:	A.1.1					
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20	LEVEL:	2000-2002		(A)		(B)	
21				INSTALL		DISCONNECT	
22				WORKTIMES (MIN)		WORKTIMES (MIN)	
23	DESCRIPTION	SME	JFC	FIRST	ADDTL	FIRST	ADDTL
24							
25							
26							
27							
28							
29							
30	SERVICE ORDER						
31	LCSC receives ASR & issues service order		2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)
32							
33							
34							
35	WMC coordinates dispatched technicians		4WXX	15.00	0.00	15.00	0.00
36	UNEC receives svc order & assigns resources to coordinate		471X	(11*30%)	(11*30%)	0.00	0.00
37							
38							
39	ENGINEERING						
40	AFIG handles requests for manual assistance (RMA) from HAL		400X	(7*5%)	(7*5%)	(7*5%)	(7*5%)
41							
42	OSPE reviews request & handles RMAs		32XX	(60*10%)	(60*10%)	0.00	0.00
43							
44	CONNECT & TURN-UP TEST						
45							
46	CO I&M Field - Circuit & Fac wires circuit at collocation site		431X	(15*85%)	(8*85%)	(12*85%)	(8*85%)
47							
48	I&M makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order		410X	(44.5+50.76)*.2	(44.5+50.76)*.2	0.00	0.00
49							
50							
51	TRAVEL						
52	I&M (incidental travel time which is not captured in NID/drop investment)		410X	20*.2	0.00	0.00	0.00
53							
54							
55							
56							
57							
58	ASSUMPTIONS:						
59	1) I&M (connect & travel) time assumes 20% of the non-designed loops are new which require new facilities & a dispatch (80% of the non-designed loops will be CT'd or pre-existing).						
60	2) I&M assumes tagging on 20% of loops requiring a dispatch--remaining loops will be tagged at next prem visit. If OLEC requires tagging of loops not requiring a dispatch, BST						
61	will bill the OLEC a T&M charge.						
62	3) OSPE engineering time assumes a 10% fall-out rate requiring manual intervention (RMA) - occurs with unbundling						
63	when loop terminates other than in the switch.						
64	4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.						
65	5) Incremental manual order coordination by the UNEC (connect & test) is charged separately. Incremental time						
66	associated with handling OLEC specified conversion time is also charged separately.						
67	6) Any IMC or Network Svcs-Clerical time is reflected in WMC time.						
68	7) Loop will be ordered via an electronic interface.						
69							
70							
71							
72							

Concurrence: Mary Worth-Bellamy

Date: 2-2-2000

	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	NONRECURRING COST STUDY INPUT - VERSION 2.0	—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—							
2	2 WIRE VOICE LOOP - SL2 (designed circuit)								
3									
4						DISCONNECT LOCATION LIFE (MOS.):	0		
5									
6	STATE:								
7	COST ELEMENT #:	A.1.2							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002			(A)		(B)		
21					INSTALL		DISCONNECT		
22					WORKTIMES (MIN)		WORKTIMES (MIN)		
23	DESCRIPTION	SME		JEC	FIRST	ADDTL	FIRST	ADDTL	
24									
25									
26									
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives ASR, issues service order & FOC	Murphy		2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)	
32									
33									
34	CPG processes svc request			470X	3.00	0.00	3.00	0.00	
35	WMC coordinates dispatched technicians	ration		4WXX	15.00	0.00	15.00	0.00	
36	UNEC coordinates overall administration of service order (receives svc req, assigns resources to work svc re			471X	11.00	11.00	11.00	11.00	
37	SSIM processes svc request			411X	78.43	0.00	0.00	0.00	
38									
39	ENGINEERING								
40	AFIG assigns loop facilities			400X	(7*5%)	(7*5%)	(7*5%)	(7*5%)	
41	CPG designs circuit and generates DLR & word document for OLEC & field			470X	7.80	7.80	0.04	0.04	
42	OSPE reviews request & handles request for manual assistance (RMA)			32XX	(60*10%)	(60*10%)	0.00	0.00	
43									
44	CONNECT & TURN-UP TEST								
45									
46	CO I&M Field wires circuit at collocation site			431X	3.50	3.50	2.00	2.00	
47	UNEC coordinates overall service turn-up			471X	(3.57+16.8+16.8	(3.57+16.8+16.8	(10.8+3.57)	(10.8+3.57)	
48	SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X	(44.5+50.76)*.2	(44.5+50.76)*.2	0.00	0.00	
49									
50									
51	TRAVEL								
52	SSIM (incidental travel time which is not captured in NID/drop investment)			411X	(20*20%)	0.00	0.00	0.00	
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) SSIM (connect & travel) time assumes 20% of the loops are new which require new facilities & a dispatch.								
60	2) I&M assumes tagging on 20% of loops requiring a dispatch--remaining loops will be tagged at next prem visit. If OLEC requires tagging of loops not requiring a dispatch, BST								
61	will bill the OLEC a T&M charge.								
62	3) UNEC assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)								
63	4) OSPE engineering time assumes a 10% fall-out rate requiring manual intervention (RMA) - occurs with unbundling								
64	when loop terminates other than in the switch.								
65	5) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
66	6) Incremental time associated with handling OLEC specified conversions is charged separately.								
67	7) Any IMC or Network Svcs-Clerical time is reflected in WMC time.								
68	8) Loop will be ordered via an electronic interface.								
69									
70									
71									
72									

Concurrence: Mary Ward Bristow

Date: 2-2-2000

NONRECURRING COST STUDY INPUT - VERSION 2.0			—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—					
2 WIRE ISDN DIGITAL LOOP (designed circuit)								
			DISCONNECT LOCATION LIFE (MOS.):		0			
STATE:								
COST ELEMENT #:	A.5.1							
LEVEL:	2000-2002			(A) INSTALL WORKTIMES (MIN)		(B) DISCONNECT WORKTIMES (MIN)		
DESCRIPTION	SME		IFC	FIRST	ADDTL	FIRST	ADDTL	
SERVICE ORDER								
LCSC receives ASR, issues service order & FOC			2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)	
CPG processes svc request			470X	3.00	0.00	3.00	0.00	
WMC coordinates dispatched technicians			4WXX	15.00	0.00	15.00	0.00	
UNEC coordinates overall service turn-up (receives svc req, assigns resources to work svc req)			471X	11.00	11.00	11.00	11.00	
SSIM processes svc request			411X	18.43	0.00	18.43	0.00	
ENGINEERING								
AFIG assigns loop facilities			400X	(60*20%)	(60*20%)	(7*5%)	(7*5%)	
CPG designs circuit and generates DLR & word document for OLEC & field			470X	7.80	7.80	0.04	0.04	
OSPE reviews request			32XX	24.47	4.82	0.00	0.00	
CONNECT & TURN-UP TEST								
Network Plug-In Administration (PICS)			341X	0.84	0.84	0.00	0.00	
CO I&M Field wires circuit at collocation site			431X	3.50	3.50	2.00	2.00	
UNEC coordinates overall service turn-up			471X	(53.6+3.57)	(53.6+3.57)	(10.8+3.57)	(10.8+3.57)	
SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X	162.54	162.54	30.00	30.00	
TRAVEL								
SSIM (incidental travel time which is not captured in NID/drop investment)			411X	20.00	0.00	20.00	0.00	
ASSUMPTIONS:								
1) Assumes new loops--100% dispatch								
2) UNEC assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)								
3) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
4) Any IMC or Network Svcs-Clerical time is reflected in WMC time.								
5) Incremental time associated with handling OLEC specified conversions is charged separately.								
6) Loop will be ordered via an electronic interface.								

Concurrence: Mary Ulrich Britton

Date: 2-2-2000

NONRECURRING COST STUDY INPUT - VERSION 2.0 —ASSUMES ELECTRONIC SERVICE ORDER ENTRY—

2 WIRE ADSL COMPATIBLE LOOP

DISCONNECT LOCATION LIFE (MOS.): 0

STATE:

COST ELEMENT #: A.6.1

LEVEL: 2000-2002

DESCRIPTION	SME	JEC	(A) INSTALL WORKTIMES (MIN) FIRST	(A) INSTALL WORKTIMES (MIN) ADDTL	(B) DISCONNECT WORKTIMES (MIN) FIRST	(B) DISCONNECT WORKTIMES (MIN) ADDTL
SERVICE INQUIRY						
CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.		2300	5.00	5.00	0.00	0.00
OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC		32XX	180.00	180.00	0.00	0.00
SERVICE ORDER						
LCSC receives svc inquiry; responds to OLEC & issues svc order		2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)
LCSC incremental work effort associated with no facilities available						
- LCSC responds to OLEC--service order issued w/FID to bill special construction charges		2300	15*.05	15*.05	0.00	0.00
WMC coordinates dispatched technicians		4W3X	15.00	0.00	15.00	0.00
UNEC coordinates overall administration of svc order		471X	11.00	11.00	11.00	11.00
SSIM processes svc request		411X	18.43	0.00	18.43	0.00
ENGINEERING						
AFIG assigns facilities		400X	(7*20%)	(7*20%)	(7*5%)	(7*5%)
CPG processes svc request & generates DLR & work document to OLEC & field		470X	7.80	7.80	0.04	0.00
CONNECT & TURN-UP TEST						
CO I&M Field work grp connects facility at collocation site		431X	3.50	3.50	2.00	2.00
UNEC coordinates overall service turnup		471X	(53.6+3.57)	(53.6+3.57)	(10.8+3.57)	(10.8+3.57)
SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order		411X	95.26	95.26	0.00	0.00
TRAVEL						
SSIM (incidental travel time which is not captured in NID/drop investment)		411X	20.00	0.00	20.00	0.00

ASSUMPTIONS:

1) Assumes new loops--100% dispatch.

2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC requests facilities under special construction and that the disconnect time is included in the service order portion of the special construction charges.

3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)

4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.

5) 2 Wire ADSL & 2 Wire HDSL work flowtimes are same.

6) Any IMC or Network Svcs-Clerical time is reflected in WMC time.

7) Incremental time associated with handling OLEC specified conversions is charged separately.

8) Loop will be ordered via an electronic interface.

Concurrence: Mary Ulrich Gertner

Date: 2-2-2000

1	NONRECURRING COST STUDY INPUT --VERSION 2.0					—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—				
2	2 WIRE HDSL COMPATIBLE LOOP									
3										
4						DISCONNECT LOCATION LIFE (MOS.):	0			
5										
	STATE:									
	COST ELEMENT #:		A.7.1							
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20	LEVEL:		2000-2002			(A)		(B)		
21						INSTALL		DISCONNECT		
22						WORKTIMES (MIN)		WORKTIMES (MIN)		
23	DESCRIPTION		SME		UFC	FIRST	ADDTL	FIRST	ADDTL	
24	SERVICE INQUIRY									
25	CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.				2300	5.00	5.00	0.00	0.00	
26	OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC				32XX	180.00	180.00	0.00	0.00	
27										
28										
29										
30	SERVICE ORDER									
31	LCSC receives svc inquiry, responds to OLEC & issues svc order				2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)	
32	LCSC incremental work effort associated with no facilities available									
33	- LCSC responds to OLEC--service order issued w/FID to bill special construction charges				2300	15*.05	15*.05	0.00	0.00	
34										
35	WMC coordinates dispatched technicians				4WXX	15.00	0.00	15.00	0.00	
36	UNEC coordinates overall administration of svc order				471X	11.00	11.00	11.00	11.00	
37	SSIM processes svc request				411X	18.43	0.00	18.43	0.00	
39										
40	ENGINEERING									
41	AFIG assigns facilities				400X	(7*20%)	(7*20%)	(7*5%)	(7*5%)	
42	CPG processes svc request & generates DLR & word document to OLEC & field				470X	7.80	7.80	0.04	0.00	
43										
44	CONNECT & TURN-UP TEST									
45										
46	CO I&M Field work grp connects facility at collocation site				431X	3.50	3.50	2.00	2.00	
47	UNEC coordinates overall service turnup				471X	(53.8+3.57)	(53.8+3.57)	(10.8+3.57)	(10.8+3.57)	
48	SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order				411X	95.26	95.26	0.00	0.00	
49										
50										
51	TRAVEL									
52	SSIM (incidental travel time which is not captured in NIO/drop investment)				411X	20.00	0.00	20.00	0.00	
53										
54										
55										
56										
57										
58	ASSUMPTIONS:									
59	1) Assumes new loops--100% dispatch.									
60	2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC									
61	requests facilities under special construction and that the disconnect time is included in the service order portion									
62	of the special construction charges.									
63	3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)									
64	4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.									
65	5) 2 Wire ADSL & 2 Wire HDSL work flowtimes are same.									
66	6) Any IMC or Network Svcs-Clerical time is reflected in WMC time.									
67	7) Incremental time associated with handling OLEC specified conversions is charged separately.									
68	8) Loop will be ordered via an electronic interface.									
69										
70										
71										
72										

Concurrence: Mary Wirtel Brittain

Date: 2-2-2000

	NONRECURRING COST STUDY INPUT - VERSION 2.0			—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—					
2	4 WIRE HDSL COMPATIBLE LOOP								
3									
4				DISCONNECT LOCATION LIFE (MOS.):		0			
5									
	STATE:								
	COST ELEMENT #:	A.8.1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002			(A)		(B)		
21					INSTALL		DISCONNECT		
22					WORKTIMES (MIN)		WORKTIMES (MIN)		
23	DESCRIPTION	SME		IEC	FIRST	ADDTL	FIRST	ADDTL	
24	SERVICE INQUIRY								
25	CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.			2300	5.00	5.00	0.00	0.00	
26	OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC			32XX	180.00	180.00	0.00	0.00	
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives svc inquiry, responds to OLEC & issues svc order			2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)	
32	LCSC incremental work effort associated with no facilities available								
33	- LCSC responds to OLEC--service order issued w/FID to bill special construction charges			2300	15*.05	15*.05	0.00	0.00	
34									
35	WMC coordinates dispatched technicians			4WXX	15.00	0.00	15.00	0.00	
36	UNEC coordinates overall administration of svc order			471X	11.00	11.00	11.00	11.00	
37	SSIM processes svc request			411X	18.43	0.00	18.43	0.00	
39	ENGINEERING								
40	AFIG assigns facilities			400X	(7*20%)	(7*20%)	(7*5%)	(7*5%)	
41	CPG processes svc request & generates DLR & word document to OLEC & field			470X	7.80	7.80	0.04	0.00	
42									
43									
44	CONNECT & TURN-UP TEST								
45									
46	CO I&M Field work grp connects facility at collocation site			431X	3.50	3.50	2.00	2.00	
47	UNEC coordinates overall service turnup			471X	(84+3.57)	(84+3.57)	(10.8+3.57)	(10.8+3.57)	
48	SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X	160.68	160.68	30.00	30.00	
49									
50									
51	TRAVEL								
52	SSIM (incidental travel time which is not captured in NID/drop investment)			411X	20.00	0.00	20.00	0.00	
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops--100% dispatch								
60	2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC								
61	requests facilities under special construction and that the disconnect time is included in the service order portion								
62	of the special construction charges.								
63	3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)								
64	4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
65	5) Any WMC or Network Svcs-Clerical time is reflected in WMC time.								
66	6) Incremental time associated with handling OLEC specified conversions is charged separately.								
67	7) Loop will be ordered via an electronic interface.								
68									
69									
70									
71									
72									

Concurrence: Mary Ulrich Eastman

Date: 2-2-2000

	CN	CO	CP	CQ	CR	CS	CT	CU	CV
1	NONRECURRING COST STUDY INPUT - VERSION 2.0	—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—							
2	2-WIRE COPPER LOOP (designed circuit)								
3									
4						DISCONNECT LOCATION LIFE (MOS.):	0		
5									
	STATE:								
	COST ELEMENT #:	A.13.1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002				(A)		(B)	
21						INSTALL		DISCONNECT	
22						WORKTIMES (MIN)		WORKTIMES (MIN)	
23	DESCRIPTION	SME		JFC		FIRST	ADDTL	FIRST	ADDTL
24	SERVICE INQUIRY								
25	CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.			2300		5.00	5.00	0.00	0.00
26	OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC			32XX		180.00	180.00	0.00	0.00
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives svc inquiry, responds to OLEC & issues svc order	Interconn Svcs		2300		(15*.2)	(15*.2)	(15*.2)	(15*.2)
32	LCSC incremental work effort associated with no facilities available								
33	- LCSC responds to OLEC--service order issued w/FID to bill special construction charges	Interconn Svcs		2300		15*.05	15*.05	0.00	0.00
34									
35	WMC coordinates dispatched technicians	Network		4WXX		15.00	0.00	15.00	0.00
36	UNEC coordinates overall administration of svc order	Network		471X		11.00	11.00	11.00	11.00
37	SSIM processes svc request	Network		411X		18.43	0.00	18.43	0.00
38									
39	ENGINEERING								
40	AFIG assigns facilities	Network		400X		(7*5%)	(7*5%)	(7*5%)	(7*5%)
41	CPG processes svc request & generates DLR & word document to OLEC & field	Network		470X		7.80	7.80	0.04	0.00
42									
43									
44	CONNECT & TURN-UP TEST								
45									
46	CO I&M Field work grp connects facility at collocation site	Network		431X		3.50	3.50	2.00	2.00
47	UNEC coordinates overall service turnup	Network		471X		(53.6+3.57)	(53.6+3.57)	(10.8+3.57)	(10.8+3.57)
48	SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order	Network		411X		(44.5+50.76)	(44.5+50.76)	0.00	0.00
49									
50									
51	TRAVEL								
52	SSIM (incidental travel time which is not captured in NID/drop investment)	Network		411X		20.00	0.00	20.00	0.00
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops--100% dispatch.								
60	2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC								
61	requests facilities under special construction and that the disconnect time is included in the service order portion								
62	of the special construction charges.								
63	3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)								
64	4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
65	5) Any IMC or Network Svcs-Clerical time is reflected in WMC time.								
66	6) Incremental time associated with handling OLEC specified conversions is charged separately.								
67	7) Loop will be ordered via an electronic interface.								
68									
69									
70									
71									
72									

Concurrence: Mary Wiesel Bratton

Date: 2-2-2000

	NONRECURRING COST STUDY INPUT - VERSION 2.0				—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—				
2	4-WIRE COPPER LOOP (designed circuit)								
3									
4					DISCONNECT LOCATION LIFE (MOS.):		0		
5									
	STATE:								
	COST ELEMENT #:	A.14.1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002			(A)		(B)		
21					INSTALL		DISCONNECT		
22					WORKTIMES (MIN)		WORKTIMES (MIN)		
23	DESCRIPTION	SME		IFC	FIRST	ADDTL	FIRST	ADDTL	
24	SERVICE INQUIRY								
25	CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.			2300	5.00	5.00	0.00	0.00	
26	OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC			32XX	180.00	180.00	0.00	0.00	
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives svc inquiry, responds to OLEC & issues svc order	Interconn Svcs		2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)	
32	LCSC incremental work effort associated with no facilities available								
33	- LCSC responds to OLEC--service order issued w/FID to bill special construction charges	Interconn Svcs		2300	15*.05	15*.05	0.00	0.00	
34									
35	WMC coordinates dispatched technicians	Network		4WXX	15.00	0.00	15.00	0.00	
36	UNEC coordinates overall administration of svc order	Network		471X	11.00	11.00	11.00	11.00	
37	SSIM processes svc request	Network		411X	18.43	0.00	18.43	0.00	
38									
39	ENGINEERING								
40	AFIG assigns facilities	Network		400X	(7*5%)	(7*5%)	(7*5%)	(7*5%)	
41	CPG processes svc request & generates DLR & word document to OLEC & field	Network		470X	7.80	7.80	0.04	0.00	
42									
43									
44	CONNECT & TURN-UP TEST								
45									
46	CO I&M Field work grp connects facility at collocation site	Network		431X	3.50	3.50	2.00	2.00	
47	UNEC coordinates overall service turnup	Network		471X	(53.6+3.57)	(53.6+3.57)	(10.8+3.57)	(10.8+3.57)	
48	SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order	Network		411X	147.48	147.48	30.00	30.00	
49									
50									
51	TRAVEL								
52	SSIM (incidental travel time which is not captured in NID/drop investment)	Network		411X	20.00	0.00	20.00	0.00	
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops--100% dispatch.								
60	2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC								
61	requests facilities under special construction and that the disconnect time is included in the service order portion								
62	of the special construction charges.								
63	3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)								
64	4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
65	5) Any IMC or Network Svcs-Clerical time is reflected in WMC time.								
66	6) Incremental time associated with handling OLEC specified conversions is charged separately.								
67	7) Loop will be ordered via an electronic interface.								
68									
69									
70									
71									
72									

Concurrence: [signature]

Date: 2 2 2002

Item No. 57
Attachment No. 3
Central Office (CO I&M)

CENTRAL OFFICE (CO I&M)

APPLIES TO SL1, ISDN, ADSL, HDSL, UCL
NOT APPLICABLE TO ULM, LQSI

6/25/98 Conference call (1:00-4:30 pm) to interview Network SMEs to gather worktimes for UNE2 cost studies

Attendees:

, CO I&M Field work group

Previous inputs gathered by provided the splite between collocation x-connect & UNE .

First Install (min)	Ea Add'l Install (min)	First Disconnect (min)	Ea Add'l Disconnect (min)	
35	35	20	20	total for wiring a circuit in the CO
31.5	31.5	18	18	90% to 2W/4W x-connect & DS1
3.5	3.5	2	2	10% to loops

New inputs from Dan Stinson.

