



ORIGINAL

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March 13, 2003

Ms. Blanca S. Bayó, Director  
Division of the Commission Clerk and Administrative Services  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

RECEIVED FPSC  
COMMISSION  
CLERK  
MAR 13 PM 4:47

RE: Docket 000121B-TP

Dear Ms. Bayó:

Enclosed for filing are the original and fifteen copies of Sprint's filing that updates the 2002 Cookbook included in the Staff's 11/01/02 Proposal in the above captioned docket. These changes were made in response to the February 13, 2003 letter from Ms. Lisa Harvey.

Copies of this have been served pursuant to the attached Certificate of Service.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning the same to this writer.

Thank you for your assistance in this matter.

Sincerely,

Susan S. Masterton

SSM/tk

Enclosures

cc: Lisa Harvey

- AUS \_\_\_\_\_
- CAF \_\_\_\_\_
- CMP \_\_\_\_\_
- COM \_\_\_\_\_
- CTR \_\_\_\_\_
- ECR \_\_\_\_\_
- GCL \_\_\_\_\_
- OPC \_\_\_\_\_
- MMS \_\_\_\_\_
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FPSC-BUREAU OF RECORDS

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FPSC-COMMISSION CLERK

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by hand delivery (\*) or U.S. mail to all known parties of record this 13<sup>th</sup> day of March, 2003.

Felicia Banks \*  
Florida Public Service Commission  
2540 Shumard Oak Blvd  
Tallahassee, FL 32399-0850

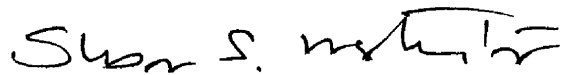
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Susan S. Masterton

*Sprint Performance Measurement Plan*

**Sprint Performance Measurement Plan  
("Cookbook")  
Florida Public Service Commission**

**March 1, 2003**

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# *Sprint Performance Measurement Plan*

## I. INTRODUCTION

### **Background**

The Telecommunications Act of 1996 and the FCC's implementing rules require ILECs to provide ALECs with nondiscriminatory access to OSS. In the August 1996 Local Competition First Report and Order, the FCC commented, generally, that ILECs must provide ALECs with access to the pre-ordering, ordering, provisioning, billing, repair, and maintenance OSS sub-functions pursuant to the Act, such that ALECs are able to perform such OSS sub-functions in "substantially the same time and manner" as the ILECs can for themselves.<sup>1</sup> In August of 1997, the FCC's *Ameritech Opinion* analyzed the nondiscriminatory access requirements of §251(c) to a Bell Operating Company's (BOC's) §271 application, and clarified that for those OSS subfunctions with retail analogs, a BOC "must provide access to competing carriers that is equal to the level of access that the BOC provides to itself, its customers or its affiliates, in terms of quality, accuracy and timeliness."<sup>2</sup> The FCC further clarified in the *Ameritech Opinion* that for those OSS functions with no retail analog, a BOC must offer access sufficient to allow an efficient competitor "a meaningful opportunity to compete."<sup>3</sup>

In 2000 the Florida Public Service Commission opened Docket No. 000121-TP to develop permanent performance metrics for the ongoing evaluation of operations support systems (OSS) provided for alternative local exchange carriers' (ALECs) use by incumbent local exchange carriers (ILECs). Docket No. 000121-TP consisted of three phases. Phase I began with workshops conducted by Commission Staff with members of the ALEC and ILEC communities. The purpose of Phase I was to determine and resolve any policy and legal issues in this matter. Phase II involved establishing permanent metrics for BellSouth Telecommunications, Inc. (BellSouth), including a specific monitoring and enforcement program. In 2002 the Florida Public Service Commission began Phase III and opened Docket No. 000121B-TP (Sprint Track) and Docket No. 000121C-TP (Verizon Track) to establish performance metrics and a performance monitoring and evaluation program for the other Florida ILECs.

<sup>1</sup> See, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499, 15763-64 [¶518] (1996) ("Local Competition First Report and Order"), aff'd in part and vacated in part sub nom. Competitive Telecommunications Ass'n v. FCC, 117 F.3d 1068 (8th Cir. 1997) and Iowa Utilities Bd. v. FCC, 120 F.3d 753 (8th Cir. 1997), modified on reh'g, No. 96-3321 (Oct. 14, 1997) (Rehearing Order), petition for cert. granted, 118 S. Ct. 879 (1998).

<sup>2</sup> See, In the Matter of Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services In Michigan, Memorandum Opinion and Order, 12 FCC Rcd 20543, 20618-19 [¶139] (1997) (Ameritech Michigan Order), writ of mandamus issued sub nom. Iowa Utils. Bd. v. FCC, No. 96-3321 (8th Cir. Jan. 22, 1998). ("Ameritech Opinion"); see also, In the Matter of Application of Bellsouth Corporation, et al., for Provision of In-Region, InterLATA services in Louisiana ("BellSouth (Louisiana II) Opinion") CC Docket No. 98-121, FCC 98-271 (10-13-98), paragraph 87 (citing, Ameritech Opinion at 12 FCC Rcd 20618-19). See also, Ameritech Opinion at ¶131, wherein the FCC makes the following statement regarding application of the §251(c) requirements to a BOC's §271 application:

"Because the duty to provide access to network elements under section 251(c)(3) and the duty to provide resale services under section 251(c)(4) include the duty to provide nondiscriminatory access to OSS functions, an examination of a BOC's OSS performance is necessary to evaluate compliance with section 271(c)(2)(B)(ii) and (xiv)."<sup>3</sup> See, Ameritech Opinion at 12 FCC Rcd at 20619 [¶141]; See also, BellSouth (Louisiana II) Opinion at ¶87 (citing Ameritech Opinion at 12 FCC Rcd at 20619).

## *Sprint Performance Measurement Plan*

On May 2, 2002, Sprint filed its initial response to Commission Staff's data request for proposed permanent performance measures in Florida in Docket No. 000121B-TP (Sprint Track). On June 30, 2002, initial comments on Sprint's proposal were filed by interested parties. Taking into consideration the information provided by Sprint and the comments provided by interested parties, Commission Staff developed an independent proposal for Sprint OSS permanent performance measurements and submitted it for comment on November 1, 2002. Comments on Commission Staff's proposal were filed November 15, 2002, and supplemental comments were filed with the Commission on November 25, 2002.

On January 9, 2003, the Florida Public Service Commission issued Order No. PSC-03-0067-PAA-TP. Order No. PSC-03-0067-PAA-TP addressed the proposed establishment and implementation of operations support systems permanent performance measures for the Sprint Track, Docket Number 000121B-TP.

Sprint complied with Order No. PSC-03-0067-PAA-TP and implemented this Performance Measurement Plan (PMP) on February 1, 2003. This Performance Measurement Plan includes:

- service quality measures
- business rules
- reporting requirements
- auditing
- statistical methodology

This Performance Measurement Plan includes performance measurements from the Sprint Nevada Plan, *August 2002 Cookbook*, and statistical methodology contained in the *Sprint Performance Measurement Plan Compliance Methodology* adopted, with modifications, by the FPSC to measure Sprint's performance in Florida.

### *Notes:*

These performance measures are not intended to create, modify, or otherwise affect parties' rights and obligations. The existence of any particular performance measure, or the language describing that measure, is not evidence that the ALECs are entitled to any particular manner of access, that these measures relate solely to access to OSS, nor is it evidence that the ILEC's obligations to such access are defined elsewhere, including the relevant laws, FCC, and state decisions/regulations, tariffs, and interconnection agreements.

# *Sprint Performance Measurement Plan*

## **Major Categories**

Measurements developed to help assess the provision of non-discriminatory access to OSS and other services, elements or functions were combined into the following broad categories:

- **Pre-Ordering**

Pre-ordering activities relate to the exchange of information between the ILEC and the ALEC regarding current or proposed customer products and services, or any other information required to initiate ordering of service. Pre-ordering encompasses the critical information needed to submit a provisioning order from the ALEC to the ILEC. The pre-order measurement reports the timeliness with which pre-order inquiries are returned to ALECs by the ILEC. Pre-ordering query types include:

Address Verification/Dispatch Required  
Request for Telephone Number  
Request for Customer Service Record  
Service Appointment Scheduling (due date)  
Rejected/Failed Queries  
Facility Availability  
Loop Pre-Qualification

Note: Service Availability information is available in Address Verification/Dispatch Required and Customer Service Record queries.

- **Ordering**

Ordering activities include the exchange of information between the ILEC and the ALEC regarding requests for service. Ordering includes: (1) the submittal of the service request from the ALEC, (2) rejection of any service request with errors and (3) confirmation that a valid service request has been received and a due date for the request assigned. Ordering performance measurements report on the timeliness with which these various activities are completed by the ILEC. Also captured within this category is reporting on the number of ALEC service requests that automatically generate a service order in the ILECs' service order creation system.

- **Provisioning**

Provisioning is the set of activities required to install, change or disconnect a customer's service. It includes the functions to establish or condition physical facilities as well as the completion of any required software translations to define the feature functionality of the service. Provisioning also involves communication between the ALEC and the ILEC on the status of a service order, including any delay in meeting the commitment date and the time at which actual completion of service installation has occurred. Measurements in this category evaluate the quality of service installations; the efficiency of the installation process and the timeliness of notifications to the ALEC that installation is completed or has been delayed.