15	8	12	8	total for 2W SL1
20	10	15	7	total for all other UNEs
15	10	0	0	total for time specific coordination

Per Dan, need to get with as at re percentage split between collocation x-connect & UNE studies. Per 6/29/99, apply 85% of new inputs to the loop and 15% to the x-connect.

Adjusted CO I&M – Field x-connect worktimes for loop portion:

12.75	6.8	10.2	6.8	2W SL1 (85%)
17.0	8.5	12.75	5.95	all other UNEs (85%)

I&M/SSI&M work groups

Discussed

1) What time savings will the field technicians realize as a result to the TechPlus mobile computing platform? Both agree that this tool will not eliminate functions; therefore, they do not envision any time savings at this point.

2) What affect non-coordinating of UDL conversions will have on other work centers? Non-coodination of UDL will affect only the UNE Center. The number of repair calls will increase due to service outages if conversions are not coordinated.

3) How will 20%/100% dispatch rates be affected if the customers served on IDLC need to be cutover to UDLC? The 20%/100% dispatch rates assume percentage of new customers only. Need to request IDLC percentages from Per 6/28/99 discussion w/JE, the UNE Ctr does not maintain this type data. JE will try to locate a source.

NONRECURRING COST STUDY INPUT - VERSION 2.0 —ASSUMES ELECTRONIC SERVICE ORDER ENTRY—

2 WIRE VOICE LOOP - SL1 (non-designed circuit)

DAN: THE 15/85% SPLIT CAME FROM LARRY THOMAS. DO YOU AGREE? DISCONNECT LOCATION LIFE (MOS.): 0

STATE:

COST ELEMENT #: A.1.1

See last sheet

LEVEL: 2000-2002

DESCRIPTION	SME	JFC	(A) INSTALL WORKTIMES (MIN) FIRST	(A) INSTALL WORKTIMES (MIN) ADDTL	(B) DISCONNECT WORKTIMES (MIN) FIRST	(B) DISCONNECT WORKTIMES (MIN) ADDTL
SERVICE ORDER						
LCSC receives ASR & issues service order		2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)
WMC coordinates dispatched technicians	atton	4WXX	15.00	0.00	15.00	0.00
UNEC receives svc order & assigns resources to coordinate		471X	(11*30%)	(11*30%)	0.00	0.00
ENGINEERING						
AFIG handles requests for manual assistance (RMA) from HAL		400X	(7*5%)	(7*5%)	(7*5%)	(7*5%)
OSPE reviews request & handles RMAs		32XX	(60*10%)	(60*10%)	0.00	0.00
CONNECT & TURN-UP TEST						
* CO I&M Field - Circuit & Fac wires circuit at collocation site		431X	(15*85%)	(8*85%)	(12*85%)	(8*85%)
I&M makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order		410X	(44.5+50.76)*.2	(44.5+50.76)*.2	0.00	0.00
TRAVEL						
I&M (incidental travel time which is not captured in NID/drop investment)		410X	20*.2	0.00	0.00	0.00

ASSUMPTIONS:

1) I&M (connect & travel) time assumes 20% of the non-designed loops are new which require new facilities & a dispatch (80% of the non-designed loops will be CT'd or pre-existing).
2) I&M assumes tagging on 20% of loops requiring a dispatch--remaining loops will be tagged at next prem visit. If OLEC requires tagging of loops not requiring a dispatch, SST will bill the OLEC a T&M charge.
3) OSPE engineering time assumes a 10% fall-out rate requiring manual intervention (RMA) - occurs with unbundling when loop terminates other than in the switch.
4) CO I&M Field (connect & test) assumes 15% of total CO I&M Field time carried in other transport elements.
5) Incremental manual order coordination by the UNEC (connect & test) is charged separately. Incremental time associated with handling OLEC specified conversion time is also charged separately.
6) Any IMC or Network Svcs-Clerical time is reflected in WMC time.
7) Loop will be ordered via an electronic interface.

Concurrence: [signature]

Date: 02-04-00

	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	NONRECURRING COST STUDY INPUT - VERSION 2.0	—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—							
2	2 WIRE VOICE LOOP - SL2 (designed circuit)								
3									
4						DISCONNECT LOCATION LIFE (MOS.):	0		
5									
	STATE:								
	COST ELEMENT #:	A.1.2							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002			(A)		(B)		
21					INSTALL		DISCONNECT		
22					WORKTIMES (MIN)		WORKTIMES (MIN)		
23	DESCRIPTION	SME		JFC	FIRST	ADDTL	FIRST	ADDTL	
24									
25									
26									
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives ASR, issues service order & FOC			2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)	
32									
33									
34	CPG processes svc request			470X	3.00	0.00	-3.00	0.00	
35	WMC coordinates dispatched technicians			4WXX	15.00	0.00	15.00	0.00	
36	UNEC coordinates overall administration of service order (receives svc req, assigns resources to work svc re			471X	11.00	11.00	11.00	11.00	
37	SSIM processes svc request			411X	18:43	0.00	0.00	0.00	
	ENGINEERING								
40	AFIG assigns loop facilities			400X	(7*5%)	(7*5%)	(7*5%)	(7*5%)	
41	CPG designs circuit and generates DLR & word document for OLEC & field			470X	7.80	7.80	0.04	0.04	
42	OSPE reviews request & handles request for manual assistance (RMA)			32XX	(60*10%)	(60*10%)	0.00	0.00	
43									
44	CONNECT & TURN-UP TEST								
45									
* 46	CO I&M Field wires circuit at collocation site			431X	20*.85	10*.85	15*.85	7*.85	
47	UNEC coordinates overall service turn-up			471X	(3.57+16.8+16.8	(3.57+16.8+16.8	(10.8+3.57)	(10.8+3.57)	
48	SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X	(44.5+50.76)*.2	(44.5+50.76)*.2	0.00	0.00	
49									
50									
51	TRAVEL								
52	SSIM (incidental travel time which is not captured in NID/drop investment)			411X	(20*20%)	0.00	0.00	0.00	
53									
54									
55									
56									
57									

58 ASSUMPTIONS:

59 1) SSIM (connect & travel) time assumes 20% of the loops are new which require new facilities & a dispatch.

60 2) I&M assumes tagging on 20% of loops requiring a dispatch--remaining loops will be tagged at next prem visit. If OLEC requires tagging of loops not requiring a dispatch, BST

61 will bill the OLEC a T&M charge.

62 3) UNEC assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)

63 4) OSPE engineering time assumes a 10% fall-out rate requiring manual intervention (RMA) - occurs with unbundling

64 when loop terminates other than in the switch.

65 5) CO I&M Field (connect & test) assumes 15% of total CO I&M Field time carried in other transport elements.

66 6) Incremental time associated with handling OLEC specified conversions is charged separately.

67 7) Any IMC or Network Svcs-Clerical time is reflected in WMC time.

68 8) Loop will be ordered via an electronic interface.

Concurrence: [signature]

Date: 02-04-00

NONRECURRING COST STUDY INPUT - VERSION 2.0 —ASSUMES ELECTRONIC SERVICE ORDER ENTRY—

2 WIRE ISDN DIGITAL LOOP (designed circuit)

DISCONNECT LOCATION LIFE (MOS.): 0

STATE:

COST ELEMENT #: A.5.1

LEVEL: 2000-2002

DESCRIPTION	SME	JFC	(A) INSTALL WORKTIMES (MIN) FIRST	(A) INSTALL WORKTIMES (MIN) ADDTL	(B) DISCONNECT WORKTIMES (MIN) FIRST	(B) DISCONNECT WORKTIMES (MIN) ADDTL
SERVICE ORDER						
LCSC receives ASR, issues service order & FOC		2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)
CPG processes svc request		470X	3.00	0.00	3.00	0.00
WMC coordinates dispatched technicians		4WXX	15.00	0.00	15.00	0.00
UNEC coordinates overall service turn-up (receives svc req, assigns resources to work svc req)		471X	11.00	11.00	11.00	11.00
SSIM processes svc request		411X	18.43	0.00	18.43	0.00
ENGINEERING						
AFIG assigns loop facilities		400X	(60*20%)	(60*20%)	(7*5%)	(7*5%)
CPG designs circuit and generates DLR & word document for OLEC & field		470X	7.80	7.80	0.04	0.04
OSPE reviews request		32XX	24.47	4.82	0.00	0.00
CONNECT & TURN-UP TEST						
Network Plug-In Administration (PICS)		341X	0.84	0.84	0.00	0.00
CO I&M Field wires circuit at collocation site		431X	20*.85	10*.85	15*.85	7*.85
UNEC coordinates overall service turn-up		471X	(53.6+3.57)	(53.6+3.57)	(10.8+3.57)	(10.8+3.57)
SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order		411X	162.54	162.54	30.00	30.00
TRAVEL						
SSIM (incidental travel time which is not captured in NID/drop investment)		411X	20.00	0.00	20.00	0.00

ASSUMPTIONS:

1) Assumes new loops--100% dispatch
2) UNEC assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)
3) CO I&M Field (connect & test) assumes 15% of total CO I&M Field time carried in other transport elements.
4) Any IMC or Network Svcs-Clerical time is reflected in WMC time.
5) Incremental time associated with handling OLEC specified conversions is charged separately.
6) Loop will be ordered via an electronic interface.

Concurrence: [signature]

Date: 02-04-00

NONRECURRING COST STUDY INPUT - VERSION 2.0 —ASSUMES ELECTRONIC SERVICE ORDER ENTRY—

2 WIRE ADSL COMPATIBLE LOOP

DISCONNECT LOCATION LIFE (MOS.): 0

STATE:

COST ELEMENT #: A.6.1

LEVEL: 2000-2002

DESCRIPTION	SME	JFC	(A) INSTALL WORKTIMES (MIN) FIRST	(A) INSTALL WORKTIMES (MIN) ADDTL	(B) DISCONNECT WORKTIMES (MIN) FIRST	(B) DISCONNECT WORKTIMES (MIN) ADDTL
SERVICE INQUIRY						
CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.		2300	5.00	5.00	0.00	0.00
OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC		32XX	180.00	180.00	0.00	0.00
SERVICE ORDER						
LCSC receives svc inquiry, responds to OLEC & issues svc order		2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)
LCSC incremental work effort associated with no facilities available						
- LCSC responds to OLEC--service order issued w/FID to bill special construction charges		2300	15*.05	15*.05	0.00	0.00
WMC coordinates dispatched technicians		4WXX	15.00	0.00	15.00	0.00
UNEC coordinates overall administration of svc order		471X	11.00	11.00	11.00	11.00
SSIM processes svc request		411X	18.43	0.00	18.43	0.00
ENGINEERING						
AFIG assigns facilities		400X	(7*20%)	(7*20%)	(7*5%)	(7*5%)
CPG processes svc request & generates DLR & word document to OLEC & field		470X	7.80	7.80	0.04	0.00
CONNECT & TURN-UP TEST						
CO I&M Field wires circuit at collocation site		431X	20*.85	10*.85	15*.85	7*.85
UNEC coordinates overall service turnup		471X	(53.6+3.57)	(53.6+3.57)	(10.8+3.57)	(10.8+3.57)
SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order		411X	95.26	95.26	0.00	0.00
TRAVEL						
SSIM (incidental travel time which is not captured in NID/drop investment)	F	411X	20.00	0.00	20.00	0.00

ASSUMPTIONS:

1) Assumes new loops--100% dispatch.
2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC requests facilities under special construction and that the disconnect time is included in the service order portion of the special construction charges.
3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)
4) CO I&M Field (connect & test) assumes 15% of total CO I&M Field time carried in other transport elements.
5) 2 Wire ADSL & 2 Wire HDSL work flow/times are same.
6) Any IMC or Network Svcs-Clerical time is reflected in WMC time.
7) Incremental time associated with handling OLEC specified conversions is charged separately.
8) Loop will be ordered via an electronic interface.

Concurrence: [signature]

Date: 02-04-00

	NONRECURRING COST STUDY INPUT - VERSION 2.0			—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—						
2	2 WIRE HDSL COMPATIBLE LOOP									
3										
4				DISCONNECT LOCATION LIFE (MOS.):	0					
5										
	STATE:									
	COST ELEMENT #:		A.7.1							
6										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20	LEVEL:		2000-2002		(A)		(B)			
21					INSTALL		DISCONNECT			
22					WORKTIMES (MIN)		WORKTIMES (MIN)			
23	DESCRIPTION	SME		IFC	FIRST	ADDTL	FIRST	ADDTL		
24	SERVICE INQUIRY									
25	CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.			2300	5.00	5.00	0.00	0.00		
26	OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC			32XX	180.00	180.00	0.00	0.00		
27										
28										
29										
30	SERVICE ORDER									
31	LCSC receives svc inquiry, responds to OLEC & issues svc order			2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)		
32	LCSC incremental work effort associated with no facilities available									
33	- LCSC responds to OLEC—service order issued w/FID to bill special construction charges			2300	15*.05	15*.05	0.00	0.00		
34										
35	WMC coordinates dispatched technicians			4WXX	15.00	0.00	15.00	0.00		
36	UNEC coordinates overall administration of svc order			471X	11.00	11.00	11.00	11.00		
37	SSIM processes svc request			411X	18.43	0.00	18.43	0.00		
	ENGINEERING									
40	AFIG assigns facilities			400X	(7*20%)	(7*20%)	(7*5%)	(7*5%)		
41	CPG processes svc request & generates DLR & word document to OLEC & field			470X	7.80	7.80	0.04	0.00		
42										
43										
44	CONNECT & TURN-UP TEST									
45										
46	CO I&M Field wires circuit at collocation site			431X	20*.85	10*.85	15*.85	7*.85		
47	UNEC coordinates overall service turnup			471X	(53.6+3.57)	(53.6+3.57)	(10.8+3.57)	(10.8+3.57)		
48	SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X	95.26	95.26	0.00	0.00		
49										
50										
51	TRAVEL									
52	SSIM (incidental travel time which is not captured in NID/drop investment)			411X	20.00	0.00	20.00	0.00		
53										
54										
55										
56										
57										
58	ASSUMPTIONS:									
59	1) Assumes new loops—100% dispatch.									
60	2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC									
61	requests facilities under special construction and that the disconnect time is included in the service order portion									
62	of the special construction charges.									
63	3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min—install & disconnect)									
64	5) CO I&M Field (connect & test) assumes 15% of total CO I&M Field time carried in other transport elements.									
65	5) 2 Wire ADSL & 2 Wire HDSL work flow/times are same.									
66	6) Any IMC or Network Svcs-Clerical time is reflected in WMC time.									
67	7) Incremental time associated with handling OLEC specified conversions is charged separately.									
68	8) Loop will be ordered via an electronic interface.									
69										
72										

Concurrence: [signature]

Date: 02-04-02

NONRECURRING COST STUDY INPUT - VERSION 2.0 —ASSUMES ELECTRONIC SERVICE ORDER ENTRY—

4 WIRE HDSL COMPATIBLE LOOP

DISCONNECT LOCATION LIFE (MOS.): 0

STATE:

COST ELEMENT #: A.8.1

LEVEL: 2000-2002

DESCRIPTION	SME	IFC	(A) INSTALL WORKTIMES (MIN) FIRST	(A) INSTALL WORKTIMES (MIN) ADDTL	(B) DISCONNECT WORKTIMES (MIN) FIRST	(B) DISCONNECT WORKTIMES (MIN) ADDTL
SERVICE INQUIRY						
CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.		2300	5.00	5.00	0.00	0.00
OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC		32XX	180.00	180.00	0.00	0.00
SERVICE ORDER						
LCSC receives svc inquiry, responds to OLEC & issues svc order		2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)
LCSC incremental work effort associated with no facilities available						
- LCSC responds to OLEC--service order issued w/FID to bill special construction charges		2300	15*.05	15*.05	0.00	0.00
WMC coordinates dispatched technicians		4WXX	15.00	0.00	15.00	0.00
UNEC coordinates overall administration of svc order		471X	11.00	11.00	11.00	11.00
SSIM processes svc request		411X	18.43	0.00	18.43	0.00
ENGINEERING						
AFIG assigns facilities		400X	(7*20%)	(7*20%)	(7*5%)	(7*5%)
CPG processes svc request & generates DLR & word document to OLEC & field		470X	7.80	7.80	0.04	0.00
CONNECT & TURN-UP TEST						
CO I&M Field wires circuit at collocation site		431X	20*.85	10*.85	15*.85	7*.85
UNEC coordinates overall service turnup		471X	(84+3.57)	(84+3.57)	(10.8+3.57)	(10.8+3.57)
SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order		411X	160.68	160.68	30.00	30.00
TRAVEL						
SSIM (incidental travel time which is not captured in NID/drop investment)		411X	20.00	0.00	20.00	0.00

ASSUMPTIONS:

1) Assumes new loops--100% dispatch

2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC requests facilities under special construction and that the disconnect time is included in the service order portion of the special construction charges.

3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)

5) CO I&M Field (connect & test) assumes 15% of total CO I&M Field time carried in other transport elements.

5) Any IMC or Network Svcs-Clerical time is reflected in WMC time.

6) Incremental time associated with handling OLEC specified conversions is charged separately.

7) Loop will be ordered via an electronic interface.

Concurrence: [signature]

Date: 02-04-00

NONRECURRING COST STUDY INPUT - VERSION 2.0 —ASSUMES ELECTRONIC SERVICE ORDER ENTRY—

2-WIRE COPPER LOOP (designed circuit)

DISCONNECT LOCATION LIFE (MOS.): 0

STATE:

COST ELEMENT #: A.13.1

LEVEL: 2000-2002

DESCRIPTION	SME	JPC	(A) INSTALL WORKTIMES (MIN) FIRST	(A) INSTALL WORKTIMES (MIN) ADDTL	(B) DISCONNECT WORKTIMES (MIN) FIRST	(B) DISCONNECT WORKTIMES (MIN) ADDTL
SERVICE INQUIRY						
CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.		2300	5.00	5.00	0.00	0.00
OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC		32XX	180.00	180.00	0.00	0.00
SERVICE ORDER						
LCSC receives svc inquiry, responds to OLEC & issues svc order		2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)
LCSC incremental work effort associated with no facilities available						
- LCSC responds to OLEC--service order issued w/FID to bill special construction charges		2300	15*.05	15*.05	0.00	0.00
WMC coordinates dispatched technicians		4WXX	15.00	0.00	15.00	0.00
UNEC coordinates overall administration of svc order		471X	11.00	11.00	11.00	11.00
SSIM processes svc request		411X	18.43	0.00	18.43	0.00
ENGINEERING						
AFIG assigns facilities		400X	(7*5%)	(7*5%)	(7*5%)	(7*5%)
CPG processes svc request & generates DLR & word document to OLEC & field		470X	7.80	7.80	0.04	0.00
CONNECT & TURN-UP TEST						
CO I&M Field wires circuit at collocation site		431X	20*.85	10*.85	15*.85	7*.85
UNEC coordinates overall service turnup		471X	(53.6+3.57)	(53.6+3.57)	(10.8+3.57)	(10.8+3.57)
SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order		411X	(44.5+50.76)	(44.5+50.76)	0.00	0.00
TRAVEL						
SSIM (incidental travel time which is not captured in NID/drop investment)		411X	20.00	0.00	20.00	0.00

ASSUMPTIONS:

1) Assumes new loops--100% dispatch.
2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC requests facilities under special construction and that the disconnect time is included in the service order portion of the special construction charges.
3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)
5) CO I&M Field (connect & test) assumes 15% of total CO I&M Field time carried in other transport elements.
5) Any IMC or Network Svcs-Clerical time is reflected in WMC time.
6) Incremental time associated with handling OLEC specified conversions is charged separately.
7) Loop will be ordered via an electronic interface.

Concurrence: [signature]

Date: 02-04-00

1	NONRECURRING COST STUDY INPUT - VERSION 2.0				—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—				
2	4-WIRE COPPER LOOP (designed circuit)								
3									
4					DISCONNECT LOCATION LIFE (MOS.):	0			
5									
	STATE:								
	COST ELEMENT #:	A.14.1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002			(A)		(B)		
21					INSTALL		DISCONNECT		
22					WORKTIMES (MIN)		WORKTIMES (MIN)		
23	DESCRIPTION	SME		IPC	FIRST	ADDTL	FIRST	ADDTL	
24	SERVICE INQUIRY								
25	CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.			2300	5.00	5.00	0.00	0.00	
26	OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC			32XX	180.00	180.00	0.00	0.00	
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives svc inquiry, responds to OLEC & issues svc order	Interconn Svcs		2300	(15*.2)	(15*.2)	(15*.2)	(15*.2)	
32	LCSC incremental work effort associated with no facilities available								
33	- LCSC responds to OLEC--service order issued w/FID to bill special construction charges	Interconn Svcs		2300	15*.05	15*.05	0.00	0.00	
34									
35	WMC coordinates dispatched technicians	Network		4WXX	15.00	0.00	15.00	0.00	
36	UNEC coordinates overall administration of svc order	Network		471X	11.00	11.00	11.00	11.00	
37	SSIM processes svc request	Network		411X	18.43	0.00	18.43	0.00	
40	ENGINEERING								
40	AFIG assigns facilities	Network		400X	(7*5%)	(7*5%)	(7*5%)	(7*5%)	
41	CPG processes svc request & generates DLR & word document to OLEC & field	Network		470X	7.80	7.80	0.04	0.00	
42									
43									
44	CONNECT & TURN-UP TEST								
45									
* 46	CO I&M Field wires circuit at collocation site			431X	20*.85	10*.85	15*.85	7*.85	
47	UNEC coordinates overall service turnup			471X	(53.6+3.57)	(53.6+3.57)	(10.8+3.57)	(10.8+3.57)	
48	SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order	Network		411X	147.48	147.48	30.00	30.00	
49									
50									
51	TRAVEL								
52	SSIM (incidental travel time which is not captured in NID/drop investment)	Network		411X	20.00	0.00	20.00	0.00	
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops--100% dispatch.								
60	2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC								
61	requests facilities under special construction and that the disconnect time is included in the service order portion								
62	of the special construction charges.								
63	3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)								
64	5) CO I&M Field (connect & test) assumes 15% of total CO I&M Field time carried in other transport elements.								
65	5) Any WMC or Network Svcs-Clerical time is reflected in WMC time.								
66	6) Incremental time associated with handling OLEC specified conversions is charged separately.								
67	7) Loop will be ordered via an electronic interface.								
68									
69									
70									
71									
72									

Concurrence: [signature]

Date: 02-04-00

Item No. 57
Attachment No. 4
Unbundled Network Element Center (UNEC)

UNBUNDLED NETWORK ELEMENT CENTER (UNEC)

APPLIES TO SL1, ISDN, ADSL, HDSL, UCL
NOT APPLICABLE TO ULM, LQSI

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Work Activity	SL1 (A.1.1)	SL2 (A.1.2)	2W ISDN (A.6.1)	2W ADSL (A.6.1)	2W HDSL (A.7.1)	2W UCL (A.13.1)	4W VGL (A.4.1)	4W HDSL (A.8.1)	4W 56/64 (A.10.1)	4W UCL (A.14.1)	OC 2W/4W (A.2.23)	2W Feeder Subloop SL1 (A.2.1)	2W Dist Subloop (A.2.2)
2	Pulls info, assigns to work forces (8+3.57)	X	X	X	X	X	X	X	X	X	X		X	X
3	Verifies & ensures accuracy of design (3; add 3.57 when the 8 min above is not applicable.)		X	X	X	X	X	X	X	X	X			
4	Creates cut sheets to verify reuse of facilities (4)		X	X	X	X		X	X	X		X		
5	Ensures dispatch (5)	X	X	X	X	X	X	X	X	X	X		X	X
6	Performs frame continuity and due date (FC/DD) coordination and testing (see below)		X	X	X	X	X	X	X	X	X			
7	Performs manual order coordination (RCF, disconnect and UL order) when service is converted on existing facilities (20)		X	X	X	X		X	X	X		X		
8	Contacts customer and completes order (10.8+3.57)	X	X	X	X	X	X	X	X	X	X		X	X
9														
10														
11	Notes:													
12	1.5 is applied for 4-wire													
13	FC/DD Coordination & Testing times are 27 minutes for ADSL, 42 minutes for HDSL, 16.8+10 for all others when applicable. (These are multiplied by 2). Also add 3.57. Applies to Designed													
14	Order coordination (20 minutes) is included in designed sub-loops; not included in non-designed sub-loops, UCLs (whole or subloops)													
15	Order coordination (20 minutes) is included in ADSL, HDSL, 19/56/64 and ISDN whole loops; not in UCL.													
16	Reuse rates: 80% for SL1, SL2, 4WVG (whole loops and sub-loops); 10% for ISDN, ADSL, HDSL, 19/56/64 (whole loops and sub-loops)													
17	When COI&M worktimes are involved, the FC/DD times are at 85%.													
18														
19														
20		Non-Designed												
21		Designed												
22														

	O	P	Q	R	S	T	U	V	W	X	Y
1	4W Dist. Subloop (A.2.11)	A.2.23 2W SL2 Feeder Subloop	A.2.24 4W Subloop - Feeder	A.2.28 2W ISDN Subloop - Feeder	A.2.29 4W 19/56/64 Subloop - Feeder	A.2.30 Subloop 2W UCL - Feeder	A.2.32 Subloop 4W UCL - Feeder	A.2.40 Subloop 2W UCL - Dist.	A.2.42 Subloop 4W UCL - Dist.	2W Riser (A.2.14)	4W Riser (A.2.16)
2	X	X	X	X	X	X	X	X	X		
3		X	X	X	X	X	X				
4		X	X	X	X						
5	X	X	X	X	X	X	X	X	X		
6		X	X	X	X	X	X				
7		X	X	X	X						
8	X	X	X	X	X	X	X	X	X		
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											

Unbundled Loop ~~ACAC~~ Cost

ACAC Work Times for Non-Recurring Cost for Unbundled Loops

Provisioning Variables all order types

• Status/Info	55% of orders at	2.4 minutes	1.32
• Escalations	12% of orders at	7.2 minutes	.86
• Assist Calls	6% of orders at	15.6 minutes	.94
• Jeopardy	25% of orders at	1.8 minutes	.45
			3.57 min

2 wire and 4 wire Voice and Unbundled Loops

• Frame Continuity Date Coordination	10.0 minutes
• Frame Continuity Date Testing and Administrative	16.8 minutes
• Plant Test Date/Due Date Coordination	10.0 minutes
• Plant Test Date/Due Date Testing and administrative	16.8 minutes

3.57
3.57
3.57
57.17

Digital Loops/ADSL

• Frame Continuity Date Testing and Administrative	27 minutes
• Plant Test Date/Due Date Testing and administrative	27 minutes

57.57

DS1/DS3/HDSL

• Frame Continuity Date Testing and Administrative	42 minutes
• Plant Test Date/Due Date Testing and administrative	42 minutes

87.57

Disconnect

• Contact Customer	9 minutes
• Complete Due Date	1.8 minutes

14.37

[redacted] = addl.

UNE?

Activity	Time
Pull order; assign to work forces Applies to all first installs and disconnects.	8+3.57
Reuse, and 4W VG **Creates cut sheets to verify reuse of facilities** Applies to SL1 ~~and~~ SL2 whole loops only at 80%; ~~subloops are 100% new.~~ (0% reuse) also ADSL, HDSL, ISDN, 56/64, applied at 10%	4
Verify and ensure accuracy of design Applies to all designed loops and sub-loops; Applies to all first and additional installs and disconnects When applied for the additional installs and disconnects, is added to the incremental time of 3.57.	3
Ensure dispatch For SL1 and SL2 loops, apply 20% to the 5 minutes; for other loops and all subloops, dispatch is 100%.	5
Perform frame continuity and due date coordination and testing When CO I&M time is present, apply 85% to this time. (designed) Multiply this time by 1.5 for additional work involved for 4wire loops. applies to all except SL1 + 2/4W VG-ND UCL - 16.8 + 10	(16.8+10)*2+3.57 27 - ADSL 42 - HDSL
Contacts customer and completes order Applies to all first installs and first disconnects.	10.8+3.57

~~Reuse~~ 20 min (reuse %)

manual OC

~~Time Spec~~

include in ADSL, HDSL, ISDN, 56/64

4W - 80/20

ADSL, HDSL, ISDN, 56/64 - 10/90

Item No. 57
Attachment No. 5
Plug-In Administration (PICS)

PLUG-IN ADMINISTRATION (PICS)

APPLIES TO ISDN
NOT APPLICABLE TO SL1, ADSL, HDSL, UCL, ULM, LQSI

Subject:
Sender:

Item

FROM:
TO:
CC:

Item 2

I provided the following "estimate" of time required for Planner and Clerical Support associated with placing and subsequent handling of an order for DISC*S & LITESPAN equipment....when the equipment is not already in stock.

- Planner.....15 minute average required to make purchase decision when unit is not already in stock and investigation is required.
  For DISC*S & LITESPAN equipment this happens 10% of the time.

WS16 Clerical....15 minute average required for normal handling of an order
  30 minute average required when there are problems
  Problems occur 10% of the time

As I emphasized to , this is an estimate only and we have no historical data to substantiate these figures.

3A2X - 33.52
WS16 - 23.40
JG57 - 36.69

JG57
Planner: $15 \times .10/60 = .0250$

(new: .025; old: .014)

WS16: $(15 \times .90) + (30 \times .10) =$

$13.5 + 3 = 16.5/60 = .2750$

.0250
.2750
.3000

Only applies to
SL2, 4W, ISDN, 5664

Item No. 57
Attachment No. 6
Outside Plant Engineering (OSPE)

OUTSIDE PLANT ENGINEERING (OSPE)

APPLIES TO ISDN, SL1
NO DOCUMENTATION FOR OTHER SERVICES

Subject: Input to Cost Study for SL1 Loops
Creator:

Item 1

FROM:
TO:

Item 2

Attached you will find OSPE response. Please make the necessary correction for

Thanks,

Item 3

REPLY
Subject: Input to Cost Study for SL1 Loops
Creator:

Dated: 1/7/99 at 9:20
Contents: 2

Item 3.1

FROM:
TO:

Item 3.2

There have been no changes to the assumptions on how much time OSPE will expend on SL1 service orders.

The original assumptions were:

10% will RMA to OSPE for handling

Each RMA will take approximately 60 minutes.

.10 times 60 equals 6 minutes per order which equals .1 hours which is what is stated on the spreadsheet.

However, there are two things wrong on the spreadsheet:

1. My name is misspelled.
2. The assumption note is not worded correctly.

I would suggest putting as the assumption note:

3) OSPE engineering time assumes a 10% fall-out rate for OSPE resolution, with each occurance taking 60 minutes on average.

Thanks,

5K 2 wire

	BU	BV	BW	BX	BY	BZ	CA	CB	CC
1	NONRECURRING COST STUDY INPUT - VERSION 2.0	—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—							
2	2 WIRE ISDN DIGITAL LOOP (designed circuit)								
3									
4						DISCONNECT LOCATION LIFE (MOS.):	0		
	STATE:								
	COST ELEMENT #:	A.5.1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	1999-2001				(A)		(B)	
21						INSTALL		DISCONNECT	
22						WORKTIMES (MIN)		WORKTIMES (MIN)	
23	DESCRIPTION	SME		IFC		FIRST	ADDTL	FIRST	ADDTL
24									
25									
26									
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives ASR, issues service order & FOC			2300		(15* 2)	(15* 2)	(15* 2)	(15* 2)
32									
33									
34	CPG processes svc request			470X		3.00	0.00	3.00	0.00
35	WMC coordinates dispatched technicians			4WXX		15.00	0.00	15.00	0.00
36	UNE Ctr coordinates overall service turn-up (receives svc req, assigns resources to work svc req)			471X		11.00	11.00	11.00	11.00
37	SSIM processes svc request			411X		18.43	0.00	18.43	0.00
38									
	ENGINEERING								
	AFIG assigns loop facilities			400X		1*.2*60 = 12.	1*.2*60 = 12.	0.00	0.00
41	CPG designs circuit and generates DLR & word document for OLEC & field			470X		7.80	7.80	0.04	0.04
42	OSPE reviews request 1/2 SI on ISDN			32XX		24.47	4.82	0.00	0.00
43									
44	CONNECT & TURN-UP TEST								
45	Network Plug-In Administration (PICS)			341X		0.84	0.84	0.00	0.00
46	CO I&M Field wires circuit at collocation site			431X		3.50	3.50	2.00	2.00
47	UNE Ctr coordinates overall service turn-up			471X		(53.6+3.57)	(53.6+3.57)	(10.8+3.57)	(10.8+3.57)
48	SSIM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X		162.54	162.54	30.00	30.00
49									
50									
51	TRAVEL								
52	SSIM (incidental travel time which is not captured in NID/drop investment)			411X		18.00	0.00	18.00	0.00
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops—100% dispatch								
60	2) UNE Ctr assumes incremental time for handling various coordination issues (3.57 min—install & disconnect)								
61	3) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
62	4) Any IMC or Network Svcs-Clerical time is reflected in WMC time.								
63	5) Incremental time associated with handling OLEC specified conversions is charged separately.								
64	6) Loop will be ordered via an electronic interface.								
65									
66									
67									
68									
69									
70									
71									

Concurrence: _____

Date: _____

Subject: Loop conditioning
Sender:

Item 1

TO:

Item 2

REPLY
Subject: Loop conditioning
Creator:

Dated: 2/4/00 at 16:10
Contents: 2

Item 2.1

TO:
CC:

Item 2.2

Thanks for responding - here is clarification.

During our conversation, and I made a the following assumptions:

1. For removal of load coils on loops less than 18kF, we will remove 10 load coils at a time.

This assumption (never really in question) is correct. This applies to the retail ADSL offering and will apply to the UNE offering as well.

2. For removal of load coils on loops greater than 18kF, we will remove only those coils requested.

This assumption has been onfirmed by . This has no real retail analogue, as the retail ADSL offering is not offered on such loops.

3. For removal of Bridge tap, we will remove no Bridge taps on the first pass, but will go back on request and remove one bridge tap per trip.

This assumption is only half correct - we remove no bridge taps on the first pass, but the plant technician does in fact remove **multiple** bridge taps when he or she goes back out at the request of the customer. This holds true for the retail ADSL offering and the UNE offering.

, we still owe three pieces of information:

- Reasonable expectation of the number of xDSL loops provided to CLECs over the next three years,
- The number of the above that are expected to require loop conditioning, and
- the number of conditioned loops that BellSouth expects to use for itself.

I will get that information to you and the others as soon as possible.

=->
=->
=-> I wanted to confirm our discussion yesterday concerning the
=->assumptions for loop conditioning. Without belaboring the point, we have
=->prepared cost studies for loop conditioning as a UNE offering (which have
=->been filed in North Carolina) that are generally consistent with the

Item No. 57
Attachment No. 7
Address and Facility Inventory (AFIG)

ADDRESS AND FACILITY INVENTORY (AFIG)

APPLIES TO SL1, ISDN, ADSL, HDSL, UCL
NO DOCUMENTATION FOR ULM
NOT APPLICABLE TO LQSI

AFIG WORKTIMES
Conversation with , 3/21/00

SL1 and SL2
7 minutes at 5%: This represents fallout from HAL. HAL is a system designed to handle errors. The 5% is the overflow that HAL cannot handle.

All Subloops
40 minutes at 20%. For unbundling subloops, there is no system in place to handle errors. The 40 minutes involves inventory building and the 20% represents fallout from FACS.

ADSL/2&4W HDSL/UCL
8 minutes at 30%. 8 minutes is facility assignment. Fallout ranges from 30-35%. wants to use 30%.

4W/5664
60 minutes at 20%. This involves building inventory in FACS. This activity takes longer for 4wire loops.

ISDN

~~60 x 20%~~ Chg to

~~30 x .~~ 8 x .3

per 3/21

Subject: Work Times
Sender:

Item 1

TO:
CC:

Item 2

I'm sorry I will get you that in the morning.
Yes they are still accurate

2/5/00

acc SL

times for AIG shd be

40 min @ 20%.

	A	B	C	D	E	F	G	H
1	NONRECURRING COST STUDY INPUT - VERSION 2.0	—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—						
2	2 WIRE VOICE LOOP - SL1 (non-designed circuit)							
3								
4					DISCONNECT LOCATION LIFE (MOS.):			
5								
6	STATE:							
7	COST ELEMENT #:	A.1.1						
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20	LEVEL:	2000-2002				(A)		(B)
21					INSTALL		DISCONNECT	
22					WORKTIMES (MIN)		WORKTIMES (MIN)	
23	DESCRIPTION	SME		JFC	FIRST	ADDT'L	FIRST	ADDT'L
24								
25								
26								
27								
28								
29								
30	SERVICE ORDER							
31	LCSC receives ASR & issues service order			2300	[redacted]			
32								
33								
34								
35	WMC coordinates dispatched technicians			4WXX	[redacted]			
36	UNEC receives svc order & assigns resources to coordinate			471X				
37								
38								
39	ENGINEERING							
40	AFIG handles requests for manual assistance (RMA) from HAL			400X	(7*5%)	(7*5%)	(7*5%)	(7*5%)
41								
42	OSPE reviews request & handles RMAs			32XX	[redacted]			
43								
44	CONNECT & TURN-UP TEST							
45								
46	CO I&M Field - Circuit & Fac wires circuit at collocation site			431X	[redacted]			
47								
48	I&M makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			410X	[redacted]			
49								
50								
51	TRAVEL							
52	I&M (incidental travel time which is not captured in NID/drop investment)			410X	[redacted]			
53								
54								
55								
56								
57								
58	ASSUMPTIONS:							
59	1) I&M (connect & travel) time assumes 20% of the non-designed loops are new which require new facilities & a dispatch (80% of the non-designed loops will be CT'd or pre-existing).							
60	2) I&M assumes tagging on 20% of loops requiring a dispatch--remaining loops will be tagged at next prem visit. If OLEC requires tagging of loops not requiring a dispatch, BST							
61	will bill the OLEC a T&M charge.							
62	3) OSPE engineering time assumes a 10% fall-out rate requiring manual intervention (RMA) - occurs with unbundling							
63	when loop terminates other than in the switch.							
64	4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.							
65	5) Incremental manual order coordination by the UNEC (connect & test) is charged separately. Incremental time							
66	associated with handling OLEC specified conversion time is also charged separately.							
67	6) Any IMC or Network Svcs-Clerical time is reflected in WMC time.							
68	7) Loop will be ordered via an electronic interface.							
69								
70								
71								
72								

Concurrence: [signature]

Date: 1/12/00

X

	S	T	U	V	W	X	Y	Z	AA
1	NONRECURRING COST STUDY INPUT				—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—				
2	ENGINEERING INFORMATION								
3	2-WIRE VOICE LOOP - SL1 ONLY								
4					DISCONNECT LOCATION LIFE (MOS.):				
5									
	STATE:								
	COST ELEMENT #:	A.1.8							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-3002				(A)		(B)	
21						INSTALL		DISCONNECT	
22						WORKTIMES (MIN)		WORKTIMES (MIN)	
23	DESCRIPTION	SME		IFC		FIRST	ADDTL	FIRST	ADDTL
24									
25									
26									
27									
28									
29									
30	SERVICE ORDER								
31	LCSC removes LMU from printer and sends via FAX to the CLEC			2300					
32									
33									
34									
35									
36									
37									
38									
39	ENGINEERING								
40	AFIG retrieves RMA based on USOC "UEANM" and checks LFACS for loop makeup (LMU)			400X		1.00	1.00	0.00	0.00
41	AFIG adds remarks to RMA and places order in pending file (PF) status to OSPE when LMU is not in LFA			400X		10*.95	10*.95	0.00	0.00
42	OSPE pulls paper copy of LMU and loads it into LFACS, then relogs & releases order which RMAs			320X					
43	to AFIG when LMU is not in LFACS								
44	AFIG again retrieves RMA based on USOC "UEANM" and checks LFACS for loop makeup (LMU)			400X		1*.95	1*.95	0.00	0.00
45	and restarts order to pick up LMU in assignment section of								
46	AFIG restarts the order to pick up the LMU in the assignment section of the service order, which is			400X		6.00	6.00	0.00	0.00
47	transmitted to an LCSC printer								
48									
49									
50									
51									
52									
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) 95% of requests for Engineering Information will require loading of LMU in LFACS by OSPE.								
60	2) Requests for Engineering Information are handled in conjunction with 2W UVL-SL1 service orders & worktimes are incremental to								
61	loop provisioning worktimes.								
62									
63					Concurrence: Shirley Ortiz				
64									
65					Date: 1/12/00				
66									
67									
68									
69									
70									
71									
72									

	BU	BV	BW	BX	BY	BZ	CA	CB	CC
1	NONRECURRING COST STUDY INPUT - VERSION 2.0	—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—							
2	2 WIRE ISDN DIGITAL LOOP (designed circuit)								
3									
4				DISCONNECT LOCATION LIFE (MOS.):					
	STATE:								
	COST ELEMENT #:	A.6.1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002				(A)		(B)	
21						INSTALL		DISCONNECT	
22						WORKTIMES (MIN)		WORKTIMES (MIN)	
23	DESCRIPTION	BASE		XPC	FIRST	ADDTL	FIRST	ADDTL	
24									
25									
26									
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives ASR, issues service order & FOC			2300					
32									
33									
34	CPG processes svc request			470X					
35	WMC coordinates dispatched technicians			4W0X					
36	UNEC coordinates overall service turn-up (receives svc req, assigns resources to work svc req)			471X					
37	SSM processes svc request			411X					
38									
	ENGINEERING								
40	AFIG assigns loop facilities			400X	(60*20%)	(60*20%)	(7*5%)	(7*5%)	
41	CPG designs circuit and generates DLR & word document for OLEC & field			470X					
42	OSPE reviews request			320X					
43									
44	CONNECT & TURN-UP TEST								
45	Network Plug-In Administration (PICS)			341X					
46	CO I&M Field wires circuit at collocation site			431X					
47	UNEC coordinates overall service turn-up			471X					
48	SSM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X					
49									
50									
51	TRAVEL								
52	SSM (incidental travel time which is not captured in NID/drop investment)			411X					
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops--100% dispatch								
60	2) UNEC assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)								
61	3) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
62	4) Any I&C or Network Svcs-Clarical time is reflected in WSC time.								
63	5) Incremental time associated with handling OLEC specified conversions is charged separately.								
64	6) Loop will be ordered via an electronic interface.								
65									
66									
67									
68									
69									
70									
1									
2									

Concurrence: Shirley Allen

Date: 11/2/00

	CD	CE	CF	CG	CH	CI	CJ	CK	CL
1	NONRECURRING COST STUDY INPUT - VERSION 2.0	—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—							
2	2 WIRE ADSL COMPATIBLE LOOP								
3									
4					DISCONNECT LOCATION LIFE (MOS.):				
	STATE:								
	COST ELEMENT #:	A&1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002				(A)		(B)	
21						INSTALL		DISCONNECT	
22						WORKTIMES (MIN)		WORKTIMES (MIN)	
23	DESCRIPTION	SME		IFC		FIRST	ADDTL	FIRST	ADDTL
24	SERVICE INQUIRY								
25	CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.			2300					
26	OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC			32XX					
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives svc inquiry, responds to OLEC & issues svc order			2300					
32	LCSC incremental work effort associated with no facilities available								
33	- LCSC responds to OLEC--service order issued w/FID to bill special construction charges			2300					
34									
35	WMC coordinates dispatched technicians			4WXX					
36	UNEC coordinates overall administration of svc order			471X					
37	SSM processes svc request			411X					
9									
	ENGINEERING								
.0	AFIG assigns facilities			400X		(7*20%)	(7*20%)	(7*5%)	(7*5%)
41	CPG processes svc request & generates DLR & word document to OLEC & field			470X					
42									
43									
44	CONNECT & TURN-UP TEST								
45									
46	CO I&M Field work grp connects facility at collocation site			431X					
47	UNEC coordinates overall service turnup			471X					
48	SSM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X					
49									
50									
51	TRAVEL								
52	SSM (incidental travel time which is not captured in NID/drop investment)			411X					
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops--100% dispatch.								
60	2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 9% of time the OLEC								
61	requests facilities under special construction and that the disconnect time is included in the service order portion								
62	of the special construction charges.								
63	3) UNEC connect assumes incremental time for handling various coordination issues (3.67 min--install & disconnect)								
64	4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
65	5) 2 Wire ADSL & 2 Wire HDSL work flowtimes are same.								
66	6) Any IMC or Network Svcs-Clerical time is reflected in WMC time.								
67	7) Incremental time associated with handling OLEC specified conversions is charged separately.								
68	8) Loop will be ordered via an electronic interface.								
69									
70									
1									
2									

Concurrence: [signature] ...