# *Sprint Performance Measurement Plan*

- **Maintenance**

Maintenance involves the repair and restoral of customer service. Maintenance functions include the exchange of information between the ILEC and ALEC related to service repair requests, the processing of trouble ticket requests by the ILEC, actual service restoral and tracking of maintenance history. Maintenance measures track the timeliness with which trouble requests are handled by the ILEC and the effectiveness and quality of the service restoral process.

- **Network Performance**

Network performance involves the level at which the ILEC provides services and facilitates call processing within its network. The ILEC also has the responsibility to complete network upgrades efficiently. Network performance is evaluated on the quality of interconnection and the timeliness of network upgrades (code openings) the ILEC completes on behalf of the ALEC.

- **Billing**

Billing involves the exchange of information necessary for ALECs to bill their customers, to process the end user's claims and adjustments, to verify the ILEC's bill for services provided to the ALEC and to allow ALECs to bill for access. Billing measures have been designed to gauge the quality, timeliness and overall effectiveness of the ILEC billing processes associated with ALEC customers.

## **Data Base Updates**

Database updates for directory assistance/listings and E911 include the processes by which these systems are updated with customer information that has changed due to the service provisioning activity. Measurements in this category are designed to evaluate the timeliness and accuracy with which changes to customer information, as submitted to these databases, are completed by the ILEC.

- **Collocation**

ILECs are required to provide to ALECs available space as required by law to allow the installation of ALEC equipment. Performance measures in this category assess the timeliness with which the ILEC handles the ALEC's request for collocation as well as how timely the collocation arrangement is provided.

- **Interfaces**

ILECs provide the ALECs with choices for access to OSS pre-ordering, ordering, maintenance and repair systems. Availability of the interfaces is fundamental to the ALEC



## *Sprint Performance Measurement Plan*

being able to effectively do business with the ILEC. Additionally, in many instances, ALEC personnel must work with the service personnel of the ILEC. Measurements in this category assess the availability to the ALECs of systems and personnel at the ILEC work centers.

### **Auditing and Review Procedures**

The parties have agreed to most procedures for auditing and review. Descriptions of these procedures can be found in Sections IV and V.

### **Reservation of Rights**

These reservations of rights do not negate the parties' agreement regarding performance measures and standards as reflected in the Florida Plan.

Incorporating the performance measures into the interconnection agreements raises several complex issues that require further consideration by the parties. This remains an open issue.

### **Sprint**

By implementing these performance measurements, Sprint:

- does not make any admission regarding the propriety or reasonableness of establishing performance penalties;
- does not admit that an apparent less-than-parity condition reflects discriminatory treatment without further factual analysis.

### **ALECs**

- By implementing these performance measurements, ALECs do not agree with, endorse, or otherwise concur in the terms of Sprint's reservation of rights.
- ALECs reserve the right to contend that Sprint's compliance with the performance measures and standards in the Florida Plan does not conclusively demonstrate Sprint compliance with the Telecommunications Act of 1996.
- ALECs reserve the right to contend that Sprint's compliance with the performance measures and standards does not conclusively demonstrate the existence of an open competitive local market.

# *Sprint Performance Measurement Plan*

## **II. Performance Measurements**

Measurement #	Measurement Title
Pre-Ordering	
01	Average Response Time to Pre Order Queries
Ordering	
02	Average FOC Notice Interval
03	Average Reject Notice Interval
04	Percent of Flow-Through Orders
Provisioning	
05	Percentage of Orders Jeopardized
06	Average Jeopardy Notice Interval
07	Average Completed Interval
08	Percent Completed Within Standard Interval
09	Coordinated Customer Conversion as a Percentage On-Time
11	Percent of Due Dates Missed
12	Percent Due Dates Missed Due to Lack of Facilities
13	Delay Order Interval to Completion Date (For Lack of Facilities)
14	Held Order Interval
15	Provisioning Trouble Reports Prior to Service Order Completion
17A	Percentage Troubles in 5 Days for New Orders
18	Average Completion Notice Interval
Maintenance	
19	Customer Trouble Report Rate
20	Percentage of Customer Trouble Not Resolved Within Estimated Time
21	Average Time to Restore
22	POTS Out of Service Less Than 24 Hours
23	Frequency of Repeat Troubles in 30-Day Period
Network Performance	
24	Percent Blocking on Common Trunks
25	Percent Blocking on Interconnection Trunks
26	NXX Loaded by LERG Effective Date
Billing	
28	Usage Timeliness
30	Wholesale Bill Timeliness
31	Usage Completeness
32	Recurring Charge Completeness
33	Non-Recurring Charge Completeness
34	Bill Accuracy
Database Updates	
37	Database Update Timeliness

## *Sprint Performance Measurement Plan*

38	Percent Database Accuracy
39	E911MS Database Update Interval
Collocation	
40	Time to Respond to a Collocation Request
41	Time to Provide a Collocation Arrangement
Interface	
42	Percentage of Time Interface is Available
44	Center Responsiveness

# Sprint Performance Measurement Plan

## Pre-Ordering

## Measure 1

**Title:** Average Response Time to Pre-Order Queries

<i>Area</i>	<i>Requirement Description</i>																																														
<b>Description</b>	<p>The response interval for each pre-ordering query is determined by computing the elapsed time from the ILEC receipt of the query from the ALEC, whether or not syntactically correct, to the time the ILEC returns the requested data to the ALEC.</p> <ul style="list-style-type: none"> <li>• Address Verification/Dispatch Required</li> <li>• Request for Telephone Number (TN)</li> <li>• Request for Customer Service Record                             <ul style="list-style-type: none"> <li>- Simple</li> <li>- Complex</li> </ul> </li> <li>• Service Appointment Scheduling (due date)</li> <li>• Rejected/Failed Queries</li> <li>• Facility Availability</li> <li>• Loop Pre-qualification</li> </ul>																																														
<b>Method of Calculation</b>	<p><b>All Electronic:</b>  <math display="block">\text{Sum} ((\text{Query Response Date and Time}) - (\text{Query Submission Date and Time})) / (\text{Number of Queries Submitted in Reporting Period})</math></p> <p><b>All Manual: Loop Pre-qualification and Facility Availability</b>  <math display="block">\text{Sum} [((\text{Fax Date and Time Returned}) - (\text{Business Date and Time of receipt of valid fax service request})) / (\text{Number of Faxes Submitted in Reporting Period})] \times 100</math></p>																																														
<b>Report Period</b>	Monthly																																														
<b>Report Structure</b>	Individual ALECs, ALECs in the aggregate, and ILEC affiliate.																																														
<b>Reported By</b>	By query type and by interface type, including fax																																														
<b>Geographic Level</b>	Statewide																																														
<b>Measurable Standards</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Disaggregation Level</th> <th style="text-align: left;">ALEC</th> <th colspan="2" style="text-align: left;">Competitive Comparison</th> </tr> <tr> <td></td> <td></td> <th style="text-align: left;">Parity</th> <th style="text-align: left;">Benchmark</th> </tr> </thead> <tbody> <tr> <td><b>All Electronic:</b></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Address Verification/Dispatch Required</td> <td>Request for Address Verification</td> <td></td> <td>6seconds</td> </tr> <tr> <td>Request for Telephone Number</td> <td>Request for Telephone Number</td> <td></td> <td>3 seconds</td> </tr> <tr> <td>Request for Customer Service Record - Simple</td> <td>Request for Simple CSR</td> <td></td> <td>10 seconds</td> </tr> <tr> <td>Request for Customer Service Record - Complex</td> <td>Request for Complex CSR</td> <td></td> <td>15 seconds</td> </tr> <tr> <td>Service Appointment Scheduling</td> <td>Request for Due Date</td> <td></td> <td>TBD</td> </tr> <tr> <td>Rejected / Failed Queries</td> <td>Rejected/Failed Queries</td> <td></td> <td>Diagnostic Only</td> </tr> <tr> <td><b>All Manual:</b></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Facility Availability</td> <td>Request for Facility Availability</td> <td></td> <td>95% within 3 business days -</td> </tr> </tbody> </table>			Disaggregation Level	ALEC	Competitive Comparison				Parity	Benchmark	<b>All Electronic:</b>				Address Verification/Dispatch Required	Request for Address Verification		6seconds	Request for Telephone Number	Request for Telephone Number		3 seconds	Request for Customer Service Record - Simple	Request for Simple CSR		10 seconds	Request for Customer Service Record - Complex	Request for Complex CSR		15 seconds	Service Appointment Scheduling	Request for Due Date		TBD	Rejected / Failed Queries	Rejected/Failed Queries		Diagnostic Only	<b>All Manual:</b>				Facility Availability	Request for Facility Availability		95% within 3 business days -
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<b>All Manual:</b>																																															
Facility Availability	Request for Facility Availability		95% within 3 business days -																																												

## *Sprint Performance Measurement Plan*

	Loop Pre-Qualification	Request for Loop Pre-Qualification	Diagnostic Only
			95% within 3 business days
<b><i>Business Rules</i></b>	<ul style="list-style-type: none"> <li>• Elapsed time is measured in seconds for electronic pre-order requests.</li> <li>• Results for ALECs with 5 or fewer transactions will be compared with a benchmark of twice the applicable electronic submeasure to determine compliance.</li> <li>• Elapsed time for fully electronic submeasures will be tracked during scheduled interface availability hours.</li> <li>• Exclude transactions that occur during OSS outages.</li> </ul>		
<b><i>Notes</i></b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> <li>• Sprint defines Simple CSR queries as a query on an account that has 4 or less lines.</li> <li>• Implementation of systems to comply with Federal National Portability requirements will prevent the capability to query by NPA/NNX in 2002 to obtain Service Availability information as an independent query. Service Availability information is available in Address Verification/Dispatch Required and Customer Service Record queries.</li> <li>• Submeasure Facility Availability provides switch verification information and Loop Pre-Qualification provides outside plant loop facility information.</li> <li>• The benchmark for Service Appointment Scheduling is To Be Determined (TBD) because Sprint implemented a new process for this disaggregation in 2002. After 12 consecutive months of historical data is collected, Sprint will re-evaluate the benchmark.</li> <li>• There is insufficient historical data to develop a valid benchmark for To Be Determined (TBD) disaggregation levels.</li> </ul>		