Date: 1/12/00

	CM	CN	CO	CP	CQ	CR	CS	CT	CU
1	NONRECURRING COST STUDY INPUT - VERSION 2.0	—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—							
2	2 WIRE HDSL COMPATIBLE LOOP								
3									
4				DISCONNECT LOCATION LIFE (MOS.):					
	STATE:								
	COST ELEMENT #:	A.7.1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002				(A)		(B)	
21						INSTALL		DISCONNECT	
22						WORKTIMES (MIN)		WORKTIMES (MIN)	
23	DESCRIPTION	BNR		JPC		FIRST	ADDTL	FIRST	ADDTL
24	SERVICE INQUIRY								
25	CRSG receives firm order SI from CLEC and screens documents. CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.			2300					
26	OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC			320X					
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives svc inquiry, responds to OLEC & issues svc order			2300					
32	LCSC incremental work effort associated with no facilities available								
33	- LCSC responds to OLEC--service order issued w/FID to bill special construction charges			2300					
34									
35	WMC coordinates dispatched technicians			4WXX					
36	UNEC coordinates overall administration of svc order			471X					
37	SSM processes svc request			411X					
9									
	ENGINEERING								
J	AFIG assigns facilities			400X		(7*20%)	(7*20%)	(7*5%)	(7*5%)
41	CPG processes svc request & generates DLR & word document to OLEC & field			470X					
42									
43									
44	CONNECT & TURN-UP TEST								
45									
46	CO I&M Field work grp connects facility at collocation site			431X					
47	UNEC coordinates overall service turnup			471X					
48	SSM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X					
49									
50									
51	TRAVEL								
52	SSM (incidental travel time which is not captured in NID/drop investment)			411X					
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops--100% dispatch.								
60	2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC								
61	requests facilities under special construction and that the disconnect time is included in the service order portion								
62	of the special construction charges.								
63	3) UNEC connect assumes incremental time for handling various coordination issues (3.67 min--install & disconnect)								
64	4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
65	5) 2 Wire ADSL & 2 Wire HDSL work flowtimes are same.								
66	6) Any I&C or Network Svcs-Clerical time is reflected in WMC time.								
67	7) Incremental time associated with handling OLEC specified conversions is charged separately.								
68	8) Loop will be ordered via an electronic interface.								
69									
70									
1									
2									

Concurrence: Shirley Celeste

Date: 1/12/02

	CV	CW	CX	CY	CZ	DA	DB	DC	DD
1	NONRECURRING COST STUDY INPUT - VERSION 2.0				—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—				
2	4 WIRE HDSL COMPATIBLE LOOP								
3									
4					DISCONNECT LOCATION LIFE (MOS.):				
	STATE:								
	COST ELEMENT #:	A.8.1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002				(A)		(B)	
21						INSTALL		DISCONNECT	
22						WORKTIMES (MIN)		WORKTIMES (MIN)	
23	DESCRIPTION	SME		IPC	FIRST	ADDTL	FIRST	ADDTL	
24	SERVICE INQUIRY								
25	CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.			2300					
26	OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC			32XX					
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives svc inquiry, responds to CLEC & issues svc order			2300					
32	LCSC incremental work effort associated with no facilities available								
33	- LCSC responds to CLEC--service order issued w/FID to bill special construction charges			2300					
34									
35	WMC coordinates dispatched technicians			4WXX					
36	UNEC coordinates overall administration of svc order			471X					
37	SSM processes svc request			411X					
9									
	ENGINEERING								
J	AFIG assigns facilities			403X	(7*20%)	(7*20%)	(7*5%)	(7*5%)	
41	CPG processes svc request & generates DLR & word document to CLEC & field			470X					
42									
43									
44	CONNECT & TURN-UP TEST								
45									
46	CO I&M Field work grp connects facility at collocation site			431X					
47	UNEC coordinates overall service turnup			471X					
48	SSM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X					
49									
50									
51	TRAVEL								
52	SSM (incidental travel time which is not captured in NID/drop investment)			411X					
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops--100% dispatch								
60	2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the CLEC								
61	requests facilities under special construction and that the disconnect time is included in the service order portion								
62	of the special construction charges.								
63	3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)								
64	4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
65	5) Any I&C or Network Svcs-Clerical time is reflected in WSC time.								
66	6) Incremental time associated with handling CLEC specified conversions is charged separately.								
67	7) Loop will be ordered via an electronic interface.								
68									
69									
70									
1									
2									

Concurrence: [signature] ***

Date: 1/12/00

	DE	DF	DG	DH	DI	DJ	DK	DL	DM
1	NONRECURRING COST STUDY INPUT - VERSION 2.0	—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—							
2	4-WIRE 56 or 64 KBPS DIGITAL LOOP (designed circuit)								
3									
4				DISCONNECT LOCATION LIFE (MOS.):					
	STATE:								
	COST ELEMENT #:	A.10.1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002				(A)		(B)	
21						INSTALL		DISCONNECT	
22						WORKTIMES (MIN)		WORKTIMES (MIN)	
23	DESCRIPTION	SME		MC	FIRST	ADDTL	FIRST	ADDTL	
24									
25									
26									
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives ASR, issues service order & FOC			2300					
32									
33									
34	CPG processes svc request			470X					
35	WMC coordinates dispatched technicians			4WXX					
36	UNEC coordinates overall service turn-up (receives svc req, assigns resources to work svc req)			471X					
37	SSM processes svc request			411X					
9									
	ENGINEERING								
J	AFIG assigns loop facilities			400X	(60*20%)	(60*20%)	(7*5%)	(7*5%)	
41	CPG designs circuit and generates DLR & word document for OLEC & field			470X					
42	OSPE reviews request & handles request for manual assistance (RMA)			320X					
43									
44	CONNECT & TURN-UP TEST								
45	Network Plug-In Administration (PICS)			341X					
46	CO I&M Field wires circuit at collocation site			431X					
47	UNEC coordinates overall service turn-up			471X					
48	SSM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X					
49									
50									
51	TRAVEL								
52	SSM (incidental travel time which is not captured in NID/drop investment)			411X					
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops--100% dispatch								
60	2) UNEC assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)								
61	3) OSPE engineering time associated w/order fall-out requiring manual intervention (RMA) - occurs with unbundling								
62	when loop terminates other than in the switch.								
63	4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
64	5) Any MC or Network Svce-Clerical time is reflected in WMC time.								
65	6) Incremental time associated with handling OLEC specified conventions is charged separately.								
66	7) Loop will be ordered via an electronic interface.								
67									
68									
69									
70									
1									
2									

Concurrence: [signature]

Date: 11/21/01

	DN	DO	DP	DQ	DR	DS	DT	DU	DV
1	NONRECURRING COST STUDY INPUT - VERSION 2.0	—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—							
2	2-WIRE COPPER LOOP (designed circuit)								
3									
4					DISCONNECT LOCATION LIFE (MOS.):				
	STATE:								
	COST ELEMENT #:	A.13.1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-2002				(A)		(B)	
21					INSTALL		DISCONNECT		
22					WORKTIMES (MIN)		WORKTIMES (MIN)		
23	DESCRIPTION			JFC	FIRST	ADDTL	FIRST	ADDTL	
24	SERVICE INQUIRY								
25	CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.			2300	[redacted]				
26	OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC			32XX					
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives svc inquiry, responds to OLEC & issues svc order			2300	[redacted]				
32	LCSC incremental work effort associated with no facilities available								
33	- LCSC responds to OLEC—service order issued w/FID to bill special construction charges			2300	[redacted]				
34									
35	WMC coordinates dispatched technicians			4WXX	[redacted]				
36	UNEC coordinates overall administration of svc order			471X					
37	SSM processes svc request			411X					
38									
39	ENGINEERING								
40	AFIG assigns facilities			400X	(7*5%)	(7*5%)	(7*5%)	(7*5%)	
41	CPG processes svc request & generates DLR & word document to OLEC & field			470X	[redacted]				
42									
43									
44	CONNECT & TURN-UP TEST								
45									
46	CO I&M Field work grp connects facility at collocation site			431X	[redacted]				
47	UNEC coordinates overall service turnup			471X					
48	SSM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X					
49									
50									
51	TRAVEL								
52	SSM (incidental travel time which is not captured in NID/drop investment)			411X	[redacted]				
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops—100% dispatch.								
60	2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 5% of time the OLEC								
61	requests facilities under special construction and that the disconnect time is included in the service order portion								
62	of the special construction charges.								
63	3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min—install & disconnect)								
64	4) CO I&M Field (connect & test) assumes 10% of total CO I&M Field time carried in other transport elements.								
65	5) Any IMC or Network Svcs-Clerical time is reflected in WMC time.								
66	6) Incremental time associated with handling OLEC specified conversions is charged separately.								
67	7) Loop will be ordered via an electronic interface.								
68									
69									
70									
71									
72									

Concurrence: Shirley Oleto (signature)

Date: 1/12/02

	DW	DX	DY	DZ	EA	EB	EC	ED	EE
1	NONRECURRING COST STUDY INPUT - VERSION 2.0	—ASSUMES ELECTRONIC SERVICE ORDER ENTRY—							
2	4-WIRE COPPER LOOP (designed circuit)								
3									
4				DISCONNECT LOCATION LIFE (MOS.):					
	STATE:								
	COST ELEMENT #:	A.14.1							
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20	LEVEL:	2000-3002				(A)		(B)	
21						INSTALL		DISCONNECT	
22						WORKTIMES (MIN)		WORKTIMES (MIN)	
23	DESCRIPTION	SME		MC	FIRST	ADDTL	FIRST	ADDTL	
24	SERVICE INQUIRY								
25	CRSG receives firm order SI from CLEC and screens documents; CRSG prepares/sends transmittals to OSPE for site setup. Upon completion of job, CRSG informs CLEC site is ready for provisioning.			2300					
26	OSPE reviews request, assigns FRN, & returns svc inquiry to LCSC			32XX					
27									
28									
29									
30	SERVICE ORDER								
31	LCSC receives svc inquiry, responds to OLEC & issues svc order			2300					
32	LCSC incremental work effort associated with no facilities available								
33	- LCSC responds to OLEC--service order issued w/FID to bill special construction charges			2300					
34									
35	WMC coordinates dispatched technicians			4WXX					
36	UNEC coordinates overall administration of svc order			471X					
37	SSM processes svc request			411X					
9									
	ENGINEERING								
J	AFIG assigns facilities			400X	(7*5%)	(7*5%)	(7*5%)	(7*5%)	
41	CPG processes svc request & generates DLR & word document to OLEC & field			470X					
42									
43									
44	CONNECT & TURN-UP TEST								
45									
46	CO I&M Field work grp connects facility at collocation site			431X					
47	UNEC coordinates overall service turnup			471X					
48	SSM makes x-conn @ x-box, tests circuit w/CO @ prem & x-box, tags circuit & completes order			411X					
49									
50									
51	TRAVEL								
52	SSM (incidental travel time which is not captured in NID/drop investment)			411X					
53									
54									
55									
56									
57									
58	ASSUMPTIONS:								
59	1) Assumes new loops--100% dispatch.								
60	2) When the service inquiry determines no facilities are available, LCSC (service order) assumes 9% of time the OLEC								
61	requests facilities under special construction and that the disconnect time is included in the service order portion								
62	of the special construction charges.								
63	3) UNEC connect assumes incremental time for handling various coordination issues (3.57 min--install & disconnect)								
64	4) CO I&M Field (connect & test) assumes 19% of total CO I&M Field time carried in other transport elements.								
65	5) Any IMC or Network Svcs-Clerical time is reflected in WMC time.								
66	6) Incremental time associated with handling OLEC specified conversions is charged separately.								
67	7) Loop will be ordered via an electronic interface.								
68									
69									
70									
1									
2									

Concurrence: [signature]

Date: 1/12/00

Item No. 57
Attachment No. 8
Circuit Provisioning Group (CPG)

CIRCUIT PROVISIONING GROUP (CPG)

APPLIES TO ISDN, ADSL, HDSL, UCL
NOT APPLICABLE TO SL1, ULM, LQSI

I. SERVICE ORDER WORKTIMES

A. Should read: First Install, the WS18 resolves SOAC fallout (SOAC is an interface between SOCS and TIRKS). Its purpose is to log the order in TIRKS. If problems are encountered, the WS18 must resolve the fallout. This is an upfront process that takes place before the circuit is engineered. The fallout rate is 15% and the amount of time to resolve this is 15 minutes, period. The 25 minutes should not be shown here.

15 X .15 = 2.25 minutes/60 = .0375 hour

B. Additional Install. No additional time is required.

C. Correct

D. Correct

II. ENGINEERING WORKTIMES

A. First Install. WS18 designs circuit and generates DLR and WORD documents to CLEC and field. 15% fallout rate is correct, but the 21 minutes should be 18 minutes, instead. I picked up the wrong number from my time and motion study.

18 X .15 = 2.7 minutes/60=.045 hour

B. Additional Install, same as First Install.

C. First Disconnect, assume 10% fallout and 4 minutes to resolve the problem. The fallout for this process is at a rate of 10% , as opposed to 15% for connects, because there are fewer problems with disconnecting a record from TIRKS than adding a new service. However, the rate remains at 15% for the service order disconnect work times (I. above) because the billing records tend to disagree with the TIRKS records. Once that part is resolved in I above, disconnecting the record from TIRKS is less of a problem.

D. Correct – Additional Disconnect, same as First Disconnect

THE NEW JFC OF 4N4X DOES REFLECT BOTH THE SERVICE ORDER AND ENGINEERING EMPLOYEES INVOLVED.

THERE SHOULD BE SERVICE ORDER WORKTIME FOR THE CPG IN CONNECTION WITH ALL OF THE UNEs THAT YOU LISTED. IT WOULD BE THE SAME AS THE OTHERS IN THIS DOCUMENT, 2.25 MINUTES.

THE DIFFERENTIATION OF LOOP OR GROUND START VERSUS REVERSE BATTERY WILL NOT IMPACT THE CPG TIME. THE EQUIPMENT WILL CHANGE ONLY IF THE CUSTOMER IS SERVED BY DIGITAL LOOP CARRIER. IN THAT CASE, THE PLUG-INS USED WILL BE DIFFERENT.

A WORD DOCUMENT (WORK ORDER RECORD DETAILS) IS THE TIRKS WIRING DOCUMENT

THAT IS DISTRIBUTED TO THE CENTRAL OFFICE AND SPECIAL SERVICE INSTALLATION AND MAINTENANCE GROUPS. IT CONVEYS THE FACILITIES AND EQUIPMENT THAT SHOULD BE WIRED TO THE CIRCUIT, OPTION SETTINGS FOR THE EQUIPMENT AND TEST POINTS. THE DLR (DESIGN LAYOUT REPORT) IS A DOCUMENT THAT IS SENT TO THE CLEC TO INDICATE WHERE WE WILL MEET THEM TO HANDOFF THE SERVICE. PRIMARILY, THIS DOCUMENT IS ISSUED MECHANICALLY TO THE CLEC; AT OTHER TIMES, IT IS MANUALLY FAXED OR MAILED TO THE CLEC.

To:

CPG

From:

Cost

Re: CPG Worktimes for UNEs

I have attached our cost study input sheets for your review. The CPG times are in red. In looking over these worktime inputs, I have a few questions:

1. Back in September, you sent me worktimes in connection with an interrogatory concerning CPG times for disconnect. In looking over these times, there are some things I don't understand.

SERVICE ORDER WORKTIMES

a. First Install, the WS18 logs order in TIRKS and SOAC. The fallout rate is 15% and the amount of time to resolve this is 15 minutes for the TIRKS entry and 25 minutes for SOAC entry.

15 + 25 = 40 x .15 = 6 minutes / 60 = .1 hour

Previous UNE study reflected 3 minutes for first install and 3 minutes for first disconnect.

b. Additional Install, you indicate there is no worktime because no additional time is required once the order problems have been resolved for the First Install.

c. First Disconnect, again assume 15% fallout and 15 minutes to resolve the problem.

15 x .15 = 2.25 minutes / 60 = .0375

d. Additional Disconnect, same as Additional Install – no additional time is required once the order problems have been resolved for the First Disconnect.

ENGINEERING WORKTIMES

a. First Install, (**WHAT WAGE SCALE? / Still WS 18?**) designs circuit and generates DLR and WORD document to CLEC and Field. Assume15% fallout and 21 minutes to perform these work

functions. (Work functions are entirely manual.) **Does 21 minutes capture all these work functions? Last round of UNE studies reflected 7.8 minutes.**

21 x .15 = 3.15 minutes / 60 = .0525

b. Additional Install, same as First Install.

c. First Disconnect, assume 10% fallout and 4 minutes to resolve the problem. **(WHY 10% FALLOUT FOR THIS FUNCTION?)**

4 x .10 = .4 minutes / 60 = .007

d. Additional Disconnect, same as First Disconnect.

Our new labor rates reflect the JFC of 4N4X instead of 470X . Does this new JFC reflect both the Service Order and the Engineering employees involved?

I see there is no Service Order worktime for the CPG in connection with the following UNEs:

2W ADSL Compatible Loop
2W HDSL Compatible Loop
4W HDSL Compatible Loop
4W 5664 Kbps Digital Loop
2W Copper Loop
4W Copper Loop
2W ISDN Digital Loop

However, I see a note from to . . . to add 3 minutes to ADSL/HDSL for the CPG? Do you agree, and should that 3 minutes also be added to 5664, the Copper Loops and ISDN?

It appears we will be studying SL2 with the differentiation of loop or ground start and reverse battery. How will this impact the CPG time, or will it? How will the equipment differ between the different types of signalling?

Also, what is a WORD document? I know it gives details to the field, but exactly what is it, and what does it convey?

Thanks for your help. As soon as you respond back, I'll input the changes and send back for your concurrence.

Item No. 57
Attachment No. 9
Complex Resale Support Group (CRSG)

COMPLEX RESALE SUPPORT GROUP (CRSG)

APPLIES TO ADSL, HDSL, UCL
NO DOCUMENTATION FOR LQSI, ULM
NOT APPLICABLE TO ISDN

Per CRSG/Account Team SME, 7/28/99:

	Total Worktime (min) Instl 1st	Instl Ea. Addl (50% of 1st)	Disc. 1st (excl SI)	Disc. Ea Addl (50% of 1st)
1. CRSG/Acct Team receives LSR & SI in "in-tray" from CLEC	10*	5*	2*	1*
2. CRSG/Acct Team screens LSR (2 min) and SI	5	2.5	5	2.5
3. calls customer to acknowledge receipt & enters start date into BRITE (CRSG tracking system) And completes folder information				
4. Prepares SI transmittal & faxes to OSPE; confirms FAX receipt & updates BRITE folder	10	5	N/A	N/A
5. Receives SI response (2 min), prepares LSCS transmittal and FAX; confirms logged on LON (LCSC service order tracking sys), sends CLEC notification; closes out folder and BRITE	20	10	18	9
TOTAL	45	22.5	25	12.5
*Manual Svc Order (screening LSR):	2	1	2	1

****Assumes perfect flow:**

- "clean" order from CLEC - no clarification
- SI received and processed within commitment time - no follow-up required
- SI response is "Facilities Available"
- LCSC does not reject LSR

Incremental work efforts for order complications

1. SI not processed within commitment - followup required, including telephone calls, re-faxing, add'l documentation (20 min * 33% 1st Instl)	6.6	3.3	0	0
2. SI response is "no facilities) available; but "reason" would	7.2	3.6	0	0

allow for "estimate" for OSPE to perform work to make available, e.g., clear pairs or run new pairs - requires negotiation with OSPE & CLEC (30 min * 24% 1st Instl)				
3. LCSC rejects or doesn't log to LON within 2 hrs - requires followup & add'l time to reformat and/or resend (20 min * 25% 1st Instl)	5	2.5	2.5	1.25
TOTAL	63.8	31.9	27.5	13.75
	2.0	1.0	2.0	1.0 (man LSR)
	61.8	30.9	25.5	12.75 (elec. LSR)

- Worktimes reflect a manual process
- CRSG is a dedicated center which volunteered to handle as of 4/99 all UNE orders requiring SI

7/20 & 7/28 - Discussion with LCSC

- LCSC receives SI only after it has been worked by OSPE & returned to the CRSG/ Account Team
- LCSC receives both the LSR & the completed SI via FAX from CRSG/Acct Team
- LSCS validates SI & entire LSR
- If LSR is clean, LCSC processes order and sends FOC to CLEC
- If LSR is incorrect/invalid, LS sends clarification back to CLEC - CLEC must send new order at this point - LCSC workflow starts over when new order comes in

Manual worktimes for the LCSC

- 1st install 30 (15 min to screen & 15 min to process order)
- ea add'l install 15
- 1st disconnect 20
- ea. Add'l disc. 10 (vs 0 included in initial UNE studies)

Item No. 57
Attachment No. 10
Notes for ULM Service Only

NOTES FOR ULM SERVICE ONLY

MESSAGE
Subject: Cost Studies - Florida - URGENT
Creator:

Dated: 3-30-2000 at 16:20
Contents: 2

Item 1

TO:

CC:

Item 2

During conversation with (cost witness), (my boss), and regarding cost recovery on ULM and issue came to light that had not previously been discussed. We need to resolve the following questions this week in order to get this information in final cost study runs.....(preliminary cost runs were completed today).

A CLEC can order Loop Modification at the same time as ordering an ADSL/HDSL/UCL loop. In these cases, if we use the worktimes as they exist for a separate ULM and a separate loop, we will double count a DLR on a percentage of the loops.

The thought is that we need to identify the overlapping functions (i.e. SI, Engineering, Assignment) first and then apply the % of time overlap occurs to those functions. Here's what we have in the studies:

	ULM	UCL/ADSL/HDSL
Service Inquiry	30 min.	61.8 min
SI - LCSC	60 min.	45.0 min
Engng-PG57	120 min.	150.0 min
Egng-SAC	180 min.	30.0 min
AFIG	60 min.	2.4 min

Can each of you identify where minutes/activities overlap? For instance, we would not require two hours of Engineering for ULM and another 3 hours for UCL if the orders are received together. What effort would be required? Only 2 hours or more?

Please call (, or myself (.) as soon as possible on Friday.....ThanX,

MESSAGE
Subject: ADSL/HDSL/UCL-S Adjustment
Creator:

Dated: 4 2 2000 at 11:51
Contents: 2

Item 1

TO:
CC:

Item 2

Recapping agreement last week on adjustment for times the loop and conditioning are ordered on same order.

100% Loops start as ADSL/HDSL/UCL-Short

40% do NOT need ULM and are OK as is

60% are not compatable and need ULM

of 60% about 20% of orders do NOT have both ULM/loop
(60% x 20% = 12%)

12% + 40% = % to apply to ADSL/HDSL/UCL-Short nonrecurring
for work centers:
CRSG
LCSC
Engng
AFIG

As stated in my earlier memo, we do not yet know what the impact is to these centers. If you have thought of any adjustments to these percentages, pleas let or I know very early on Monday. ThanX,

MESSAGE
Subject: % ULM/Copper Long Order Together
Creator:

Dated: 4/11/2000 at 9:07
Contents: 2

Item 1

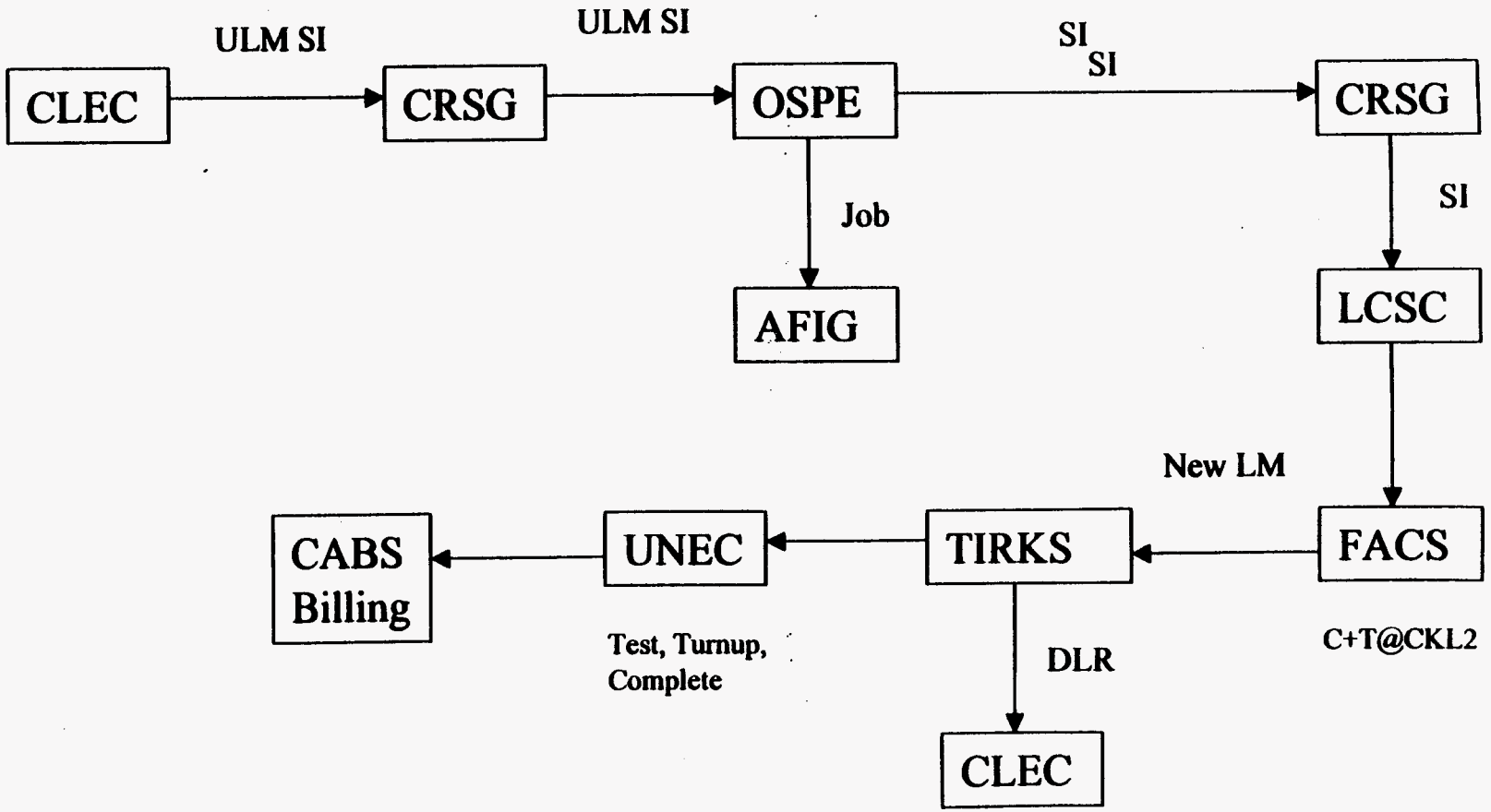
TO:
CC:

Item 2

Already a change.....after discussing the assumptions about ULM and Copper Long Loop orders coming in together with he would like us to use 95% rather than 100% for UCL long loops requiring modification.

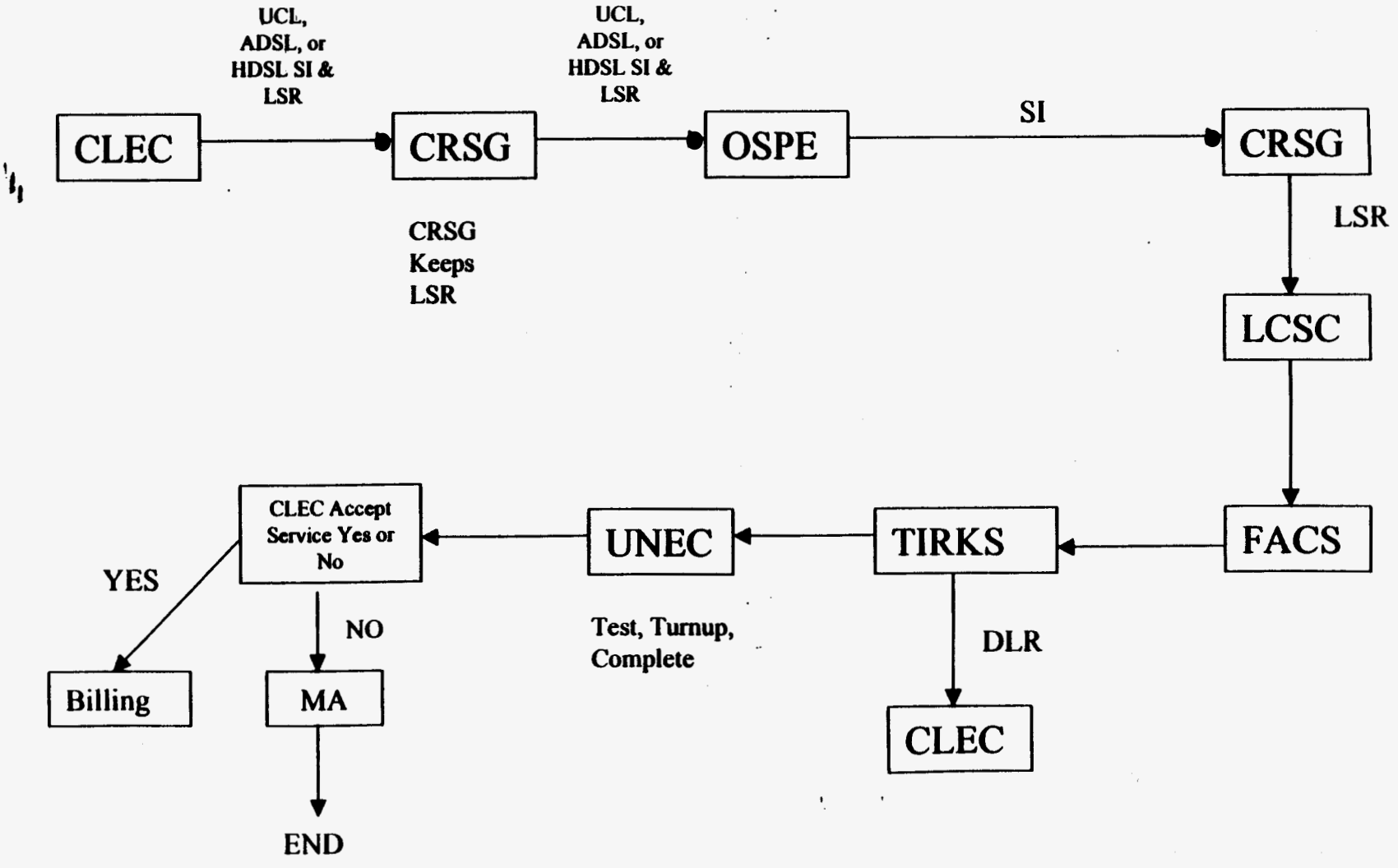
He feels the occurrence will be very high, but does not want to use 100%....please make this change in all studies going forward and make a note in Florida filings.

Customers with Existing UCL, ADSL, & HDSL Services that Request ULM



Request for New UCL, ADSL, or HDSL Services
(CLEC Does Not Accept Service)

(1) CLEC can accept service and then add ULM on another SI
(2) CLEC can choose to not accept service and either request service with ULM on new SI or cancel and not order service



Item No. 57
Attachment No. 11
Supporting Data for Electronic Service
Order and Manual Service Order

Install - UNE						
Rate Element	UNE Loops	LNP Non-complex	UNE-P Combos	Complex-UNE	Total	
Distribution of UNE Orders	21%	8%	68%	3%	100%	
Manual Time Estimate (Minutes)						**Weighted**
Basic	25	10	40			*39*
Complex				177		
Electronic Time Estimate (Minutes)						
Basic						**Weighted**
System Design (7% fallout rate)	18	7	32		26	1.8
CLEC Error (3% fallout rate)	18	4	7		9	0.3
Complex						
System Design (7% fallour rate)				177	5	0.4
CLEC Error (50% fallout rate)				177	5	2.7
						5
LCSC worktimes (Minutes)						

DISCONNECT - UNE							
Rate Element	UNE Loops	LNP Non-complex	UNE-P Combos	Complex - UNE	Total		
Distribution of UNE Orders	21%	8%	68%	3%	100%		
Manual Time Estimate (Minutes)						**Weighted**	
Basic	6	6	6			*6*	
Complex				6			
Electronic Time Estimate (Minutes)							
Basic						**Weighted**	
System Design (7% fallout rate)	6	6	6		6	0.4	
CLEC Error (3% fallout rate)	6	6	6		6	0.2	
Complex							
System Design (7% fallout rate)				6	0.18	0.0	
CLEC Error (50 fallout rate%)				6	0.18	0.1	
						0.68	
LCSC worktimes (Minutes)							

Item No. 57
Attachment No. 12
Supporting Data for LIDB

ESTABLISHMENT OF A SIGNALING CONNECTION FOR LIDB - PER STP (ASSUMES SIGNALING CONNECTIVITY IS ALREADY IN PLACE)		
STEPS	**TIME**	**JFC**
Receive and Screen Customer Request / DBSI form (Per STP pair) - Determine LATA, Access Gateway, CLLI(s), point code(s) - Obtain connecting Linkset information - Update folder information for customer - Add information to Excel spreadsheet used for tracking LIDB customers	:30	432X
Build and Execute NetPilot orders to establish LIDB (Per STP) - Update Gateway screening for customer. - Verify and add Route to STP hosting the LIDB SCP, if required.	:15	432X
Add Point code Information in LIDB SCP (Per SCP)	:10	432X

Item No. 57
Attachment No. 13
Supporting Data for CCS7

ESTABLISHMENT OF A SIGNALING CONNECTION ACCESS LINK - PER STP NEW DIRECT LINKS		
STEPS	**TIME**	**JFC**
Receive and Screen ASR/DSR from RPEC (Per STP Pair) - Determine LATA, Link type & quantity, CLLI(s), point code(s) - Flow information to LMC, update point code list - Obtain Port Assignments from spreadsheet supplied by RPEC - Establish / update folder information for customer	:30	432X
Build and Execute NetPilot orders for Assignments (Per STP)		
Add Linkset	:05	432X
Add Link	:05	432X
Add Route	:05	432X
Add Basic Gateway Screening - Allow ISUP to BellSouth offices in the requested LATA - Allow CLASS messaging, requires NPA-NXX information from the customer to complete	:30	432X
- Add NPA-NXX information for CLASS, if provided.	:05	432X
Build Node and Link/Linket Information in NetPilot Database	:05	WS16

Item No. 57
Attachment No. 14
Supporting Data for Selective Carrier Routing

SCR

Selective Carrier Routing

	A	B	C	D	E	F	G	H
1	Florida							
2	Nonrecurring Labor Inputs							
3	Study Period: 2000-2002							
4								
5								
6	Element	Life	Item/Description		JFC/JG/	Worktime		
7	Number	(Months)	Description	Source	WS	Hours	SME	DEPT
8	G.11.1	60	**Service Establishment per CLEC**					
9			**Service Order - LSR**	Product Team			Ronald L. Thweatt	Product Commercialization Unit
10			Install - First Hub		JG58	10		
11			Install - Additional Hubs		JG58	2		
12			Disconnect - First Hub		JG58	1		
13			Disconnect - Additional Hubs		JG58	1		
14								
15			**Service Order- LCSC**	Product Team			Ronald L. Thweatt	Product Commercialization Unit
16			Install - First Hub		230X	1		
17			Install - Additional Hubs		230X	0.625		
18			Disconnect - First Hub		230X	0.625		
19			Disconnect - Additional Hubs		230X	0.625		
20								
21			**Connect and Test - Translations CO**	Product Team			Brenda L. Haynes	Interconnection Operations
22			Install - First Hub		4N2X	3.75		
23			Install - Additional Hubs		4N2X	3.75		
24			Disconnect - First Hub		4N2X	3.75		
25			Disconnect - Additional Hubs		4N2X	3.75		
26								
27			**Connect&Test - SCP**	Product Team			Mary Edwards	Interconnection Operations
28			Install - First Hub		4N2X	2		
29			Install - Additional Hubs		4N2X	2		
30			Disconnect - First Hub		4N2X	0.5		
31			Disconnect - Additional Hubs		4N2X	0.5		
32								
33	G.11.2	60	**Service Establishment per Office**					
34			**Service Order - LSR**	Product Team			Ronald L. Thweatt	Product Commercialization Unit
35			Install - First		JG58	2		
36			Install - Additional		JG58	0.25		
37								
38			**Service Order - LCSC**	Product Team			Ronald L. Thweatt	Product Commercialization Unit
39			Install - First		230X	1		
40			Install - Additional		230X	0.625		
41			Disconnect - First		230X	0.625		
42			Disconnect - Additional		230X	0.625		
43								
44			**Connect and Test - CO Translations**	Product Team			Brenda L. Haynes	Interconnection Operations
45			Install		4N2X	18.00		
46								
47			**Connect & Test - Sub Hub Translations**	Product Team			Brenda L. Haynes	Interconnection Operations
48			Install		4N2X	18.50		

SCRLCC

Selective Carrier Routing Line Class Code

MESSAGE Dated: 3/3/00 at 9:43
Subject: Disconnect Time for LCC-based SCR Contents: 2
Creator:

Item 1

TO:
CC:

Item 2

In answer to your question about disconnects of LCC-based SCR, my estimate would be .5 for first LCC and .25 for each additional LCC per central office. In other words, the .5 would be for the first LCC disconnected in each central office. This would all be ET time. There is no BVA time involved, as there was in the connect.

Please call me at 404-529-8727 with any questions.

Thanks,

June 23, 1997

Memorandum to:

Copy:

Subject: Updated Response to Georgia PSC Interrogatory

As requested in your memo, the following information is provided. Please note that since I'm no longer in the Switch Translations organization, this input must be reviewed and approved by Network Operations Support.

Question 55.
The assumption is that each CLEC would want to closely reproduce the existing BST services, for that approximately 75 LCCs would be required in each rate area. It is also assumed that for each CLEC the first request would probably not include all LCCs but would build to the 75 LCCs level, and perhaps exceed that figure with time.

Since each LCC requires detailed manual work by experienced electronics technicians no economies of scales are expected. The four hour (4hrs) estimate to provision and test each LCC is based on the detailed activities listed on table 1 and 2. These figures are independent of the number or distribution of the CLEC LCCs.

Question 56.
As indicated under question 56, the number or distribution of CLEC LCCs is independent of the work content associated with the provisioning and testing of each CLEC LCC. From a procedural perspective there are no differences of material significance based on the switch technology (5ESS/DMS/1AESS).

Question 87a.
The individual components associated with the provisioning and testing of Selective Routing LCCs for Local Competitors are as follows:

TABLE 1
Electronics Technician

Item	Activity	Time
1.	Log into WFA, retrieve work request, Review Ordering Document.	0.25hrs
2.	Identify and plan work requirements associated with the work request.	0.25hrs
3.	Log in systems to be used for this work.	0.25hrs
4.	Identify the source LCC and retrieve system information on source code.	0.25hrs
5.	Make changes to the source code and schedule for download in MTS.	0.50hrs
6.	Log back in system after scheduled download date, verify packet successful.	0.25hrs
7.	Make operational test calls, and complete WFA work request.	0.50hrs
Total		2.25hrs

TABLE 2
Billing Verification Assistant/RCMAG Assistant

Item	Activity	Time
1.	Log into WFA and review work request.	0.25hrs
2.	Log into System and verify/change MATV LCC.	0.25hrs
3.	Change ATICS LCC.	0.25hrs
4.	Schedule test.	0.25hrs
5.	Retrieve results	0.25hrs
6.	Analyze results.	0.25hrs
7.	Complete work request, file documentation.	0.25hrs
Total		1.75hrs

Please note that these estimates or work times assume no rework is required, however in real world a certain amount usually takes place.

Question 87b.
No specific memory requirements have been identified associated with this service.

Question 88.
Not Applicable.

Question 89.
This information is not Available.

Question 90a.
If not already built, this migration would require a new CLEC specific LCC, plus the costs associated with changing the LCC on each line from the existing LCC to the new LCC.

Question 90b.
There are no network costs associated with this change, assuming the same operator services/directory assistance platforms/services are used.

Question 90c.
Same as 90a.

Question 91.
Information not available.

Question 92 a/b/c/d.
In addition to the different USOCS used for each of these services, the following LCC variations apply:

Question 92 a.
This service uses NON CLEC specific LCC.

Question 92 b.
This service uses a CLEC specific LCC.

Question 92 c.
This service uses BST's own LCC.