# Sprint Performance Measurement Plan

## Ordering

## Measure 2

**Title:** Average FOC Notice Interval

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the average time from receipt of a valid service request to returning a Firm Order Confirmation (FOC).		
<b>Method of Calculation</b>	<p><b>All Electronic:</b>            Sum ((Date and Time of FOC) - (Business Date and Time of Receipt of Valid Service Request)) / (Number of FOCs Sent in Reporting Period)</p> <p><b>Electronic/Manual Mix:</b>            Sum ((FOC Date and Time) – (Receipt Date and Time of receipt of error free order)) / (Number of FOCs sent.)</p>		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALECs, ALECs in the aggregate, by ILEC (if analog applies) and ILEC affiliates.		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• Electronically received/electronically handled</li> <li>• Electronically received and manually handled</li> <li>• By Service Group Type</li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Disaggregation Level <b>RESALE</b>	ALEC	<b>Competitive Comparison</b>
			<b>Parity</b> <b>Benchmark</b>
	<b>Blind FOC</b>		
	Res POTS All Electronic Electronic/Manual Mix	Res POTS	TBD 4 hrs
	Bus POTS All Electronic Electronic/Manual Mix	Bus POTS	TBD 6 hrs
	ISDN BRI All Electronic Electronic/Manual Mix	ISDN BRI	TBD 6 hrs
	CENTREX All Electronic Electronic/Manual Mix	CENTREX	TBD 13 hrs.
	PBX All Electronic Electronic/Manual Mix	PBX	TBD 13 hrs
	<b>Intelligent FOC</b>		
	DDS All Electronic Electronic/Manual Mix	DDS	TBD 36 business hrs
	DS1/ISDN PRI All Electronic Electronic/Manual Mix	DS1/ISDN PRI	TBD 36 business hrs
	DS3 All Electronic Electronic/Manual Mix	DS3	TBD 36 business hrs
	VGPL/DS0 All Electronic Electronic/Manual Mix	VGPL/DS0	TBD 36 business hrs
	<b>UNBUNDLED NETWORK ELEMENTS</b>		
	<b>Blind FOC</b>		
UNE Loops Non-Designed	UNE Loops		

## Sprint Performance Measurement Plan

All Electronic Electronic/Manual Mix	Non-Designed		TBD 6 hrs
UNE Loops xDSL Provisioned All Electronic Electronic/Manual Mix	UNE Loops xDSL Provisioned		TBD 6 hrs
UNE Subloops – Voice Grade All Electronic Electronic/Manual Mix	UNE Subloops – Voice Grade		TBD 6 hrs
UNE Subloops – Data All Electronic Electronic/Manual Mix	UNE Subloops – Data		TBD 13 hrs
Line Sharing All Electronic Electronic/Manual Mix	Line Sharing		TBD 6 hrs
<b>LNP</b> All Electronic Electronic/Manual Mix	LNP		TBD 6 hrs
<b>Intelligent FOC</b>			
UNE Loops Designed All Electronic Electronic/Manual Mix	UNE Loops Designed		TBD 36 business hrs
UNE Ports All Electronic Electronic/Manual Mix	UNE Ports		TBD 36 business hrs
Dark Fiber All Electronic Electronic/Manual Mix	Dark Fiber		TBD 36 business hrs
EELS All Electronic Electronic/Manual Mix	EELS		TBD 36 business hrs
<b>UNE Dedicated Transport</b> All Electronic Electronic/Manual Mix	UNE Dedicated Transport		TBD 36 business hrs
<b>UNE Platform</b> All Electronic Electronic/Manual Mix	UNE Platform		TBD 36 business hrs
<b>Interconnection Trunks</b> All Electronic Electronic/Manual Mix	Interconnection Trunks		TBD 7 business days
<b>PROJECTS:</b>			
<b>Projects</b> All Electronic Electronic/Manual Mix	Projects		TBD Diagnostic Only
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Elapsed time calculated in business hours and excludes non-business days and ILEC published holidays.</li> <li>• The start time of requests received after the end of the business day will be the beginning of the next business day. Business day is defined as published hours of operation for the ILEC ordering center.</li> <li>• Excludes Loop Pre-Qualification queries that are processed as LSRs.</li> <li>• Manually received and handled FOCs not included.</li> <li>• Denominator includes all FOCs sent regardless of receipt and response time.</li> <li>• ALEC to ALEC conversions are not included in the elapsed time of FOC response for LNP Service Group Type.</li> </ul>		
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>		

## *Sprint Performance Measurement Plan*

- Sprint has implemented an Intelligent Firm Order Confirmation process for all the Service Group Types listed with 36 business hours as the measurable standard. Sprint will review data for these submeasures to determine applicability as parity submeasures for the 2003 PMP filing.
- Project is a planned event where terms and conditions in which work is performed is agreed to by both the ALEC, Sprint and any other party engaged in the provisioning process. To allow for successful turn-up of facilities or conversion of facilities, each party must negotiate, in good faith, the timelines that allow required activities to be met, equipment ordered, placed and tested to meet the overall objectives of the project. The timeline must meet the rule of reasonable and prudent business practices. If the activity is not agreed to be a project, the transaction will be reported in the appropriate service group type.
- All Electronic submeasures are To Be Determined (TBD) because all FOCs are returned via an Electronic/Manual Mix process. If an All Electronic process is developed, Sprint will re-evaluate the benchmark after 12 consecutive months of historical data is collected.
- BFOC disaggregation levels are To Be Determined (TBD) because there is insufficient historical data to develop a valid benchmark.
- IFOC disaggregation levels are To Be Determined (TBD) because “All Electronic” processing is not available.



## Sprint Performance Measurement Plan

### Ordering

### Measure 3

**Title:** Average Reject Notice Interval

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Reject interval is the elapsed time between the ILEC receipt of an order from the ALEC to the ILEC return of a notice of a rejection to the ALEC.			
<b>Method of Calculation</b>	<p><b>All Electronic</b>            ((Business Date and Time of ILEC Transmission of Order Rejection) - (Business Date and Time of Order Receipt)) / (# of Mechanized Orders Rejected)</p> <p><b>Electronic/Manual Mix</b>            ((Business Date and Time of ILEC transmission of Order Rejection) – (Business Date and Time of Order Receipt)) / (# of Electronic/Manual Orders Rejected).</p>			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, and ILEC Affiliates			
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• Electronically received, electronically handled               <ul style="list-style-type: none"> <li>• All interfaces</li> <li>• Syntax (edit engine) and content errors (other edits)</li> <li>• Resale orders and Facility based UNE orders</li> </ul> </li> <li>• Electronically received, manually handled               <ul style="list-style-type: none"> <li>• All interfaces</li> <li>• Syntax (edit engine) and content errors (other edits)</li> <li>• Resale orders and Facility based UNE orders</li> </ul> </li> </ul>			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	<b>Disaggregation Level</b>		<b>Competitive Comparison</b>	
			<b>Parity</b>	
			<b>Benchmark</b>	
	All Electronic	Reject Notice		TBD
Electronic/Manual Mix	Reject Notice		6 hrs	
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Elapsed time calculated in business hours. Excludes non-business days and ILEC published holidays.</li> <li>• Calculation of requests received after the end of the business day starts at the beginning of the next business day. Business day is defined as published hours of operation for the ILEC ordering center</li> <li>• Exclude rejects when the PON is received after business hours and processed prior to the beginning of the next business day.</li> <li>• Exclude Loop Pre-Qualification queries created as service orders.</li> </ul>			
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> <li>• All Electronic submeasures are To Be Determined (TBD) because</li> </ul>			

## *Sprint Performance Measurement Plan*

all orders are rejected via an Electronic/Manual Mix process.