Question 92 d.
This service uses a CLEC specific LCC.

Item No. 57
Attachment No. 16
Supporting Data for SMS Toolkit

SMS
TOOLKIT

Ra. Element	Monthly / NRC	Input Description	JFC / Payband	N / ISD SMS Access Input		SME Name	SME Signature	Date
K.1.1	NRC	Service Order	AEWC	Install = 60 min	Disconnect = 60 min	Carol		
K.1.1	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓		
K.1.1	NRC	Connect & Test (BSAT1)	BSAT1	Install = 30 min	Disconnect = 15 min	Joe		
K.1.2	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.2	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓		
K.1.2	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe		
K.1.3	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.3	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓		
K.1.3	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe		
K.1.4	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.4	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓		
K.1.4	NRC	Service Order (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe		
K.1.4	NRC	Connect & Test	ITWS10	Install = 10 min	Disconnect = 10 min	Cindy Owen		
K.1.4	NRC	Connect & Test	NWPBSS	Install = 60 min	Disconnect = 30 min	Beverly McDonald		
K.1.5	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.5	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓		
K.1.5	NRC	Service Order (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe		
K.1.5	NRC	Connect & Test	ITWS10	Install = 10 min	Disconnect = 10 min	Cindy Owen		
K.1.6	NRC	Service Order (BSAT2)	BSAT2	Company session	MOU = 1 min			
K.1.X	Recurring	BellSouth Applied Tech	BSAT1	[illegible] =	$84.00/hr	Joe Banney		
K.1.X	Recurring	BellSouth Applied Tech	BSAT2	Training / Help =	$110.00/hr	Joe Banney		
K.1.6	Recurring	Model 20 Disk Array	BSAT	Material Price =	$46,966	Barbara King	Barbara King	5/6/97
K.1.6	Recurring	Model 20 Disk Array	BSAT	Kilobyte Capacity =	66,000,000	↓	↓	
K.1.6	Recurring	Model 20 Disk Array	BSAT	Utilization =	60.0%	↓ (HF)	↓	
K.1.6	Recurring	Model 20 Disk Array	BSAT	SMS Processors =	$74,750	↓	↓	
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 1 =	146,290	Alan Weatherby	[illegible]	4/30/97
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 2 =	289,440		[illegible]	4/30/97
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 3 =	436,580		[illegible]	4/30/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 1 =	1	[illegible]		
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 2 =	2	↓		
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 3 =	3	↓		

Please sign + [illegible]

Rate Element	Monthly / NRC	Input Description	JFC / Payband	AIN / ISD SMS Access Input		SME Name	SME Signature	Date
K.1.1	NRC	Service Order	AEWC	Install = 60 min	Disconnect = 60 min	Carol		
K.1.1	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓		
K.1.1	NRC	Connect & Test (BSAT1)	BSAT1	Install = 30 min	Disconnect = 15 min	Joe		
K.1.2	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.2	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓		
K.1.2	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe		
K.1.3	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.3	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓		
K.1.3	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe		
K.1.4	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.4	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓		
K.1.4	NRC	Service Order (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe	*[signature]	5/4/97
K.1.4	NRC	Connect & Test	ITWB10	Install = 10 min	Disconnect = 10 min	Cindy Owen		
K.1.4	NRC	Connect & Test	NWPB60	Install = 60 min	Disconnect = 30 min	Beverly McDonald		
K.1.5	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.5	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓		
K.1.5	NRC	Service Order (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe	*[signature]	5/6/97
K.1.5	NRC	Connect & Test	ITWB10	Install = 10 min	Disconnect = 10 min	Cindy Owen		

Rate Element	Monthly / NRC			SME Name	SME Signature	Date
K.1.8	N	Company session	MOU = 1 min			
K.1.X	Recu	Triggers =	$94.00/hr	Joe Raney, MAH		
K.1.X	Recu	Training / Help =	$110.00/hr	Joe Raney, MAH		
K.1.6	Recu	Material Price =	$46,000	Barbara King		
K.1.6	Recu	Mobyte Capacity =	86,000,000	↓ (KG)		
K.1.6	Recu	Utilization =	80.0%			
K.1.6	Recu	SMS Processors =	$74,700			
K.1.7	Recu	Year 1 =	146,238	Alan Wetherby	[signature]	4/30/97
K.1.7	Recu	Year 2 =	290,440		[signature]	4/30/97
K.1.7	Recu	Year 3 =	435,000		[signature]	4/30/97
K.1.X	Recu	Year 1 =	1	[illegible] Regan	[signature]	5/5/97
K.1.X	Recu	Year 2 =	2	↓	[signature]	5/5/97
K.1.X	Recu	Year 3 =	3		[signature]	5/5/97

* DOES NOT INCLUDE ON-GOING SUPPORT FOR USERS OF THE APPLICATION

Cindy,

Please review lines K.1.4 (set-up Dials [illegible]) and K.1.5 (mod Dials [illegible]) 10 min. each. Please initial if O.K. ~~[illegible]~~ + FAX Back to me.

Thanks,
Alan

Post-it™ brand fax transmittal memo 7671 | # of pages ▸

To Cindy Owen | From Alan Wetherby
Co. | Co.

Rate Element	Monthly / NRC	Input Description	JFC / Payband	SMS Access Input		SME Name	SME Signature	Date
K.1.1	NRC	Service Order	AEWC	Install = 60 min	Disconnect = 60 min	Carol		
K.1.1	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	"		
K.1.1	NRC	Connect & Test (BSAT1)	BSAT1	Install = 30 min	Disconnect = 15 min	Joe R		5/7/97
K.1.2	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.2	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	"		
K.1.2	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R*		5/7/97 *
K.1.3	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	(Carol)		
K.1.3	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	"		
K.1.3	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R*		5/7/97 *
K.1.4	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.4	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	"		
K.1.4	NRC	Service Order (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R*		5/7/97 *
K.1.4	NRC	Connect & Test	ITW810	Install = 10 min	Disconnect = 10 min	Cindy Owen		
K.1.4	NRC	Connect & Test	MWP800	Install = 60 min	Disconnect = 30 min	Beverly McDonald		
K.1.5	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.5	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	"		
K.1.5	NRC	Service Order (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R*		5/7/97 *
K.1.5	NRC	Connect & Test	ITW810	Install = 10 min	Disconnect = 10 min	Cindy Owen		
K.1.6	NRC	Service Order (BSAT2)	BSAT2	Company access	MOU = 1 min			
K.1X	Recurring	BellSouth Applied Tech	BSAT1	① Triggers =	$84.00/hr	Joe Raney	Joe Raney	5/7/97
K.1X	Recurring	BellSouth Applied Tech	BSAT2	② Training / Help =	$110.00/hr	Joe Raney	Joe Raney	5/7/97
K.1.6	Recurring	Model 28 Disk Array	BS&T	Material Price =	$45,000	Barbara King		
K.1.6	Recurring	Model 28 Disk Array	BS&T	Kilobyte Capacity =	65,000,000			
K.1.6	Recurring	Model 28 Disk Array	BS&T	Utilization =	80.0%			
K.1.6	Recurring	Model 28 Disk Array	BS&T	SS6 Processors =	$74,700	(HF)		
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 1 =	146,250	Alan Washburn		4/10/97
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 2 =	280,440			4/10/97
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 3 =	438,000			4/10/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 1 =	1	Lisa Rogers	Lisa Rogers	5/5/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 2 =	2		Cindy Owen	5/5/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 3 =	3		Cindy Owen	5/5/97

* For BellSouth Applied Technologies, this estimate is our most aggressive and assumes "best case" as far as timing. For worst case, our estimate is 15 min. and 10 min., respectively.

① 73,000 ÷ 869 hrs = $84

249,000 ÷ 263 hrs = $110

Please sign & date

Rate Element	Monthly / NRC	Input Description	JFC / Payband	AIN / ISD SMS Access Input		SME Name	SME Signature	Date
K.1.1	NRC	Service Order	AEWC	Install = 60 min	Disconnect = 60 min	Carol	Carol [illegible]	5-7-97
K.1.1	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓	"	"
K.1.1	NRC	Connect & Test (BSAT1)	BSAT1	Install = 30 min	Disconnect = 15 min	Joe R		
K.1.2	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol	Carol	"
K.1.2	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓	"	"
K.1.2	NRC	Connect & Test (BSAT1)	BSAT1	Install = 5 min	Disconnect = 7 min	Joe R		
K.1.3	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol	Carol	"
K.1.3	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓	"	"
K.1.3	NRC	Connect & Test (BSAT1)	BSAT1	Install = 5 min	Disconnect = 7 min	Joe R		
K.1.4	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol	Carol	"
K.1.4	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓	"	"
K.1.4	NRC	Service Order (BSAT1)	BSAT1	Install = 5 min	Disconnect = 7 min	Joe R		
K.1.4	NRC	Connect & Test	ITV9510	Install = 10 min	Disconnect = 10 min	Cindy Owen		
K.1.4	NRC	Connect & Test	[illegible]	Install = 60 min	Disconnect = 30 min	[illegible]		
K.1.5	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol	Carol	"
K.1.5	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	↓	"	"
K.1.5	NRC	Service Order (BSAT1)	BSAT1	Install = 5 min	Disconnect = 7 min	Joe		
K.1.5	NRC	Connect & Test	ITV9510	Install = 10 min	Disconnect = 10 min	Cindy Owen		
K.1.6	NRC	Service Order (BSAT2)	BSAT2	Company session	MOU = 1 min			
K.1.X	Recurring	BellSouth Applied Tech	BSAT1	Titanse =	$94.00/hr	Joe Bassett [illegible]		
K.1.X	Recurring	BellSouth Applied Tech	BSAT2	Training / Help =	$116.00/hr	Joe Bassett [illegible]		
K.1.6	Recurring	Model 25 Disk Array	BSAT	Material Price =	$46,000	Barbara Rong		
K.1.6	Recurring	Model 25 Disk Array	BSAT	Kilobyte Capacity =	96,000,000	↓		
K.1.6	Recurring	Model 25 Disk Array	BSAT	Utilization =	80.8%	↓ (H/F)		
K.1.6	Recurring	Model 25 Disk Array	BSAT	SMS Processors =	$74,760			
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 1 =	146,230	Alan Westbury	[illegible]	5/5/97
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 2 =	288,448		[illegible]	[illegible]
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 3 =	435,668		[illegible]	[illegible]
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 1 =	1	Eric Rogers	[illegible]	5/5/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 2 =	2	↓	[illegible]	5/5/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 3 =	3		[illegible]	5/5/97

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Rate Element	Monthly / NRC	Input Description	JFC / Payband	[illegible] / ISD SMS Access Input		SME Name	SME Signature	Date
K.1.1	NRC	Service Order	AEWC	Install = 60 min	Disconnect = 60 min	Carol ↓ Joe R	Joe Ramey	5/7/97
K.1.1	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min			
K.1.1	NRC	Connect & Test (BSAT1)	BSAT1	Install = 30 min	Disconnect = 15 min			
K.1.2	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol ↓ Joe R*	Joe Ramey	5/7/97 *
K.1.2	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min			
K.1.2	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min			
K.1.3	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol ↓ Joe R*	Joe Ramey	5/7/97 *
K.1.3	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min			
K.1.3	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min			
K.1.4	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol ↓ Joe R*	Joe Ramey	5/7/97 *
K.1.4	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min			
K.1.4	NRC	Service Order (BSAT1)	BSAT1	Install = 6 min	Disconnect = 7 min			
K.1.4	NRC	Connect & Test	ITWS10	Install = 10 min	Disconnect = 10 min	Cindy Owen		
K.1.4	NRC	Connect & Test	NWPB56	Install = 60 min	Disconnect = 30 min	Beverly McDonald		
K.1.5	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol ↓ Joe *	Joe Ramey	5/7/97 *
K.1.5	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min			
K.1.5	NRC	Service Order (BSAT1)	BSAT1	Install = 6 min	Disconnect = 7 min			
K.1.5	NRC	Connect & Test	ITWS10	Install = 10 min	Disconnect = 10 min	Cindy Owen		
K.1.6	NRC	Service Order (BSAT2)	BSAT2	Company session	MOU = 1 min			
K.1.X	Recurring	BellSouth Applied Tech	BSAT1	① Triggers =	$84.00/hr	Joe Ramey	Joe Ramey	5/7/97
K.1.X	Recurring	BellSouth Applied Tech	BSAT2	② Training / Help =	$110.00/hr	Joe Ramey	Joe Ramey	5/7/97
K.1.6	Recurring	Model 20 Disk Array	BSAT	Material Price =	$46,000	Barbara King ↓ (HF)		
K.1.6	Recurring	Model 20 Disk Array	BSAT	Kilobyte Capacity =	56,000,000			
K.1.6	Recurring	Model 20 Disk Array	BSAT	Utilization =	60.0%			
K.1.6	Recurring	Model 20 Disk Array	BSAT	SMS Processors =	$74,700			
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 1 =	146,238	Alan Weatherby	[illegible]	5/5/97
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 2 =	290,446			5/5/97
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 3 =	495,000			5/5/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 1 =	1	Eddie Regan ↓	[illegible]	5/5/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 2 =	2			5/5/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 3 =	3			5/5/97

* For BellSouth Applied Technologies, this estimate is our most aggressive and assumes "best case" as far as timing. For worst case, our estimate is 15 min. and 10 min., respectively.

① 73,000 ÷ 869 hrs = $84
② 29,000 ÷ 263 hrs = $110

Rate Element	Monthly / NRC	Input Description	JFC / Payband	AIN / ISD SMS Access Input		SME Name	SME Signature	Date
K.1.1	NRC	Service Order	AEWC	Install = 60 min	Disconnect = 60 min	Carol		
K.1.1	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	"		
K.1.1	NRC	Connect & Test (BSAT1)	BSAT1	Install = 30 min	Disconnect = 15 min	Joe Raney		
K.1.2	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.2	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	"		
K.1.2	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R		
K.1.3	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	(Carol)		
K.1.3	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	"		
K.1.3	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R		
K.1.4	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.4	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	"		
K.1.4	NRC	Service Order (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R		
K.1.4	NRC	Connect & Test	ITWS10	Install = 10 min	Disconnect = 10 min	Cindy Owen		
K.1.4	NRC	Connect & Test	NWPB58	Install = 60 min	Disconnect = 30 min	Beverly McDonald		
K.1.5	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.1.5	NRC	Service Order	2300	Install = 25 min	Disconnect = 10 min	"		
K.1.5	NRC	Service Order (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe		
K.1.5	NRC	Connect & Test	ITWS10	Install = 10 min	Disconnect = 10 min	Cindy Owen		
K.1.8	NRC	Service Order (BSAT2)	BSAT2	Company session	MOU = 1 min			
K.1.X	Recurring	BellSouth Applied Tech	BSAT1	Triggers =	$84.00/hr	Joe Raney, BAT		
K.1.X	Recurring	BellSouth Applied Tech	BSAT2	Training / Help =	$110.00/hr	Joe Raney, BAT		
K.1.6	Recurring	Model 20 Disk Array	BS&T	Material Price =	~~$46,000~~	Barbara King		
K.1.6	Recurring	Model 20 Disk Array	BS&T	Kilobyte Capacity =	86,000,000			
K.1.6	Recurring	Model 20 Disk Array	BS&T	Utilization =	60.0%			
K.1.6	Recurring	Model 20 Disk Array	BS&T	SMS Processors =	$74,760	(HF)		
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 1 =	145,236	Alan Weatherly		4/24/97
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 2 =	290,448			4/30/97
K.1.7	Recurring	Minutes Of Use	AIN / ISD	Year 3 =	435,660			4/30/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 1 =	1	Las Vegas		5/5/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 2 =	2			5/5/97
K.1.X	Recurring	Customers In Service	AIN / ISD	Year 3 =	3			5/5/97

Rate Element	Monthly / NRC	Input Description	JFC / Paybend	UNE / ISD Tooltip Input		SME Name	SME Signature	Date
K.2.1	NRC	Service Order	AEWC	Install = 60 min	Disconnect = 60 min	Carol Mahaske		
K.2.1	NRC	Service Order	2300	Install = 20 min	Disconnect = 10 min	Joe Ramey, BAT	Joe Ramey	5/7/97
K.2.1	NRC	Connect & Test (BSAT1)	BSAT1	Install = 30 min	Disconnect = 15 min			
K.2.3	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol Mahaske		
K.2.3	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	Joe Ramey, BAT	Joe Ramey	5/7/97
K.2.3	NRC	Connect & Test (BSAT1)	BSAT1	Install = 6 min	Disconnect = 7 min			
K.2.4	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.2.4	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	Joe K	Joe Ramey	5/7/97
K.2.4	NRC	Connect & Test (BSAT1)	BSAT1	Install = 6 min	Disconnect = 7 min			
K.2.5	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.2.5	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	Joe K	Joe Ramey	5/7/97
K.2.5	NRC	Connect & Test (BSAT1)	BSAT1	Install = 6 min	Disconnect = 7 min			
K.2.6	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol M		
K.2.6	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	Joe K	Joe Ramey	5/7/97
K.2.6	NRC	Connect & Test (BSAT1)	BSAT1	Install = 6 min	Disconnect = 7 min	Tom Caldwell, MCI		
K.2.6	NRC	Connect & Test	4322	Install = 60 min	Disconnect = 10 min			
K.2.7	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol M		
K.2.7	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	Joe K	Joe Ramey	5/7/97
K.2.7	NRC	Connect & Test (BSAT1)	BSAT1	Install = 6 min	Disconnect = 7 min	Tom Caldwell, MCI		
K.2.7	NRC	Connect & Test	4322	Install = 60 min	Disconnect = 10 min			
K.2.8	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol M		
K.2.8	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	Joe K	Joe Ramey	5/7/97
K.2.8	NRC	Connect & Test (BSAT1)	BSAT1	Install = 6 min	Disconnect = 7 min	Tom Caldwell, MCI		
K.2.8	NRC	Connect & Test	4322	Install = 60 min	Disconnect = 10 min			
K.2.12	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol M		
K.2.12	NRC	Service Order	2300	Install = 15 min	Disconnect = 15 min	Joe K	Joe Ramey	5/7/97
K.2.12	NRC	Connect & Test (BSAT1)	BSAT1	Install = 6 min	Disconnect = 6 min			
K.2.13	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 6 min	Carol M		
K.2.13	NRC	Service Order	2300	Install = 15 min	Disconnect = 6 min	Joe K	Joe Ramey	5/7/97
K.2.13	NRC	Connect & Test (BSAT1)	BSAT1	Install = 6 min				
K.2.14	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol M		
K.2.14	NRC	Service Order	2300	Install = 15 min	Disconnect = 6 min	Joe K	Joe Ramey	5/7/97
K.2.14	NRC	Connect & Test (BSAT1)	BSAT1	Install = 6 min				
K.2.15	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 0 min	Carol		
K.2.15	NRC	Service Order	2300	Install = 15 min	Disconnect = 0 min	Joe K	Joe Ramey	5/7/97
K.2.15	NRC	Connect & Test (BSAT1)	BSAT1	Install = 6 min	Disconnect = 0 min			

* For BellSouth Applied Technologies, this estimate of minutes is our most aggressive and assumes "best case" as far as timing. For worstcase, our estimate is 15 min. and 10 min., respectively.