# Sprint Performance Measurement Plan

## Ordering

## Measure 4

**Title:** Percent of Flow-Through Orders

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the percentage of mechanized service orders processed on a flow through basis. The definition of Flow-through for the intent of this measure is to reflect those orders that are able to get to the Firm Order Confirmation status without manual intervention.		
<b>Method of Calculation</b>	[(Number of valid electronically received orders that flow-through without manual intervention) / (Total valid electronically received service orders)] x 100		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALECs, ALECs in the aggregate, and ILEC Affiliates		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• Orders that flow through as a percentage of                             <ol style="list-style-type: none"> <li>1) All electronically received orders programmed to flow-through</li> <li>2) All electronically received orders</li> </ol> </li> <li>• By Service Group Types</li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	The process to evaluate performance on this measure is under development. Issues, if any, are not yet finally defined. Final resolution depends on completed development of an agreed to Flow-Through Plan.		
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
	<b>Resale</b>		<b>Parity</b> <b>Benchmark</b>
	Res POTS	Res POTS	Diagnostic Only
	Bus POTS	Bus POTS	Diagnostic Only
	ISDN BRI	ISDN BRI	Diagnostic Only
	CENTREX	CENTREX	Diagnostic Only
	PBX	PBX	Diagnostic Only
	DDS	DDS	Diagnostic Only
	DS1/ISDN PRI	DS1/ISDN PRI	Diagnostic Only
	DS3	DS3	Diagnostic Only
	VGPL/DS0	VGPL/DS0	Diagnostic Only
	<b>UNBUNDLED NETWORK ELEMENTS</b>		
	<b>UNE Loops</b>		
	UNE Loops Non-Designed	UNE Loops - Non-Designed	Diagnostic Only
	UNE Loops Designed	UNE Loops Designed	Diagnostic Only
	UNE Loops xDSL Provisioned	UNE Loops xDSL Provisioned	Diagnostic Only
	Line Sharing	Line Sharing	Diagnostic Only
	UNE Subloops – Voice Grade	UNE Subloops – Voice Grade	Diagnostic Only
	UNE Subloops – Data	UNE Subloops – Data	Diagnostic Only
	Dark Fiber	Dark Fiber	Diagnostic Only
	UNE Ports	UNE Ports	Diagnostic Only
	EELS	EELS	Diagnostic Only
	UNE Dedicated Transport	UNE Dedicated Transport	Diagnostic Only
	UNE Platform	UNE Platform	Diagnostic Only
	LNP	LNP	Diagnostic Only
<b>Business Rules</b>	Excludes Loop Pre-Qualification queries.		
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under</li> </ul>		

## *Sprint Performance Measurement Plan*

proprietary information provisions.

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# Sprint Performance Measurement Plan

## Provisioning

## Measure 5

**Title:** Percentage of Orders Jeopardized

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Percentage of total orders processed for which the ILEC notifies the ALEC that the work will not be completed by the due date committed on the FOC.			
<b>Method of Calculation</b>	$(\text{Number of Orders Jeopardized}) / (\text{Number of Orders Completed}) \times 100$			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, ILEC and ILEC Affiliates			
<b>Reported By</b>	By service group type			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
	<b>Resale</b>		<b>Parity</b>	<b>Benchmark</b>
	Res POTS	Res POTS	Res POTS	
	Bus POTS	Bus POTS	Bus POTS	
	ISDN BRI	ISDN BRI	ISDN BRI	
	CENTREX	CENTREX	CENTREX	
	PBX	PBX	PBX	
	DDS	DDS	DDS	
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI	
	DS3	DS3	DS3	
	VGPL/DS0	VGPL/DS0	VGPL/DS0	
	<b>UNBUNDLED NETWORK ELEMENTS</b>			
	<b>UNE Loops</b>			
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched	
	UNE Loops Designed	UNE Loops Designed	DDS, VGPL/DS0	
	<b>UNE Loops - xDSL Provisioned</b>	UNE Loops - xDSL Provisioned	Retail xDSL	
	Line Sharing	Line Sharing	Retail xDSL	
	UNE Subloops - Voice Grade	UNE Subloops - Voice Grade	Bus. POTS Dispatched	
	UNE Subloops - Data	UNE Subloops - Data	Retail xDSL	
	Dark Fiber	Dark Fiber	D3	
	<b>UNE Port</b>	UNE Port	DS1/ISDN PRI	
EELS	EELS	DS3, DS1/ISDN PRI, VGPL/ DS0		
<b>UNE Dedicated Transport</b>	UNE Dedicated Transport	DS1/ISDN PRI, DS3		
<b>UNE Platform</b>	UNE Platform	Res POTS, Bus POTS, ISDN BRI, Centrex, PBX		
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>● Excludes delays for customer reasons.</li> <li>● Excludes Loop Pre-Qualification queries.</li> </ul>			
<b>Notes</b>	<ul style="list-style-type: none"> <li>● Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>			

# Sprint Performance Measurement Plan

## Provisioning

## Measure 6

**Title:** Average Jeopardy Notice Interval

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Measures the remaining time between the pre-existing committed order completion date and time (communicated via the FOC) and the date and time the ILEC issues a notice to the ALEC indicating an order is in jeopardy of missing the due date (or the due date/time has been missed).			
<b>Method of Calculation</b>	<p><u>Assignment:</u> Jeopardies identified during assignment            ((Date and Time of Committed Due Date for the Order) - (Date and Time of Jeopardy Notice) / (Number of Order Jeopardized))</p> <p><u>Installation:</u>            Jeopardies identified during installation prior to due time            ((Date &amp; Time of Committed Due Date for the Order) - (Date &amp; Time of Jeopardy Notice) / (Number of Installation Jeopardy Notices))</p> <p><u>Notification of Missed Commitments:</u>            (Due Date and Time of Missed CommitNotice - Due Date and Time of Order) / (Number of Missed Commit Notices)</p>			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALECs, ALECs in the aggregate, and ILEC Affiliates			
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• By service group type</li> <li>• By jeopardy type</li> </ul>			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
	<b>Resale</b>		<b>Parity</b>	<b>Benchmark</b>
	Res POTS	Res POTS	Res POTS	
	Bus POTS	Bus POTS	Bus POTS	
	ISDN BRI	ISDN BRI	ISDN BRI	
	CENTREX	CENTREX	CENTREX	
	PBX	PBX	PBX	
	DDS	DDS	DDS	
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI	
	DS3	DS3	DS3	
	VGPL/DS0	VGPL/DS0	VGPL/DS0	
	<b>UNBUNDLED NETWORK ELEMENTS</b>			
	<b>UNE Loops</b>			
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched	
	UNE Loops Designed	UNE Loops Designed	DDS, VGPL/DS0	
	UNE Loops - xDSL Provisioned	UNE Loops - xDSL Provisioned	Retail xDSL	
	Line Sharing	Line Sharing	Retail xDSL	-
	UNE Subloops – Voice Grade	UNE Subloops – Voice Grade	Bus. POTS Dispatched	

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	UNE Subloops - Data	UNE Subloops – Data	Retail xDSL	
	Dark Fiber	Dark Fiber	D3	
	UNE Ports	UNE Ports	DS1/ISDN PRI	
	EELS	EELS	DS1/ISDN PRI, DS3, VGPL/DS0	
	UNE Dedicated Transport	UNE Dedicated Transport	DS1/ISDN PRI, DS3	
	UNE Platform	UNE Platform	Res. POTS, Bus. POTS, ISDN BRI, Centrex, PBX	
<b><i>Business Rules</i></b>	<ul style="list-style-type: none"> <li>• Excludes delays for customer reasons.</li> <li>• Excludes Loop Pre-Qualification queries.</li> </ul>			
<b><i>Notes</i></b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> <li>• If the ILEC policy changes regarding jeopardy notices to their Retail customers, this measure should be evaluated for analog.</li> <li>• Interval is reported in business days.</li> </ul>			

# Sprint Performance Measurement Plan

## Provisioning

## Measure 7

**Title:** Average Completed Interval

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Average business days from receipt of valid, error-free service request to completion date in service order system for new, move, and change orders.			
<b>Method of Calculation</b>	(Total business days from receipt of valid, error-free service request to completion date in service order system for new, move and change orders) / (Total new, move and change orders)			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, by ILEC, and ILEC Affiliates			
<b>Reported By</b>	By service group type and field work/no field work where applicable.			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
	<b>Resale</b>		<b>Parity</b>	<b>Benchmark</b>
	Res POTS	Res POTS	Res POTS	
	Bus POTS	Bus POTS	Bus POTS	
	ISDN BRI	ISDN BRI	ISDN BRI	
	CENTREX	CENTREX	CENTREX	
	PBX	PBX	PBX	
	DDS	DDS	DDS	
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI	
	DS3	DS3	DS3	
	VGPL/DS0	VGPL/DS0	VGPL/DS0	
	<b>UNBUNDLED NETWORK ELEMENTS</b>			
	<b>UNE Loops</b>			
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched	
	UNE Loops Designed	UNE Loops Designed	DDS, VGPL/DS0	
	UNE Loops - xDSL Provisioned	UNE Loops - xDSL Provisioned	Retail xDSL	
	Line Sharing	Line Sharing	Retail xDSL	
	UNE Subloops - Voice Grade	UNE Subloops - Voice Grade	Bus. POTS Dispatched	
	UNE Subloops - Data	UNE Subloops - Data	Retail xDSL	
	<b>Dark Fiber</b>	Dark Fiber	DS3	
	<b>UNE Ports</b>	UNE Ports	DS1/ISDN PRI	
	EELS	EELS	DS1/ISDN PRI, DS3, VGPL/DS0	
	<b>UNE Dedicated Transport</b>	UNE Dedicated Transport	DS1/ISDN PRI, DS3	
	<b>UNE Platform</b>	UNE Platform	Res POTS, Bus. POTS, ISDN BRI, Centrex, PBX	
	<b>Interconnection Trunks</b>	Interconnection Trunks	ILEC Dedicated Trunks	
	<b>Projects</b>	Projects Diagnostic Only	Projects Diagnostic Only	
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>● Excludes customer requested due dates beyond interval offered, and</li> </ul>			



## *Sprint Performance Measurement Plan*

	<p>orders delayed for customer reasons.</p> <ul style="list-style-type: none"><li>• For UNE Loop services, feature only orders are excluded from the retail analog.</li><li>• Excludes Loop Pre-Qualification queries</li><li>• Project is a planned event where terms and conditions in which work is performed is agreed to by both the ALEC, Sprint and any other party engaged in the provisioning process. To allow for successful turn-up of facilities or conversion of facilities, each party must negotiate, in good faith, the timelines that allow required activities to be met, equipment ordered, placed and tested to meet the overall objectives of the project. The timeline must meet the rule of reasonable and prudent business practices. If the activity is not agreed to be a project, the transaction will be reported in the appropriate service group type.</li></ul>
<i>Notes</i>	<ul style="list-style-type: none"><li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li></ul>

# Sprint Performance Measurement Plan

## Provisioning

## Measure 8

**Title:** Percent Completed Within Standard Interval

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures orders completed within the standard interval of receipt of valid, error-free service request.		
<b>Method of Calculation</b>	[(Total New, Move and Change Orders Completed Within the Standard interval of Receipt of Valid, Error-free Service Request) / (Total New, Move and Change Orders)] x 100		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, by ILEC, and ILEC Affiliates		
<b>Reported By</b>	By service group type excluding services with flexible due dates.		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement		
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
	<b>Resale</b>		<b>Parity                      Benchmark</b>
	Res POTS	Res POTS	Res POTS
	Bus POTS	Bus POTS	Bus POTS
	ISDN BRI	ISDN BRI	ISDN BRI
	CENTREX	CENTREX	CENTREX
	PBX	PBX	PBX
	DDS	DDS	DDS
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI
	DS3	DS3	DS3
	VGPL/DS0	VGPL/DS0	VGPL/DS0
	<b>UNBUNDLED NETWORK ELEMENTS</b>		
	<b>UNE Loops</b>		
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched
	UNE Loops Designed	UNE Loops Designed	0 DDS and VGPL/DS0
	UNE Loops - xDSL Provisioned	UNE Loops - xDSL Provisioned	Retail xDSL
	Line Sharing	Line Sharing	Retail xDSL
	UNE Subloops - Voice Grade	UNE Subloops - Voice Grade	Bus. POTS Dispatched
	UNE Subloops - Data	UNE Subloops - Data	Retail xDSL
	<b>Dark Fiber</b>	Dark Fiber	DS3
	<b>UNE Ports</b>	UNE Ports	DS1/ISDN PRI
	<b>EELS</b>	EELS	DS1/ISDN PRI, DS3, VGPL/DS0
	<b>UNE Dedicated Transport</b>	UNE Dedicated Transport	DS1/ISDN PRI, DS3
	<b>UNE Platform</b>	UNE Platform	Res. POTS, Bus. POTS, ISDN BRI, Centrex, PBX
	<b>Interconnection Trunks</b>	Interconnection Trunks	ILEC Dedicated Trunks
	<b>Projects</b>	Projects Diagnostic Only	Projects Diagnostic Only

## *Sprint Performance Measurement Plan*

<i>Business Rules</i>	<ul style="list-style-type: none"><li>• Excludes customer requested due dates greater than the standard interval, and orders delayed for customer reasons.</li><li>• Excludes services with flexible due dates.</li><li>• For UNE Loop services, feature only orders are excluded from the retail analog.</li><li>• Excludes Loop Pre-Qualification queries.</li><li>• Project is a planned event where terms and conditions in which work is performed is agreed to by both the ALEC, Sprint and any other party engaged in the provisioning process. To allow for successful turn-up of facilities or conversion of facilities, each party must negotiate, in good faith, the timelines that allow required activities to be met, equipment ordered, placed and tested to meet the overall objectives of the project. The timeline must meet the rule of reasonable and prudent business practices. If the activity is not agreed to be a project, the transaction will be reported in the appropriate service group type.</li></ul>
<i>Notes</i>	<ul style="list-style-type: none"><li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li></ul>

# Sprint Performance Measurement Plan

## Provisioning

## Measure 9

**Title:** Coordinated Customer Conversion as a Percentage On-Time

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the percentage of coordinated cut overs CHC started on time where ALEC has requested timed coordination.  * Note: "On time" means appointment arrival time plus or minus 1 hour. Orders started before appointment arrival time are considered on time if early arrival includes coordination and sign off with the ALEC.		
<b>Method of Calculation</b>	$\left[ \frac{\text{(Number of coordinated cut overs started on time)}}{\text{(Count of timed coordinated cut overs completed in reporting period)}} \right] \times 100$		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, and ILEC Affiliates		
<b>Reported By</b>	Residence, Business, and LNP conversions		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
	<b>Resale</b>		<b>Parity</b> <b>Benchmark</b>
	Res POTS	Res POTS	95% within 1 hour of planned time on due date
	Bus POTS	Bus POTS	95% within 1 hour of planned time on due date
	LNP	LNP	95% within 1 hour of planned time on due date
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Excludes ALEC caused misses</li> <li>• Applies to ALEC requested coordinated cut overs only</li> </ul>		
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>		

# Sprint Performance Measurement Plan

## Provisioning

## Measure 11

**Title:** Percent of Due Dates Missed

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Measures the percent of new, move and change orders where installation was not completed by the due date.			
<b>Method of Calculation</b>	[(Total Number of Missed Due Dates Due to ILEC Reasons for New, Move and Change Orders) / (Total Number of New, Move and Change Orders)] x 100			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, by ILEC, and ILEC Affiliates			
<b>Reported By</b>	By service group type and Field Work/No Field Work as appropriate			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
	<b>Resale</b>		<b>Parity</b>	<b>Benchmark</b>
	Res POTS	Res POTS	Res POTS	
	Bus POTS	Bus POTS	Bus POTS	
	ISDN BRI	ISDN BRI	ISDN BRI	
	CENTREX	CENTREX	CENTREX	
	PBX	PBX	PBX	
	DDS	DDS	DDS	
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI	
	DS3	DS3	DS3	
	VGPL/DS0	VGPL/DS0	VGPL/DS0	
	<b>UNBUNDLED NETWORK ELEMENTS</b>			
	<b>UNE Loops</b>			
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched	
	UNE Loops Designed	UNE Loops Designed	DDS and VGPL/DSO	
	UNE Loops - xDSL Provisioned	UNE Loops - xDSL Provisioned	Retail xDSL	
	Line Sharing	Line Sharing	Retail xDSL	
	UNE Subloops – Voice Grade	UNE Subloops – Voice Grade	Bus. POTS Dispatched	
	UNE Subloops – Data	UNE Subloops – Data	Retail xDSL	
	<b>Dark Fiber</b>			
	Dark Fiber	Dark Fiber	DS3	
	<b>UNE Ports</b>			
	UNE Ports	UNE Ports	DS1/ISDN PRI	
	<b>EELS</b>			
	EELS	EELS	DS1/ISDN PRI, DS3, VGPL/DS0	
	<b>UNE Dedicated Transport</b>			
	UNE Dedicated Transport	UNE Dedicated Transport	DS1/ISDN PRI, DS3	
	<b>UNE Platform</b>			
	UNE Platform	UNE Platform	Res. POTS, Bus. POTS, ISDN BRI, Centrex, PBX	
	<b>Interconnection Trunks</b>			
	Interconnection Trunks	Interconnection Trunks	ILEC Dedicated Trunks	
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Excludes customer caused misses.</li> <li>• Due date is defined as either original due date, revised due date, or final due date if the original or revised due date was missed.</li> </ul>			

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	<ul style="list-style-type: none"><li>• For UNE Loop services, feature only orders are excluded from the retail analog.</li><li>• Excludes Loop Pre-Qualification queries.</li></ul>
<i>Notes</i>	<ul style="list-style-type: none"><li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li><li>• Sprint will provide disaggregation by Missed Appointment Reason codes as diagnostic data upon raw data request.</li></ul>

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# Sprint Performance Measurement Plan

## Provisioning

## Measure 12

**Title:** Percent of Due Dates Missed Due to Lack of Facilities

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Measures the percent of new, move and change orders missed due to lack of facilities.  Note: Results also included in Measure "Percent Missed Due Dates"			
<b>Method of Calculation</b>	$\left[ \frac{\text{((Total New, Move and Change Orders Missed Due Dates Due to Lack of Facilities) / (Total Number of New, Move and Change Orders))}}{1} \right] \times 100$			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, by ILEC, and ILEC Affiliates			
<b>Reported By</b>	By service group type			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
	<b>Resale</b>		<b>Parity</b>	<b>Benchmark</b>
	Res POTS	Res POTS	Res POTS	
	Bus POTS	Bus POTS	Bus POTS	
	ISDN BRI	ISDN BRI	ISDN BRI	
	CENTREX	CENTREX	CENTREX	
	PBX	PBX	PBX	
	DDS	DDS	DDS	
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI	
	DS3	DS3	DS3	
	VGPL/DS0	VGPL/DS0	VGPL/DS0	
	<b>UNBUNDLED NETWORK ELEMENTS</b>			
	<b>UNE Loops</b>			
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched	
	UNE Loops Designed	UNE Loops Designed	DDS, VGPL/DS0	
	UNE Loops - xDSL Provisioned	UNE Loops - xDSL Provisioned	Retail xDSL	
	Line Sharing	Line Sharing	Retail xDSL	
	UNE Subloops – Voice Grade	UNE Subloops – Data	Bus. POTS Dispatched	
	UNE Subloops – Data	UNE Subloops – Data	Retail xDSL	
	<b>Dark Fiber</b>	Dark Fiber	DS3	
	<b>UNE Ports</b>	UNE Ports	DS1/ISDN PRI	
	<b>EELS</b>	EELS	DS1/ISDN PRI, DS3, VGPL/DS0	
	<b>UNE Dedicated Transport</b>	UNE Dedicated Transport	DS1/ISDN PRI, DS3	
	<b>UNE Platform</b>	UNE Platform	Res. POTS, Bus. POTS, ISDN BRI, Centrex, PBX	
	<b>Interconnection Trunks</b>	Interconnection Trunks	ILEC Dedicated Trunks	
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Due date is defined as either original due date, revised due date, or</li> </ul>			