Rate Element	Monthly / NRC	Input Description	JFC / Payband	AIN / ISD ToolKit Input		SME Name	SME Signature	Date
K.2.1	NRC	Service Order	AEWC	Install = 60 min	Disconnect = 60 min	Carol Michaske		
K.2.1	NRC	Service Order	2300	Install = 20 min	Disconnect = 10 min	↓		
K.2.1	NRC	Connect & Test (BSAT1)	BSAT1	Install = 30 min	Disconnect = 15 min	Joe Ravey, BAT		←
K.2.3	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol Mahaske		
K.2.3	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	↓		
K.2.3	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe Ravey, BAT		←
K.2.4	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.2.4	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	↓		
K.2.4	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R		←
K.2.5	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol		
K.2.5	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	↓		
K.2.5	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R		←
K.2.6	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol M		
K.2.6	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	↓		
K.2.6	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R		←
K.2.6	NRC	Connect & Test	4322	Install = 60 min	Disconnect = 10 min	Tom Coffield, NISC		
K.2.7	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol M		
K.2.7	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	↓		
K.2.7	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R		←
K.2.7	NRC	Connect & Test	4322	Install = 60 min	Disconnect = 10 min	Tom Coffield, NISC		
K.2.8	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol M		
K.2.8	NRC	Service Order	2300	Install = 10 min	Disconnect = 10 min	↓		
K.2.8	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 7 min	Joe R		←
K.2.8	NRC	Connect & Test	4322	Install = 60 min	Disconnect = 10 min	Tom Coffield, NISC		
K.2.12	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol M		
K.2.12	NRC	Service Order	2300	Install = 15 min	Disconnect = 15 min	↓		
K.2.12	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 0 min	Joe R		←
K.2.13	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 0 min	Carol M		
K.2.13	NRC	Service Order	2300	Install = 15 min	Disconnect = 0 min	↓		
K.2.13	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 0 min	Joe R		←
K.2.14	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 10 min	Carol M		
K.2.14	NRC	Service Order	2300	Install = 15 min	Disconnect = 15 min	↓		
K.2.14	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 0 min	Joe R		←
K.2.15	NRC	Service Order	AEWC	Install = 10 min	Disconnect = 0 min	Carol		
K.2.15	NRC	Service Order	2300	Install = 15 min	Disconnect = 0 min	↓		
K.2.15	NRC	Connect & Test (BSAT1)	BSAT1	Install = 8 min	Disconnect = 0 min	Joe R		←

Re. Element	Monthly / NRC	Input Description	JFC / Payband	AIN / ISD ToolKit Input		SME Name	SME Signature	Date
K.2.12	Recurring	Connect & Test	BSAT1	Install = 10 min	Disconnect = 0 min	Joe Raney		
K.2.14	Recurring	Connect & Test	BSAT1	Install = 10 min	Disconnect = 0 min	Joe Raney		
K.2.3	NRC	Terminating Attempt	AIN / ISD	% Occurrence =	50.0%	IRIS Regas		
K.2.4	NRC	Off-Hook Delayed	AIN / ISD	% Occurrence =	10.0%			
K.2.5	NRC	Off-Hook Immediate	AIN / ISD	% Occurrence =	5.0%			
K.2.6	NRC	Public Office Dialing Plan	AIN / ISD	% Occurrence =	25.0%			
K.2.7	NRC	Customized Dialing Plan	AIN / ISD	% Occurrence =	5.0%			
K.2.8	NRC	Feature Code	AIN / ISD	% Occurrence =	5.0%			
K.2.9	Recurring	per Query	AIN / ISD	% POOP =	26.0%	IRIS REGAS		
K.2.9	Recurring	per Query	AIN / ISD	% POOP (local) =	89.0%	IRIS REGAS		
K.2.X	Recurring	per Query	BSAT	Average Octets =	150	Bob Koch		
K.2.2	NRC	Training Sessions	AIN / ISD	Additive (VB) =	$4,000	Joe Raney, BST		
K.2.2	NRC	Training Sessions	AIN / ISD	Additive (VI) =	$10,000	Joe Raney, BST		
K.2.2	NRC	Training Sessions Yr1	AIN / ISD	Demand =	1	IRIS Regas		
K.2.2	NRC	Training Sessions Yr2	AIN / ISD	Demand =	1			
K.2.2	NRC	Training Sessions Yr3	AIN / ISD	Demand =	1			
K.2.2	NRC	Training Sessions Yr4	AIN / ISD	Demand =	1			
K.2.2	NRC	Training Sessions Yr5	AIN / ISD	Demand =	1			
K.2.X	NA	MB Processor Characteristic	BSAT	HP-[illegible]	$14,000	[illegible]	[illegible]	
K.2.X	NA	MB Processor Characteristic	BSAT	HP-[illegible]/0	$50,000	[illegible]	[illegible]	
K.2.X	NA	MB Processor Characteristic	BSAT	Holiday Occupied	10	[illegible]	[illegible]	
K.2.X	NA	MB Processor Characteristic	BSAT	Exc/Call Event Report	3	Peggy Carey, SBT	[illegible]	
K.2.X	NA	MB Processor Characteristic	BSAT	Exc/Summary Report	60	Peggy Carey, SBT	[illegible]	
K.2.X	NA	SCP to STP Link1	BSAT	Number of Miles	0	Deb Allison		
K.2.X	NA	SCP to STP Link1	BSAT	Interoffice Cits	0			
K.2.X	NA	SCP to STP Link1	BSAT	STP Terminations	2			
K.2.X	NA	SCP to STP Link2	BSAT	Number of Miles	0			
K.2.X	NA	SCP to STP Link2	BSAT	Interoffice Cits	0			
K.2.X	NA	SCP to STP Link2	BSAT	STP Terminations	2			
K.2.X	NA	SCP to STP Link3	BSAT	Number of Miles	22.1			
K.2.X	NA	SCP to STP Link3	BSAT	Interoffice Cits	2			
K.2.X	NA	SCP to STP Link3	BSAT	STP Terminations	2			
K.2.X	NA	SCP to STP Link4	BSAT	Number of Miles	22.1			
K.2.X	NA	SCP to STP Link4	BSAT	Interoffice Cits	2			
K.2.X	NA	SCP to STP Link4	BSAT	STP Terminations	2			
K.2.X	NA	SCP Investment (per pair)	BSAT	Year 1	$3,992,340	[illegible]	[illegible]	4/30/97
K.2.X	NA	SCP Investment (per pair)	BSAT	Year 2	$3,992,340	[illegible]	[illegible]	4/30/97
K.2.X	NA	SCP Investment (per pair)	BSAT	Year 3	$3,992,340	[illegible]	[illegible]	4/30/97

05/07/97 14:07

NO. 787 P003/004

Rate Element	Monthly / NRC	Input Description	JFC / Payband	AIN / ISD Toolkit Input		SME Name	SME Signature	Date
K.2.12	Recurring	Connect & Test	BSAT1	Install = 10 min	Disconnect = 0 min	Joe Raney	Joe Raney	5/7/97
K.2.14	Recurring	Connect & Test	BSAT1	Install = 10 min	Disconnect = 0 min	Joe Raney	Joe Raney	5/7/97
K.2.3	NRC	Terminating Attempt	AIN / ISD	% Occurrence =	60.0%	IRIS Regas	Iris Regas	5-5-97
K.2.4	NRC	Off-Hook Delayed	AIN / ISD	% Occurrence =	10.0%			"
K.2.5	NRC	Off-Hook Immediate	AIN / ISD	% Occurrence =	5.0%			"
K.2.6	NRC	Public Office Dialing Plan	AIN / ISD	% Occurrence =	25.0%			"
K.2.8	NRC	Customized Dialing Plan	AIN / ISD	% Occurrence =	5.0%			"
K.2.7	NRC	Feature Code	AIN / ISD	% Occurrence =	5.0%			"
K.2.9	Recurring	per Query	AIN / ISD	% PODP =	25.0%	IRIS REGAS	Iris Regas	"
K.2.9	Recurring	per Query	AIN / ISD	% PODP (local) =	80.0%	IRIS REGAS	Iris Regas	"
K.2.X	Recurring	per Query	BS&T	Average Octets =	150	Bob Koch		
K.2.2	NRC	Training Session	AIN / ISD	Additive (VS) =	0 $4,000	Joe Raney/BST	Joe Raney	5-7-97
K.2.2	NRC	Training Session	AIN / ISD	Additive (VI) =	0 $10,000	Joe Raney/BST	Joe Raney	5-7-97
K.2.2	NRC	Training Sessions Yr1	AIN / ISD	Demand =	1	IRIS Regas	Iris Regas	5-5-97
K.2.2	NRC	Training Sessions Yr2	AIN / ISD	Demand =	1			"
K.2.2	NRC	Training Sessions Yr3	AIN / ISD	Demand =	1			"
K.2.2	NRC	Training Sessions Yr4	AIN / ISD	Demand =	1			"
K.2.2	NRC	Training Sessions Yr5	AIN / ISD	Demand =	1			"
K.2.X	NA	MS Processor Characteristic	BS&T	HP-[illegible]	$14,000	Alan Whatley		
K.2.X	NA	MS Processor Characteristic	BS&T	HP-[illegible]70	$50,000	Alan Whatley		
K.2.X	NA	MS Processor Characteristic	BS&T	Hr/day Occupied	16	Alan Whatley		
K.2.X	NA	MS Processor Characteristic	BS&T	See/Call Event Report	3	Peggy Carey, SIT		
K.2.X	NA	MS Processor Characteristic	BS&T	See/Summary Report	50	Peggy Carey, SIT		
K.2.X	NA	SCP to STP Link1	BS&T	Number of Miles	0	John Ritcon		
K.2.X	NA	SCP to STP Link1	BS&T	Interoffice Ckts	0			
K.2.X	NA	SCP to STP Link1	BS&T	STP Terminations	2			
K.2.X	NA	SCP to STP Link2	BS&T	Number of Miles	0			
K.2.X	NA	SCP to STP Link2	BS&T	Interoffice Ckts	0			
K.2.X	NA	SCP to STP Link2	BS&T	STP Terminations	2			
K.2.X	NA	SCP to STP Link3	BS&T	Number of Miles	22.1			
K.2.X	NA	SCP to STP Link3	BS&T	Interoffice Ckts	2			
K.2.X	NA	SCP to STP Link3	BS&T	STP Terminations	2			
K.2.X	NA	SCP to STP Link4	BS&T	Number of Miles	22.1			
K.2.X	NA	SCP to STP Link4	BS&T	Interoffice Ckts	2			
K.2.X	NA	SCP to STP Link4	BS&T	STP Terminations	2			
K.2.X	NA	SCP Investment (per pair)	BS&T	Year 1	$3,982,640	Alan Whatley		4/30/97
K.2.X	NA	SCP Investment (per pair)	BS&T	Year 2	$3,982,640			4/30/97
K.2.X	NA	SCP Investment (per pair)	BS&T	Year 3	$3,982,640			4/30/97

"For BellSouth Applied Technologies, this estimate is our most aggressive and assumes "best case" [illegible] training. For worst, case, our estimate is 15 min. and 10 min., respectively.

OK [illegible] 4/[illegible]/97

Rate Element	Monthly / NRC	Input Description	JFC / Payband	AIN / ISD Tool Kit Input		SME Name	SME Signature	Date
K.2.12	Recurring	Connect & Test	BSAT1	Install = 10 min	Disconnect = 0 min	Joe Raney	Joe Raney	5/7/97
K.2.14	Recurring	Connect & Test	BSAT1	Install = 10 min	Disconnect = 0 min	Joe Raney	Joe Raney	5/7/97
K.2.3	NRC	Terminating Attempt	AIN / ISD	% Occurrence =	60.0%	IRIS Regas	[illegible]	5-5-97
K.2.4	NRC	Off-Hook Delayed	AIN / ISD	% Occurrence =	10.0%		[illegible]	"
K.2.5	NRC	Off-Hook Immediate	AIN / ISD	% Occurrence =	5.0%		[illegible]	"
K.2.6	NRC	Public Office Dialing Plan	AIN / ISD	% Occurrence =	25.0%		[illegible]	"
K.2.7	NRC	Customized Dialing Plan	AIN / ISD	% Occurrence =	5.0%		[illegible]	"
K.2.8	NRC	Feature Code	AIN / ISD	% Occurrence =	5.0%		[illegible]	"
K.2.9	Recurring	per Query	AIN / ISD	% PODP =	25.0%	IRIS REGAS	[illegible]	"
K.2.9	Recurring	per Query	AIN / ISD	% PODP (local) =	80.0%	IRIS REGAS	[illegible]	"
K.2.X	Recurring	per Query	BSAT	Average Octets =	150	Bob Rash		
K.2.1	NRC	Training Session	AIN / ISD	Additive (VS) =	0 $4,000	Joe Raney, BST	Joe Raney	5-7-97
K.2.1	NRC	Training Session	AIN / ISD	Additive (VI) =	0 $10,000	Joe Raney, BST	Joe Raney	5/7/97
K.2.2	NRC	Training Sessions Yr1	AIN / ISD	Demand =	1	IRIS Regas	IRIS Regas	5-5-97
K.2.2	NRC	Training Sessions Yr2	AIN / ISD	Demand =	1		"	"
K.2.2	NRC	Training Sessions Yr3	AIN / ISD	Demand =	1		"	"
K.2.2	NRC	Training Sessions Yr4	AIN / ISD	Demand =	1		"	"
K.2.2	NRC	Training Sessions Yr5	AIN / ISD	Demand =	1		"	"
K.2.X	NA	MS Processor Characteristic	BSAT	HP-9000/G30	$14,000	Alan Whatley	[illegible]	
K.2.X	NA	MS Processor Characteristic	BSAT	HP-9000/70	$50,000	Alan Whatley	[illegible]	
K.2.X	NA	MS Processor Characteristic	BSAT	Holiday Occupied	18	Alan Whatley	Alan Whatley	
K.2.X	NA	MS Processor Characteristic	BSAT	Seq/Call Event Report	3	Peggy Carey, SIT		
K.2.X	NA	MS Processor Characteristic	BSAT	Seq/Summary Report	96	Peggy Carey, SIT		
K.2.X	NA	SCP to STP Link1	BSAT	Number of Miles	0	John Ritson		
K.2.X	NA	SCP to STP Link1	BSAT	Interoffice Cits	0			
K.2.X	NA	SCP to STP Link1	BSAT	STP Terminations	2			
K.2.X	NA	SCP to STP Link2	BSAT	Number of Miles	0			
K.2.X	NA	SCP to STP Link2	BSAT	Interoffice Cits	0			
K.2.X	NA	SCP to STP Link2	BSAT	STP Terminations	2			
K.2.X	NA	SCP to STP Link3	BSAT	Number of Miles	22.1			
K.2.X	NA	SCP to STP Link3	BSAT	Interoffice Cits	2			
K.2.X	NA	SCP to STP Link3	BSAT	STP Terminations	2			
K.2.X	NA	SCP to STP Link4	BSAT	Number of Miles	22.1			
K.2.X	NA	SCP to STP Link4	BSAT	Interoffice Cits	2			
K.2.X	NA	SCP to STP Link4	BSAT	STP Terminations	2			
K.2.X	NA	SCP Investment (per pair)	BSAT	Year 1	$3,982,640	Alan Whatley	[illegible]	4/30/97
K.2.X	NA	SCP Investment (per pair)	BSAT	Year 2	$3,982,640		[illegible]	4/30/97
K.2.X	NA	SCP Investment (per pair)	BSAT	Year 3	$3,982,640		[illegible]	4/30/97

"For BellSouth Applied Technologies, this estimate is our most aggressive and assumes "best case" [illegible] timing. For worst, case, our estimate is 15 min. and 10 min., respectively.

OK [illegible] 5/7/97

Rate Element	Monthly / NRC	Input Description	JFC / Payband	AIN / ISD Toolkit Input		SME Name	SME Signature	Date
K.2.12	Recurring	Connect & Test	BSAT1	Install = 10 min	Disconnect = 0 min	Joe Ramey		
K.2.14	Recurring	Connect & Test	BSAT1	Install = 10 min	Disconnect = 0 min	Joe Ramey		
K.2.3	NRC	Terminating Attempt	AIN / ISD	% Occurrence =	50.0%	IRIS Regas	Iris Regas	5-5-97
K.2.4	NRC	Off-Hook Delayed	AIN / ISD	% Occurrence =	10.0%		IRR	"
K.2.5	NRC	Off-Hook Immediate	AIN / ISD	% Occurrence =	5.0%		IRR	"
K.2.6	NRC	Public Office Dialing Plan	AIN / ISD	% Occurrence =	25.0%		IRR	"
K.2.7	NRC	Customized Dialing Plan	AIN / ISD	% Occurrence =	5.0%		IRR	"
K.2.8	NRC	Feature Code	AIN / ISD	% Occurrence =	5.0%		IRR	"
K.2.9	Recurring	per Query	AIN / ISD	% PODP =	25.0%	IRIS REGAS	IRR	"
K.2.9	Recurring	per Query	AIN / ISD	% PODP (local) =	50.0%	IRIS REGAS	IRR2	"
K.2.X	Recurring	per Query	BS&T	Average Octets =	150	Bob Roth		
K.2.2	NRC	Training Session	AIN / ISD	Additive (VS) =	$4,000	Joe Ramey, BAT		
K.2.2	NRC	Training Session	AIN / ISD	Additive (VI) =	$19,500	Joe Ramey, BAT		
K.2.2	NRC	Training Sessions Yr1	AIN / ISD	Demand =	1	IRIS Regas	Iris Regas	5-5-97
K.2.2	NRC	Training Sessions Yr2	AIN / ISD	Demand =	1		"	"
K.2.2	NRC	Training Sessions Yr3	AIN / ISD	Demand =	1		"	"
K.2.2	NRC	Training Sessions Yr4	AIN / ISD	Demand =	1		"	"
K.2.2	NRC	Training Sessions Yr5	AIN / ISD	Demand =	1		"	"
K.2.X	NA	MS Processor Characteristic	BS&T	HP-9000G50	$14,880	Alan Weatherby		
K.2.X	NA	MS Processor Characteristic	BS&T	HP-9000I70	$50,880	Alan Weatherby		
K.2.X	NA	MS Processor Characteristic	BS&T	Hr/day Occupied	18	Alan Weatherby		
K.2.X	NA	MS Processor Characteristic	BS&T	Sec/Call Event Report	3	Peggy Emrey, SBT		
K.2.X	NA	MS Processor Characteristic	BS&T	Sec/Summary Report	90	Peggy Emrey, SBT		
K.2.X	NA	SCP to STP Link1	BS&T	Number of Miles	0	John Petteson		
K.2.X	NA	SCP to STP Link1	BS&T	Interoffice Ckts	0			
K.2.X	NA	SCP to STP Link1	BS&T	STP Terminations	2			
K.2.X	NA	SCP to STP Link2	BS&T	Number of Miles	0			
K.2.X	NA	SCP to STP Link2	BS&T	Interoffice Ckts	0			
K.2.X	NA	SCP to STP Link2	BS&T	STP Terminations	2			
K.2.X	NA	SCP to STP Link3	BS&T	Number of Miles	22.1			
K.2.X	NA	SCP to STP Link3	BS&T	Interoffice Ckts	2			
K.2.X	NA	SCP to STP Link3	BS&T	STP Terminations	2			
K.2.X	NA	SCP to STP Link4	BS&T	Number of Miles	22.1			
K.2.X	NA	SCP to STP Link4	BS&T	Interoffice Ckts	2			
K.2.X	NA	SCP to STP Link4	BS&T	STP Terminations	2			
K.2.X	NA	SCP Investment (per pair)	BS&T	Year 1	$3,992,540	Alan Weatherby		4/30/97
K.2.X	NA	SCP Investment (per pair)	BS&T	Year 2	$3,992,540			4/30/97
K.2.X	NA	SCP Investment (per pair)	BS&T	Year 3	$3,992,540			4/30/97

Rate Element	Monthly / NRC	Input Description	JFC / Payband	JN / ISD ToolKit Input		SME Name	SME Signature	Date
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 1	0.9%	[illegible]	[illegible]	4/30/97
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 2	2.6%	↓	[illegible]	4/30/97
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 3	13.1%		[illegible]	4/30/97
K.2.X	NA	SCP Queries	BS&T	Year 1	514,800	J. Bell Rogers		
K.2.X	NA	SCP Queries	BS&T	Year 2	1,544,400	↓		
K.2.X	NA	SCP Queries	BS&T	Year 3	7,207,200			
K.2.X	NA	Cost Relationship by Query	BS&T	Portion query cost type 1	10.[illegible]%	Andrew Vernon	[illegible]	5/6/97
K.2.X	NA	Cost Relationship by Query	BS&T	Portion query cost type 2	[illegible].10[illegible]7%	↓		
K.2.X	NA	SCP Queries	BS&T	Type 1 node per query	[illegible]			
K.2.X	NA	SCP Queries	BS&T	Type 2 node per query	[illegible].70			
K.2.X	NA	SCP Storage	BS&T	Memory Space	[illegible],414	[illegible] Jo Anne [illegible]	[illegible]	5/6/97
K.2.X	NA	SCP Storage	BS&T	Capacity (bytes)	14[illegible],600	↓		
K.2.X	NA	SCP Storage	BS&T	Utilization factor	[illegible]%			

Rate Element	Monthly / NRC	Input Description	JFC / Payband	AIN / ISD ToolKit Input		SME Name	SME Signature	Date
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 1	0.9%	[illegible]	[illegible]	4/30/97
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 2	2.8%	↓	[illegible]	4/30/97
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 3	13.1%		[illegible]	4/30/97
K.2.X	NA	SCP Queries	BS&T	Year 1	514,800	I. Rees Rogers	[illegible]	5-5-97
K.2.X	NA	SCP Queries	BS&T	Year 2	1,544,400	↓	"	5-5-97
K.2.X	NA	SCP Queries	BS&T	Year 3	7,207,200		"	"
K.2.X	NA	Cost Relationship by Query	BS&T	Portion query cost type 1	10.80663%	Andrew Vernon		
K.2.X	NA	Cost Relationship by Query	BS&T	Portion query cost type 2	89.19337%	↓		
K.2.X	NA	SCP Queries	BS&T	Type 1 node per query	0.45			
K.2.X	NA	SCP Queries	BS&T	Type 2 node per query	5.70			
K.2.X	NA	SCP Storage	BS&T	Memory Space	[illegible],414	Jo Anne Hall		
K.2.X	NA	SCP Storage	BS&T	Capacity (bytes)	142,334,000	↓		
K.2.X	NA	SCP Storage	BS&T	Utilization factor	65.6%			

Rate Element	Monthly / NRC	Input Description	JFC / Payband	AIN / ISD ToolKit Input		SME Name	SME Signature	Date
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 1	0.9%	[illegible]	[illegible]	4/30/97
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 2	2.6%	↓	[illegible]	4/30/97
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 3	15.1%		[illegible]	4/30/97
K.2.X	NA	SCP Queries	BS&T	Year 1	514,800	I. Rus Regas	[illegible]	5-5-97
K.2.X	NA	SCP Queries	BS&T	Year 2	1,544,400	↓	"	5-5-97
K.2.X	NA	SCP Queries	BS&T	Year 3	7,207,200		"	"
K.2.X	NA	Cost Relationship by Query	BS&T	Portion query cost type 1	10.80663%	Andrew Vernon		
K.2.X	NA	Cost Relationship by Query	BS&T	Portion query cost type 2	89.19337%	↓		
K.2.X	NA	SCP Queries	BS&T	Type 1 node per query	0.45			
K.2.X	NA	SCP Queries	BS&T	Type 2 node per query	5.70			
K.2.X	NA	SCP Storage	BS&T	Memory Space	868,414	Jo Anne Wall		
K.2.X	NA	SCP Storage	BS&T	Capacity (bytes)	142,336,000	↓		
K.2.X	NA	SCP Storage	BS&T	Utilization factor	85.9%			