## *Sprint Performance Measurement Plan*

	<p>final due date if the original due date, revised due date, or final due date was missed</p> <ul style="list-style-type: none"><li>• Excludes customer caused misses.</li><li>• For UNE Loop services, feature only orders are excluded from the retail analog.</li><li>• Excludes Loop Pre-Qualification queries.</li></ul>
<i>Notes</i>	<ul style="list-style-type: none"><li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li></ul>

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# Sprint Performance Measurement Plan

## Provisioning

## Measure 13

**Title:** Delay Order Interval to Completion Date (For Lack of Facilities)

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the average calendar days from due date to completion date on company missed orders due to lack of ILEC facilities.		
<b>Method of Calculation</b>	Sum ((Completion Date for orders missed due to lack of ILEC facilities) – (Committed Order Due Date for orders missed due to lack of ILEC facilities)) / (Number of Orders Missed due to lack of ILEC Facilities in the Reporting Period)		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, by ILEC, and ILEC Affiliates		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• By service group type</li> <li>• Disaggregated by 1-30 calendar days, 31-90 calendar days and &gt;90 calendar days</li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.		
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
	<b>Resale</b>		<b>Parity</b> <b>Benchmark</b>
	Res POTS	Res POTS	Res POTS
	Bus POTS	Bus POTS	Bus POTS
	ISDN BRI	ISDN BRI	ISDN BRI
	CENTREX	CENTREX	CENTREX
	PBX	PBX	PBX
	DDS	DDS	DDS
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI
	DS3	DS3	DS3
	VGPL/DS0	VGPL/DS0	VGPL/DS0
	<b>UNBUNDLED NETWORK ELEMENTS</b>		
	<b>UNE Loops</b>		
	UNE Loops Non-Designed	UNE Loops - Non-Designed	Bus. POTS Dispatched
	UNE Loops Designed	UNE Loops Designed	DDS and VGPL/DS0
	UNE Loops - xDSL Provisioned	UNE Loops - xDSL Provisioned	Retail xDSL
	Line Sharing	Line Sharing	Retail xDSL
	UNE Subloops -- Voice Grade	UNE Subloops -- Voice Grade	Bus. POTS Dispatched
	Subloops -- Data	Subloops -- Data	Retail xDSL
<b>Dark Fiber</b>	Dark Fiber	DS3	
<b>UNE Ports</b>	UNE Ports	DS1/ISDN PRI	
<b>EELS</b>	EELS	DS1/ISDN PRI, DS3, VGPL/DS0	
<b>UNE Dedicated Transport</b>	UNE Dedicated Transport	DS1/ISDN PRI, DS3	
<b>UNE Platform</b>	UNE Platform	Res. POTS, Bus. POTS, ISDN BRI, Centrex, PBX	
<b>Interconnection Trunks</b>	Interconnection Trunks	ILEC Dedicated Trunks	

## *Sprint Performance Measurement Plan*

<i>Business Rules</i>	Excludes Loop Pre-Qualification queries.
<i>Notes</i>	<ul style="list-style-type: none"><li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li></ul>

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# Sprint Performance Measurement Plan

## Provisioning

## Measure 14

**Title:** Held Order Interval

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Measures the time period that service orders are not completed by the original due dates for all ILEC reasons (including lack of facilities).			
<b>Method of Calculation</b>	$\frac{((\text{Reporting Period Close Date}) - (\text{Committed Order Due Date}))}{(\text{Number of Orders Pending and Past the Committed Due Date})}$ <p>Note: For all orders pending and past the committed due date.</p>			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, by ILEC, and ILEC Affiliates			
<b>Reported By</b>	By service group type			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
	<b>Resale</b>		<b>Parity</b>	<b>Benchmark</b>
	Res POTS	Res POTS	Res POTS	
	Bus POTS	Bus POTS	Bus POTS	
	ISDN BRI	ISDN BRI	ISDN BRI	
	CENTREX	CENTREX	CENTREX	
	PBX	PBX	PBX	
	DDS	DDS	DDS	
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI	
	DS3	DS3	DS3	
	VGPL/DS0	VGPL/DS0	VGPL/DS0	
	<b>UNBUNDLED NETWORK ELEMENTS</b>			
	<b>UNE Loops</b>			
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched	
	UNE Loops Designed	UNE Loops Designed	DDS and VGPL/DS0	
	UNE Loops - xDSL Provisioned	UNE Loops - xDSL Provisioned	Retail xDSL	
	Line Sharing	Line Sharing	Retail xDSL	
	UNE Subloops – Voice Grade	UNE Subloops – Voice Grade	Bus. POTS Dispatched	
	UNE Subloops – Data	UNE Subloops – Data	Retail xDSL	
<b>Dark Fiber</b>	Dark Fiber	DS3		
<b>UNE Ports</b>	UNE Ports	DS1/ISDN PRI		
<b>EELS</b>	EELS	DS1/ISDN PRI, DS3, VGPL/DS0		
<b>UNE Dedicated Transport</b>	UNE Dedicated Transport	DS1/ISDN PRI, DS3		
<b>UNE Platform</b>	UNE Platform	Bus POTS Dispatched		
<b>Interconnection Trunks</b>	Interconnection Trunks	ILEC Dedicated Trunks		
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Excludes customer caused misses.</li> <li>• Excludes Loop Pre-Qualification queries.</li> </ul>			

## *Sprint Performance Measurement Plan*

	<ul style="list-style-type: none"><li>• Interval is measured in business days.</li></ul>
<i>Notes</i>	<ul style="list-style-type: none"><li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li><li>• Sprint will provide disaggregation by Missed Appointment Reason codes as diagnostic data upon raw data request.</li><li>• For UNE Loop services, feature only orders are excluded from the retail analog.</li></ul>

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# Sprint Performance Measurement Plan

## Provisioning

## Measure 15

**Title:** Provisioning Trouble Reports Prior to Service Order Completion

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Measures the percent of troubles that are reported (via customer or indirectly by ALEC) that occur during the provisioning process.			
<b>Method of Calculation</b>	[(Total number of trouble reports that occur from the time of service order creation, up to and including the date of service order completion) / (Total Number of service orders completed in reporting period)] x 100.			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, ILEC, and ILEC Affiliates			
<b>Reported By</b>	<ul style="list-style-type: none"> <li>● By Resale, UNE Loop Non-Designed, UNE Subloops – Voice Grade, and LNP</li> <li>● By Affecting Service and Out of Service</li> </ul>			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
	<b>Resale</b>		<b>Parity</b>	<b>Benchmark</b>
	Res. Pots Bus. Pots	Res POTS Bus POTS	Res POTS Bus POTS	
	<b>UNBUNDLED NETWORK ELEMENTS</b>			
	<b>UNE Loops</b>			
	UNE Loops Non-Designed	UNE Loops Non-Designed	B1 Dispatch Non-Designed	
	<b>UNE Subloops – Voice Grade</b>	UNE Subloops – Voice Grade	B1 Dispatch Non-Designed	
	<b>LNP</b>	LNP	LNP	
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>● Excludes CPE and IEC/ALEC caused troubles</li> <li>● Excludes Subsequent reports</li> <li>● Excludes Message Reports (circuit reports for which ILEC has no records)</li> <li>● Excludes ILEC employee generated reports</li> </ul>			
<b>Notes</b>	<ul style="list-style-type: none"> <li>● Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>			

# Sprint Performance Measurement Plan

## Provisioning

## Measure 17a

**Title:** Percentage Troubles in 5 Days for New Orders

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Measures the percent of network customer trouble reports received within 5 calendar days of service order completion.			
<b>Method of Calculation</b>	[(Total Number of Customer Trouble reports received within 5 calendar days of service order completion) / (Total Number of new, move and change completed orders)] x 100			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, ILEC, and ILEC Affiliates			
<b>Reported By</b>	By service group type			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
	<b>Resale</b>		<b>Parity</b>	<b>Benchmark</b>
	Res POTS	Res POTS	Res POTS	
	Bus POTS	Bus POTS	Bus POTS	
	ISDN BRI	ISDN BRI	ISDN BRI	
	CENTREX	CENTREX	CENTREX	
	PBX	PBX	PBX	
	DDS	DDS	DDS	
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI	
	DS3	DS3	DS3	
	VGPL/DS0	VGPL/DS0	VGPL/DS0	
	<b>UNBUNDLED NETWORK ELEMENTS</b>			
	<b>UNE Loops</b>			
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched	
	UNE Loops Designed	UNE Loops Designed	DDS and VGPL/DS0	
	UNE Loops - xDSL Provisioned	UNE Loops - xDSL Provisioned	Retail xDSL	
	Line Sharing	Line Sharing	Retail xDSL	
	UNE Subloops – Voice Grade	UNE Subloops - Voice Grade	Bus. POTS Dispatched	
	UNE Subloops – Data	UNE Subloops – Data	Retail xDSL	
	<b>Dark Fiber</b>	Dark Fiber	DS3	
	<b>UNE Ports</b>	UNE Ports	DS1/ISDN PRI	
	<b>EELS</b>	EELS	DS1/ISDN PRI, DS3, VGPL/DS0	
<b>UNE Dedicated Transport</b>	UNE Dedicated Transport	DS1/ISDN PRI, DS3		
<b>UNE Platform</b>	UNE Platform	Res. POTS, Bus POTS, ISDN BRI, Centrex, PBX		
<b>LNP</b>	LNP	LNP		
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>● Excludes CPE and IEC/ALEC caused troubles</li> <li>● Excludes troubles associated with inside wire</li> <li>● Excludes Trouble Reports Received on the Due Date (which instead are reported in the “Provisioning Troubles” measure)</li> <li>● Excludes Subsequent reports</li> </ul>			

## *Sprint Performance Measurement Plan*

	<ul style="list-style-type: none"><li>• Excludes Message Reports (circuit reports for which ILEC has no records)</li><li>• Excludes ILEC employee generated reports</li><li>• Excludes Loop Pre-Qualification queries.</li></ul>
<i>Notes</i>	<ul style="list-style-type: none"><li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li><li>• Sprint will provide disaggregation by Maintenance Disposition codes as diagnostic data upon a request for raw data.</li></ul>

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# Sprint Performance Measurement Plan

## Provisioning

## Measure 18

**Title:** Average Completion Notice Interval

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the average time per order to issue notification to ALEC of a completed order.		
<b>Method of Calculation</b>	<p><b>All Electronic:</b>            ((Date and Time of Electronic Completion Notification to ALEC) - (Date and Time of Work Completion)) / (Number of Orders Completed Electronically)</p> <p><b>Electronic/Manual Mix:</b>            [((Date and Time of Electronic Completion Notification to ALEC) – (Date and Time of Work Completion))/(Number of Orders Completed That Required Manual Intervention)]x 100</p>		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, and by ILEC Affiliates		
<b>Reported By</b>	Electronic and Electronic/Manual Mix Interface		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
			<b>Parity</b> <b>Benchmark</b>
	All Electronic	Completion Notice	20 minutes
	Electronic/Manual Mix	Completion Notice	95% within 24 hrs
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• 24-hour clock is used to measure interval for electronic/manual process.</li> <li>• Excludes weekends and ILEC published holidays</li> <li>• Excludes Loop Pre-Qualification queries</li> </ul>		
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> <li>• Sprint will track fall out rate.</li> </ul>		



# Sprint Performance Measurement Plan

## Maintenance

## Measure 19

**Title:** Customer Trouble Report Rate

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the total number of network customer trouble reports received within a calendar month per 100 circuits/UNEs.		
<b>Method of Calculation</b>	[(Total Number of Customer initial and repeat network trouble reports) / (Number of access lines/circuits/UNEs in service at the end of the reporting period)] x 100		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, ILEC, and ILEC Affiliates		
<b>Reported By</b>	By service group type		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.		
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
	<b>Resale</b>		<b>Parity                      Benchmark</b>
	Res POTS	Res POTS	Res POTS
	Bus POTS	Bus POTS	Bus POTS
	ISDN BRI	ISDN BRI	ISDN BRI
	CENTREX	CENTREX	CENTREX
	PBX	PBX	PBX
	DDS	DDS	DDS
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI
	DS3	DS3	DS3
	VGPL/DS0	VGPL/DS0	VGPL/DS0
	<b>UNBUNDLED NETWORK ELEMENTS</b>		
	<b>UNE Loops</b>		
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched
	UNE Loops Designed	UNE Loops Designed	DDS and VGPL/DS0
	UNE Loops - xDSL Provisioned	UNE Loops - xDSL Provisioned	Retail xDSL
	Line Sharing	Line Sharing	Retail xDSL
	UNE Subloops – Voice Grade	UNE Subloops – Voice Grade	Bus. POTS Dispatched
	UNE Subloops – Data	UNE Subloops – Data	Retail xDSL
	Dark Fiber	Dark Fiber	DS3
	UNE Ports	UNE Ports	DS1/ISDN PRI
	EELS	EELS	DS1/ISDN PRI, DS3, VGPL/DS0
	UNE Dedicated Transport	UNE Dedicated Transport	DS1/ISDN PRI, DS3
	UNE Platform	UNE Platform	Res POTS, Bus. POTS, ISDN BRI, Centrex, PBX
	Interconnection Trunks	Interconnection Trunks	ILEC Dedicated Trunks
	LNP	LNP	LNP

## *Sprint Performance Measurement Plan*

<i><b>Business Rules</b></i>	<ul style="list-style-type: none"><li>• Excludes CPE and IEC/ALEC caused troubles</li><li>• Excludes Subsequent reports</li><li>• Excludes Message Reports (circuit reports for which ILEC has no records)</li><li>• Access line/circuit count taken from previous month</li><li>• Excludes ILEC employee generated reports</li></ul>
<i><b>Notes</b></i>	<ul style="list-style-type: none"><li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li><li>• Sprint will provide disaggregation by Maintenance Disposition codes as diagnostic data upon a request for raw data.</li></ul>

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# Sprint Performance Measurement Plan

## Maintenance

## Measure 20

**Title:** Percentage of Customer Trouble Not Resolved Within Estimated Time

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the percent of trouble reports not cleared by the commitment time.		
<b>Method of Calculation</b>	[(Total network trouble reports not cleared by the commitment time for ILEC reasons) / (Total network trouble reports completed)] x 100		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, ILEC, and ILEC Affiliates		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• By service group type</li> <li>• By dispatch and no dispatch</li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.		
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
	<b>Resale</b>		<b>Parity</b> <b>Benchmark</b>
	Res POTS	Res POTS	Res POTS
	Bus POTS	Bus POTS	Bus POTS
	ISDN BRI	ISDN BRI	ISDN BRI
	CENTREX	CENTREX	CENTREX
	PBX	PBX	PBX
	DDS	DDS	DDS
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI
	DS3	DS3	DS3
	VGPL/DS0	VGPL/DS0	VGPL/DS0
	<b>UNBUNDLED NETWORK ELEMENTS</b>		
	<b>UNE Loops</b>		
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched
	UNE Loops Designed	UNE Loops Designed	DDS and VGPL/DS0
	UNE Loops - xDSL Provisioned	UNE Loops -- xDSL Provisioned	Retail xDSL
	Line Sharing	Line Sharing	Retail xDSL
	UNE Subloops - Voice Grade	UNE Subloops - Voice Grade	Bus. POTS Dispatched
	UNE Subloops - Data	UNE Subloops - Data	Retail xDSL
	Dark Fiber	Dark Fiber	DS3
	UNE Ports	UNE Ports	DS1/ISDN PRI
	EELS	EELS	DS1/ISDN PRI, DS3, VGPL/DS0
	UNE Dedicated Transport	UNE Dedicated Transport	DS1/ISDN PRI, DS3
	UNE Platform	UNE Platform	Res. POTS, Bus. POTS, ISDN BRI, Centrex, PBX
	Interconnection Trunks	Interconnection Trunks	ILEC Dedicated Trunks
	LNP	LNP	LNP
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Excludes CPE and IEC/ALEC caused troubles</li> <li>• Excludes Subsequent reports</li> </ul>		

## *Sprint Performance Measurement Plan*

	<ul style="list-style-type: none"><li>• Excludes Message Reports (circuit reports which ILEC has no records on)</li><li>• Excludes ILEC employee generated reports</li><li>• Excludes customer caused misses</li><li>• Includes LNP NXX Code Opening Troubles</li></ul>
<i>Notes</i>	<ul style="list-style-type: none"><li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li><li>• Sprint will provide disaggregation by Maintenance Disposition codes as diagnostic data upon a request for raw data.</li></ul>

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# Sprint Performance Measurement Plan

## Maintenance

## Measure 21

**Title:** Average Time to Restore

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the average duration of customer trouble reports from the receipt of the customer trouble report to the time the trouble is cleared.		
<b>Method of Calculation</b>	(Total duration of customer network trouble reports) / (Total customer network trouble reports)		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, ILEC, and ILEC Affiliates		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• By service group type</li> <li>• By dispatch and no dispatch</li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.		
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
	<b>Resale</b>		<b>Parity</b> <b>Benchmark</b>
	Res POTS	Res POTS	Res POTS
	Bus POTS	Bus POTS	Bus POTS
	ISDN BRI	ISDN BRI	ISDN BRI
	CENTREX	CENTREX	CENTREX
	PBX	PBX	PBX
	DDS	DDS	DDS
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI
	DS3	DS3	DS3
	VGPL/DS0	VGPL/DS0	VGPL/DS0
	<b>UNBUNDLED NETWORK ELEMENTS</b>		
	<b>UNE Loops</b>		
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched
	UNE Loops Designed	UNE Loops Designed	DDS and VGPL/DSO
	UNE Loops - xDSL Provisioned	UNE Loops - xDSL Provisioned	Retail xDSL
	Line Sharing	Line Sharing	Retail xDSL
	UNE Subloops – Voice Grade	UNE Subloops – Voice Grade	Bus. POTS Dispatched
	UNE Subloops – Data	UNE Subloops – Data	Retail xDSL
	Dark Fiber	Dark Fiber	DS3
	UNE Ports	UNE Ports	DS1/ISDN PRI
	EELS	EELS	DS1/ISDN PRI, DS3, VGPL/ DS0
	UNE Dedicated Transport	UNE Dedicated Transport	DS1/ISDN PRI, DS3
	UNE Platform	UNE Platform	Res. POTS, Bus. POTS, ISDN BRI, Centrex, PBX
	Interconnection Trunks	Interconnection Trunks	ILEC Dedicated Trunks
	LNP	LNP	LNP