Rate Element	Monthly / NRC	Input Description	JFC / Payband	AIN / ISD ToolKit Input		SME Name	SME Signature	Date
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 1	0.9%	[illegible]	[illegible]	4/30/97
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 2	2.8%	↓	[illegible]	4/30/97
K.2.X	NA	SCP Utilized by ToolKit	BS&T	Year 3	13.1%		[illegible]	4/30/97
K.2.X	NA	SCP Queries	BS&T	Year 1	514,800	Iris Rogers	[illegible]	5-5-97
K.2.X	NA	SCP Queries	BS&T	Year 2	1,544,400	↓	"	5-5-97
K.2.X	NA	SCP Queries	BS&T	Year 3	7,207,200		"	"
K.2.X	NA	Cost Relationship by Query	BS&T	Portion query cost type 1	10.80663%	Andrew Vernon		
K.2.X	NA	Cost Relationship by Query	BS&T	Portion query cost type 2	89.19337%	↓		
K.2.X	NA	SCP Queries	BS&T	Type 1 node per query	0.45			
K.2.X	NA	SCP Queries	BS&T	Type 2 node per query	8.70			
K.2.X	NA	SCP Storage	BS&T	Memory Space	$68,414	Jo Anne Hood		
K.2.X	NA	SCP Storage	BS&T	Capacity (bytes)	142,338,000	↓		
K.2.X	NA	SCP Storage	BS&T	Utilization factor	85.0%			

Item No. 57
Attachment No. 18
Supporting Data for Ports

Assumptions Manual Process

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	N Order	2300 SR	1.75 ~~1.58339~~	~~0.16667~~ .2500		
	D Order	WS10 Clk	0.50000			
AFIG	~~Assign~~ Inventory OSP Cable Pair	400X	0.00583	~~0.00000~~	0.00233	
CTG	NA	NA				
CO	? RAN jumper & test	431X	0.41667	0.16667	0.00833	
CPG - Trunk Translations	NA	NA				
CPG - Design	Design CKT	4N4X	0.08000	0.05000	0.04000	0.04000
RCMAG	Assign Line	4210	0.00175	0.00175	0.00175	
L & N	NA	NA				
SSI & M	NA	NA				
UNEC	Turn up, Test, Complete	4AXX WS32	~~0.50000~~	0.50000	0.50000	~~0.00000~~
OSPE	NA	NA				
CRSG	NA	NA				
WMC	~~RT Order~~ NA	~~35~~	~~0.02500~~		~~0.02500~~	

Description	Function	Job Function Code	Install (hrs.)	Additional	Disconnect	Additional
LCSC	N Order	2300 - SR WS10 - Clk	~~4.5 4.00000~~ 1.00000	.6667 ~~1.25 1.00000~~ —	0.25000	
AFIG	Inventory of [illegible]	400X FAS	0.00583	—	0.00223	
CTG	Provision Switch	4N20 - ET (WS32)	0.75000	0.10000	0.50000	0.05000
CO	Wire/Place Cards	431X	0.41667	0.16667	0.33333	0.08333
CPG - Trunk Translations	Determine Trunk Translation	4N4X - WS18 (PS)	.4667/grp		0.16667/grp	
CPG - Designed	Establish Trunk Group SO RMA - Design CKT	4N4X - WS18 (PS)	0.08000	0.05000	0.04000	0.04000
RCMAG	Translate Numbers to ~~RTZ~~ RTI	4N10	0.01670	0.00830	0.01670/num	
L & N	~~SR~~ Service Order ~~Fallout~~	~~MA~~ 2730	0.0333	0.0167	—	—
SSI & M	NA ~~Install Service - Cross connect jumpers and test~~	411X - WS32	~~1.45000~~		~~0.00000~~	
UNEC	Turn up; Test; Complete	4AXX - WS32	0.50000	0.01670	0.5000/ord	
OSPE	~~SO Fallout~~ NA	~~3290~~ -	~~0.10000~~		~~0.00000~~	
CRSG	NA	NA				
WMC	~~Coordinate Word Doc; Dispatch~~ NA	~~4WXX~~ -	~~0.20000~~		~~0.00000~~	

Assumptions

AFIG - Collocation CA/PA will be inventoried in LFACS & flowed after the line ASSIGN USOCS. And will not be shown as CFA entries on the order

L&N: Based on 10% fallout

DDITS 4 Way - New

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	Issue Order	2300 SR WS10 Clk	6.66000 6.5 0.50000	2.50000 2.75	1.50000 0.50000	
AFIG	[redacted]	400X	0.15000	—	.00233[redacted]	
CTG	Provision Switch	4N2X	.75000/trk	.10000/trk	0.25000	
CO	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
CPG - Trunk Translations	Determine Trunk Trans	4N4X	.46670/grp	—	0.16700	
CPG - Design	Design [redacted] Trunk	4N4X	1.50000[redacted]	1.30000[redacted]	0.00600	0.00600
RCMAG	Assign TNs/RTI TRNKS	4N1X	[redacted]	.00830/tn	0.01670	
L & N	S.O. fallout	2730	[redacted]	[redacted]	NA	
SSI & M	NA	—	—	—	—	—
UNEC	Turn up; Test; Complete	4AXX	2.00000	1.00000	0.50000	
OSPE	Obtain OLEAC NA	32XX	3.00000	3.00000		
CRSG	NA	NA				
WMC	Route S.O. NA	4WXX	0.50000		0.25000	

Assumptions:
2 orders:
[redacted]
Co-location facilities
channels

for LEN:
S.O. fallout
10% of time
for DID trunks
only

DID Design - Switch as Is

Description	Function	Job Function Code	Install	Additional	Previous Input	Total	Reconciled	Reconciled By	Total	Difference
LCSC	ISSNG N/D Orderd	2300-SR	1.5 (first)	.1112 / trunk	1.0000		3.5000			
		WSIO - Clerk	1.0000		0.2500					
AFIG	Assign OSP CA/PR	400X FAS (W320)	0.0035		0.0035					
CO	NA	NA	NA		0.0000					
CPG - TRUNK TRANSLATIONS	NA	NA	NA		0.0000					
CPG - Design	Resolve RMAs from SO process design CKT Word doc	4N4X	0.1200	0.1042	0.1517		0.1517			
CTG	NA	NA	NA		NA					
RCMAG	NA	NA	NA		NA					
WMC	NA	NA	NA		NA					
L & N	NA	NA	NA		0.0333		0.0000			
SSI & M	NA	NA	NA		NA					
UNEC	WFA Completion	4AXX-ET	0.2500		0.0000					

2W DID Subsequent - Add Trunks

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	Issue Order	2300	3.00000			
AFIG	Assign OSP CA/PR	400X	.05830/ord	.00223/ord		
CTG	Provision Switch	4N20	.10000/trk	.10000/trk		
CO	Run Jumper	431X	4.2000/ord	.01670/ord		
CPG - Trunk Translations	Update Systems	4N4X	.01670/ord			
CPG - Designed	Design Circuit	4N4X	0.08000/trk	.05000/trk		
RCMAG	NA	NA				
L & N	S.O. Fallout	2730	2 min	1 min		
SSI & M	NA	NA				
UNEC	Turn-up; Test; Connect	4AXX	.25000/ord			
OSPE	S.O.Fallout	32XX	.10000/ord			
CRSG	NA	NA				
WMC	Route Order	4WXX	.25000/ord			

Assumptions for L & N -
Based on 10% fallout

PBX Convers Line Side

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	N Order	2300 SR	1.50000	0.16667		
	D Order	WS10 Clk	0.50000			
AFIG	Assign Cable Pair	400X	0.00350/ord			
CTG	NA	NA				
CO	NA	NA				
CPG - Trunk Translations	NA	NA				
CPG - Design	Est Trunk Grp	4N4X	0.15170	0.10420/trk		
RCMAG	Tranlate Num to RTI	4210	0.00175	0.00175/num		
L & N	NA	NA				
SSI & M	NA					
UNEC	Completion	4AXX WS32	0.25000			
OSPE	NA	NA				
CRSG	NA	NA				
WMC	NA	NA				

PBX Line Side Subsequent

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	Issue Order	2300 SR WS10 Clk	1.08333 0.50000			
AFIG	HML TE Arrange	400X	0.04160/ord			
CTG	NA	NA				
CO	NA	NA				
CPG - Trunk Translations	NA	NA				
CPG - Design	Design CKT (HML only)	4N4X	0.08000	0.05000		
RCMAG	Rearrange HML	4210	0.00175	0.00175/tn		
L & N	NA	NA				
SSI & M	NA	NA				
UNEC	WFA Completion	4AXX WS32	0.25000			
OSPE	NA	NA				
CRSG	NA	NA				
WMC	NA	NA				

Assumptions:
PIC / LPIC HML

Combo - FX-FCO Conversion

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	Issue Order	2300 SR	1.00000			
		WS10 Clk	0.50000	0.16667		
AFIG	Assign OSP Cable Pair	400X	.00350/ord			
CTG	NA	NA				
CO	NA	NA				
CPG - Trunk Translations	NA	NA				
CPG - Design	SO RMA Design CKT	4N4X	0.15170	0.10420/line		
RCMAG	Translate Line	4210	0.00175			
L & N	NA	NA				
SSI & M	NA	NA				
UNEC	Completion	4AXX WS32	0.25000			
OSPE	NA	NA				
CRSG	NA	NA				
WMC	NA	NA				

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	Issue Order	2300 SR	0.50000			
		WS10 Clk	0.50000			
AFIG	Assign OSP Cable Pair		0.00350			
CTG	NA	NA				
CO	NA	NA				
CPG - Trunk Translations	NA	NA				
CPG - Design	NA	NA				
RCMAG	Assign In	4N10	0.00175			
L & N	NA	NA				
I & M	NA	NA				
BRMC	NA	NA				
OSPE	NA	NA				
CRSG	NA	NA				
WMC	NA	NA				

Assumptions :
Manual process with 25 Comb
No DPA
Minimum no captions over / under

DDITS 1 & 2 Way Conversion

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	Issue Order	2300 SR	5.20000			
		WS10 Clk	0.50000			
AFIG	DSI	400X	0.00116			
CTG	Provision Switch	4N2X	.50000/grp			
CO	NA	NA	0.00000			
CPG - Trunk Translations	Determine Trunk Trans	4N4X	.25000/grp			
CPG - Design	Design Pipe & Trunk	4N4X	1.85000			
RCMAG	NA	NA				
L & N	NA	NA	0.00000			
SSI & M	NA	NA	0.00000			
UNEC	Turn up; Test; Complete	4AXX	.16670/ord			
OSPE	NA	NA				
CRSG	NA	NA				
WMC	NA	NA				

Assumptions:

DSI
Trunks
1 Pipe
24 Channels
Single "C"

MegaLink Channel Lineside -Conv

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	Issue (2) N and (2) D Orders	2300 SR WS10 Clk	7.50000 0.50000	0.50000		
AFIG	Facility Inventory	400X	0.00700			
CTG	NA	NA				
CO	NA					
CPG - Trunk Translations	NA	NA				
CPG - Design	Design Pipe & Trunk	4N4X	1.40000			
RCMAG	Assign TNs OE		0.00350	0.00350		
L & N	NA	NA				
SSI & M	NA	NA				
UNEC	Completion	4AXX	0.50000			
OSPE	NA	NA				
CRSG	NA	NA				
WMC	NA	NA				

Assumptions:

1 W out and 2 way

4N4X assumes PIC/LPIC in 5e / EWSD -appx 60 % change

Port IFR-IFB Coin - New

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	Issue Order	2300 SR	0.66700	0.21700	0.33300	
		WS10 Clk	0.50000			
AFIG	Assign OSP Cable Pair	400X	0.00583		0.00233	
CTG	NA	NA				
CO	Run Jumper	431X	0.10000	0.10000	0.05000	0.05000
CPG - Trunk Translations	NA	NA				
CPG - Design	NA	NA				
RCMAG	Translate	4N10	0.00175	0.00175	0.00175	
L & N	NA	NA				
I & M	NA	NA				
BRMC	NA	NA				
OSPE	NA	NA				
CRSG	NA	NA				
WMC	NA	NA				

Assumptions :
Up to 25 lines
Minimum listing requirements
Non-designed
No coordination

Port IFR-IFB Coin - Conversion

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	Issue Order	2300 SR	0.58300	0.21700	0.33300	
		WS10 Clk	0.50000			
AFIG	Assign OSP Cable Pair		0.00583		0.00233	
CTG	NA	NA				
CO			0.10000	0.10000	0.05000	0.05000
CPG - Trunk Translations	NA	NA				
CPG - Design	NA	NA				
RCMAG	Translate	4N10	0.00175			
L & N	NA	NA				
I & M	NA	NA				
BRMC	NA	NA				
OSPE	NA	NA				
CRSG	NA	NA				
WMC	NA	NA				

Assumptions :
Non-designed
No coordination

COMBO (PORT)

Centrex - Conversion (AS IS)

Description	Function	Job Function Code	Install	Additional	Disconnect	Additional
LCSC	Issues N/D	WS10	0.50000			
		WS@#	2.83330	1.00000	.5*	
			3.58330			
AFIG	Assign OE & CA/PR	400X	0.00350	NA		
CTG			NA	NA		
CO		431X	NA	NA		
CPG - Trunk Translations			NA	NA		
OPG - Designed			NA	NA		
RCMAG	Change LCC to measured per port	4N1X	0.01000	0.01000		
L & N			NA	NA		
SSI & M			NA	NA		
UNEC/BRMC	NA	NA	NA	NA	NA	
OSPE			NA	NA		
CRSG			NA	NA	.5*	
WMC			NA	NA		
ECAS/DCAS	Review & Update database per system	4B5A	1.50000	NA	*Assumes termination charges to be calculated and discussed	

Assumptions:

1. Can change PIC/LPIC

2. Assumes basic system which includes common block, ports and NARs

3. Assume dial 9

1. Doesn't use BCOS

2. Minimal listing input

3. No optional features

4. Only one location

5. With NARs

6. Assumes / basic system which includes a standard common block, ports, NARs

Item No. 57
Attachment No. 19
Supporting Data for Line Sharing Splitter

	A	B	C	D	E	F	G	H	I	J	K	L
1	Florida											
2	Inputs for Nonrecurring Costs											
3	Study Period: 01/2000 - 12/2002											
4	FL											
5								Time in Hours (Hrs)				
6	Item / Description				Cost Element	(For use w/ one NR)		First		Additional		Nonrecurring
7	Element	Description	JFC / JG / WS	Source	Life (mos.)	Install	Disconnect	Install	Disconnect	Install	Disconnect	Additive
8												
9	**J.4**	**LINE SHARING SPLITTER - in the Central Office and in the Remote Terminal**										
10		**(Subject Matter Experts)**										
11	**J.4.1**	**Line Sharing Splitter - per Splitter System 96 Line Capacity in the Cenral Office**			43							
12		**(Bill McAllister)**	34XX	Circuit Capacity Management				3.0000	3.0000	0.0000	0.0000	
13		**(Debbie Timmons)**	221X	Complex Resale Support Group				0.7400	0.7400	0.0000	0.0000	
14		**(Debbie Timmons)**	SDWC	Complex Resale Support Group				0.6700	0.6700	0.0000	0.0000	
15												
16	**J.4.2**	**Line Sharing Splitter - per Splitter System 24 Line Capacity in the Central Office**			43							
17		**(Bill McAllister)**	34XX	Circuit Capacity Management				3.0000	3.0000	0.0000	0.0000	
18		**(Debbie Timmons)**	221X	Complex Resale Support Group				0.7400	0.7400	0.0000	0.0000	
19		**(Debbie Timmons)**	SDWC	Complex Resale Support Group				0.6700	0.6700	0.0000	0.0000	
20												
21	**J.4.3**	**Line Sharing Splitter - per Line Activation in the Central Office**			43							
22		**(Bill McAllister)**	34XX	Circuit Capacity Management				0.0833	0.0833	0.0208	0.0208	
23		**(Shirley Abts)**	4M1X	Assignment Facility Inventory Group				0.0467	0.0467	0.0467	0.0467	
24		**(Lenny Glynn)**	4WXX	Work Management Center				0.0500	0.0500	0.0500	0.0500	
25		**(Dan Stinson)**	431X	CO Install & Mtce Field - Ckt & Fac				0.4167	0.2000	0.1667	0.0833	
26		**(Debbie Timmons)**	221X	Complex Resale Support Group				0.0308	0.0308	0.0000	0.0000	
27		**(Debbie Timmons)**	SDWC	Complex Resale Support Group				0.0279	0.0279	0.0000	0.0000	
28		**(Bill McAllister)**	34XX	Circuit Capacity Management				0.0250	0.0000	0.0250	0.0000	
29		**(Shirley Abts)**	4M1X	Assignment Facility Inventory Group				0.0047	0.0000	0.0047	0.0000	
30		**(Dan Stinson)**	431X	CO Install & Mtce Field - Ckt & Fac				0.0550	0.0000	0.0750	0.0000	
31		**(Danny Colburn)**	410X	Installation & Maintenance				0.1000	0.0000	0.1000	0.0000	
32		**(Danny Colburn)**	410X	Installation & Maintenance				0.0500	0.0000	0.0000	0.0000	
33												
34	**J.4.4**	**Line Sharing Splitter per Subsequent Activity per Line Rearrangement**			43							
35		**(Bill McAllister)**	4M1X	Assignment Facility Inventory Group				0.0467	0.0000	0.0467	0.0000	
36		**(Lenny Glynn)**	4WXX	Work Management Center				0.1000	0.0000	0.1000	0.0000	
37		**(Dan Stinson)**	431X	CO Install & Mtce Field - Ckt & Fac				0.6167	0.0000	0.2500	0.0000	
38		**(Debbie Timmons)**	221X	Complex Resale Support Group				0.0308	0.0000	0.0000	0.0000	
39		**(Debbie Timmons)**	SDWC	Complex Resale Support Group				0.0279	0.0000	0.0000	0.0000	
40												
41												
42												
43												
44												
45												

Item No. 57
Attachment No. 20
Supporting Data for Access to the DCS

Florida
Inputs for Nonrecurring Costs
Study Period: 01/2000 - 12/2002
FL

Element	Item / Description	JFC / JG / WS	Source	Cost Element Life (mos.)	(For use w/ one NR) Install	(For use w/ one NR) Disconnect	First Install	First Disconnect	Additional Install	Additional Disconnect	Nonrecurring Additive
							Time in Hours (Hrs)				
J.5	**ACCESS to DCS - CUSTOMER RECONFIGURATION**										
	(Subject Matter Expert)										
J.5.1	**Customer Reconfiguration Establishment**			43							
	(Candace Michelle Tatum)	WS32	Customer Network Control Ctr (CNCC)				0.0833	0.0833	0.0000	0.0000	
J.5.2	**DS-1 DCS Port Termination e/w DS-0 Switching**			43							
	(Candace Michelle Tatum)	WS32	Customer Network Control Ctr (CNCC)				0.9167	0.5000	0.9000	0.5000	
	(Dan Stinson)	431X	Central Office I & M (Ckt & Fac)				0.4167	0.2000	0.1667	0.0833	
J.5.3	**DS-1 DCS Port Termination e/w DS-1 Switching**			43							
	(Candace Michelle Tatum)	WS32	Customer Network Control Ctr (CNCC)				0.5167	0.3000	0.5000	0.3000	
	(Dan Stinson)	431X	Central Office I & M (Ckt & Fac)				0.4167	0.2000	0.1667	0.0833	
J.5.4	**DS-3 DCS Port Termination e/w DS-1 Switching**			43							
	(Candace Michelle Tatum)	WS32	Customer Network Control Ctr (CNCC)				0.9167	0.5000	0.9000	0.5000	
	(Dan Stinson)	431X	Central Office I & M (Ckt & Fac)				0.4167	0.2000	0.1667	0.0833	

BELLSOUTH TELECOMMUNICATIONS, INC.

FPSC DKT NO. 990649-TP

AT&T'S FOURTH REQUEST FOR PRODUCTION OF DOCUMENTS

POD NO. 58

C D Rom

State of Florida

Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: January 17, 2013

TO: Docket No. 990649-TP

FROM: Ann Cole, Commission Clerk, Office of Commission Clerk

RE: Memorandum to File for Clarification of Records

Concerning the above-referenced docket, DN 08148-00 was assigned to a filing from BellSouth described as (CONFIDENTIAL) Information responsive to Nos. 31 and 38 in responses to staff's 7th request for production of documents. This document was subsequently declassified and forwarded to the docket file. Upon further review, it was found that the CD containing AT&T's production of documents No 58 (DNLN Map.zip) could not be opened, rendering the information unreadable and unacceptable for filing. A copy of the originally-filed CD is attached to this memorandum, which was ultimately destroyed in accordance with the procedures of the Department of State.


BellSouth
Telecommunications, Inc.
FPSC Dkt. No. 990649-TP
AT&T's 4th Set of PODs
Item No. 58
DECLASSIFIED
3/6/07
DN
08148-00
File: DNLN_Map.ZIP
PROPRIETARY: Not for Disclosure
Outside of BellSouth Except Under
Written Agreement