## *Sprint Performance Measurement Plan*

<b><i>Business Rules</i></b>	<ul style="list-style-type: none"><li>• Excludes CPE and IEC/ALEC caused troubles</li><li>• Excludes Subsequent reports</li><li>• Excludes Message Reports (circuit reports which ILEC has no records on)</li><li>• Excludes ILEC employee generated reports</li><li>• Includes LNP NXX Code Opening troubles</li><li>• Elapsed time is measured on a 24-hour-a-day, seven-days-a-week basis.</li></ul>
<b><i>Notes</i></b>	<ul style="list-style-type: none"><li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li><li>• Sprint will provide disaggregation by Maintenance Disposition codes as diagnostic data upon a request for raw data.</li></ul>

# Sprint Performance Measurement Plan

## Maintenance

## Measure 22

**Title:** POTS Out of Service Less Than 24 Hours

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Measures the percent of POTS out-of-service trouble reports cleared in less than 24 hours.			
<b>Method of Calculation</b>	$\left[ \frac{\text{Total number of out of service network troubles cleared in less than 24 hours}}{\text{Total number of out of service network troubles reported}} \right] \times 100$ <p>Note: For non-design services only</p>			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, ILEC, and ILEC Affiliates			
<b>Reported By</b>	By POTS Residence and Business (Resale), UNE Loops -Non-Designed, and UNE Subloops – Voice Grade			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
	<b>Resale</b>		<b>Parity</b>	<b>Benchmark</b>
	Res. POTS Bus. POTS	Res POTS Bus POTS	Res POTS Bus POTS	
	<b>UNBUNDLED NETWORK ELEMENTS</b>			
	<b>UNE Loops</b>			
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus POTS Dispatched	
	UNE Subloops - Voice Grade	UNE Subloops - Voice Grade	Bus. POTS Dispatched	
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Residential and Business POTS only</li> <li>• Excludes no access</li> <li>• Interval for tickets received Saturday and Sunday begins no later than Monday morning</li> <li>• Excludes CPE and IEC/ALEC caused troubles</li> <li>• Excludes Subsequent reports</li> <li>• Excludes Message Reports (circuit reports for which ILEC has no records)</li> <li>• Excludes ILEC employee generated reports</li> </ul>			
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> <li>• Sprint will provide disaggregation by Maintenance Disposition codes as diagnostic data upon a request for raw data.</li> </ul>			

# Sprint Performance Measurement Plan

## Maintenance

## Measure 23

**Title:** Frequency of Repeat Troubles in 30 Day Period

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Measures the percent of customer network trouble reports received within 30 calendar days of a previous report.			
<b>Method of Calculation</b>	$\left[ \frac{\text{Total customer network trouble reports received within 30 calendar days of a previous customer report}}{\text{Total customer network trouble reports}} \right] \times 100$			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, ILEC, and ILEC Affiliates			
<b>Reported By</b>	By service group type			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
	<b>Resale</b>		<b>Parity</b>	<b>Benchmark</b>
	Res POTS	Res POTS	Res POTS	
	Bus POTS	Bus POTS	Bus POTS	
	ISDN BRI	ISDN BRI	ISDN BRI	
	CENTREX	CENTREX	CENTREX	
	PBX	PBX	PBX	
	DDS	DDS	DDS	
	DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI	
	DS3	DS3	DS3	
	VGPL/DS0	VGPL/DS0	VGPL/DS0	
	<b>UNBUNDLED NETWORK ELEMENTS</b>			
	<b>UNE Loops</b>			
	UNE Loops Non-Designed	UNE Loops Non-Designed	Bus. POTS Dispatched	
	UNE Loops Designed	UNE Loops Designed	DDS and VGPL/DSO	
	UNE Loops - xDSL Provisioned	UNE Loops - xDSL Provisioned	Retail xDSL	
	Line Sharing	Line Sharing	Retail xDSL	
	UNE Subloops – Voice Grade	UNE Subloops – Voice Grade	Bus. POTS Dispatched	
	UNE Subloops – Data	UNE Subloops – Data	Retail xDSL	
	Dark Fiber	Dark Fiber	DS3	
	UNE Ports	UNE Ports	DS1/ISDN PRI	
	EELS	EELS	DS1/ISDN PRI, DS3, VGPL/DS0	
	UNE Dedicated Transport	UNE Dedicated Transport	DS1/ISDN PRI, DS3	
	UNE Platform	UNE Platform	Resl POTS, Bus. POTS, ISDN BRI, Centrex, PBX	
	Interconnection Trunks	Interconnection Trunks	ILEC Dedicated Trunks	
	LNP	LNP	LNP	
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Excludes CPE and IEC/ALEC caused troubles</li> <li>• Excludes troubles associated with inside wiring</li> <li>• Excludes Subsequent reports</li> </ul>			



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	<ul style="list-style-type: none"><li>• Excludes Message Reports</li><li>• Excludes ILEC employee generated reports</li><li>• Includes LNP NXX Code Opening troubles</li></ul>
<i>Notes</i>	<ul style="list-style-type: none"><li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li><li>• Sprint will provide disaggregation by Maintenance Disposition codes as diagnostic data upon a request for raw data.</li></ul>

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# Sprint Performance Measurement Plan

## Network Performance

## Measure 24

**Title:** Percent Blocking on Common Trunks

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the total percentage of blockage across all common and shared transport trunk groups exceeding 1% blockage.  Note: Includes list of trunks exceeding 1% benchmark		
<b>Method of Calculation</b>	[(Total blocked calls across all common and shared transport trunk groups)/(Total call attempts count across all common and shared transport trunk groups)] x 100		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Reported by common/shared transport trunk group		
<b>Reported By</b>	State		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison Parity Benchmark</b>
	State	Common Trunk Group	No more than 1%
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Exclude 911 trunks except where ILEC has augmentation control.</li> <li>• Excludes the maintenance window (12am local time to 6am local time).</li> <li>• Internal traffic data collection procedures exclude force majeure (Acts of God, Natural Disasters, etc.)</li> <li>• Measured by:                             <ul style="list-style-type: none"> <li>- Total trunk groups</li> <li>- Percent Blocking</li> </ul> </li> </ul>		
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Common trunk groups provide service to all customers, therefore, there is one result for both ALEC and ILEC.</li> </ul>		

# Sprint Performance Measurement Plan

## Network Performance

## Measure 25

**Title:** Percent Blocking on Interconnection Trunks

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the total percent of blockage on final dedicated interconnection trunk groups exceeding 1% blockage.		
<b>Method of Calculation</b>	$\left[ \frac{\text{Total blocked calls across all final dedicated interconnection trunk groups per ALEC}}{\text{Total call attempts count across all final dedicated interconnection trunk groups per ALEC}} \right] \times 100$		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, and ILEC Affiliates		
<b>Reported By</b>	State		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
			<b>Parity</b> <b>Benchmark</b>
	State	Interconnection Trunks	No more than 1% blockage
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Only measured on trunks where ILEC has outgoing traffic to ALECs and where ILEC controls trunk capacity.</li> <li>• Threshold exception trunk detail.</li> <li>• Internal traffic data collection procedures exclude force majeure (Acts of God, Natural Disasters, etc.)</li> <li>• Excludes the maintenance window (12am local time to 6am local time).</li> <li>• Applies to those trunks where the ILEC has augmentation control</li> <li>• Does not apply when trunks are provisioned as two-way trunks.</li> </ul>		
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Measured by:               <ul style="list-style-type: none"> <li>- Total trunk groups</li> <li>- Threshold exceptions</li> <li>- ILEC end office to ALEC end office</li> <li>- ILEC tandem to ALEC end office</li> </ul> </li> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>		

# Sprint Performance Measurement Plan

## Network Performance

## Measure 26

**Title:** NXX Loaded by LERG Effective Date

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Measures the number of NXXs loaded and tested by the LERG effective date.			
<b>Method of Calculation</b>	[((Number of NXXs loaded and tested by LERG effective date) / (Number of NXXs scheduled to be loaded and tested by LERG effective date))] x 100			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, by ILEC (if analog applies) and by ILEC Affiliates			
<b>Reported By</b>	Reported for all NXX codes scheduled to be loaded in reporting period			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	ALEC	<b>Competitive Comparison</b>	
			<b>Parity</b>	<b>Benchmark</b>
	CLLI	ALEC NXXs loaded	ILEC NXXs loaded	
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Excludes any NXX codes with requested loading interval of less than the industry standard (currently 45 calendar days).</li> <li>• Excludes any NXX code facilities that cannot be completely tested because the ALEC has not provided an accurate test number or because ALEC facilities have not been installed.</li> </ul>			
<b>Notes</b>	<ul style="list-style-type: none"> <li>• NXX loading procedures include central office/tandem translations, verification of translations, call through testing, and AMA testing.</li> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>			

# Sprint Performance Measurement Plan

## Billing

## Measure 28

**Title:** Usage Timeliness

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	This measure captures the elapsed time between the recording of usage data generated either by ALEC retail customers or access usage associated with ALEC customers and the time when the data set, in a compliant format, is available for transmission to the ALEC.			
<b>Method of Calculation</b>	<p><b>For Resale and UNE Messages:</b>  <math display="block">\text{Sum} [(Data\ Set\ Transmission\ Availability\ Date) - (Date\ of\ Message\ Recording)] / (\text{Count of all messages transmitted within a calendar month of reporting period})</math></p> <p><b>Access:</b>  <math display="block">[(\text{Count of all messages available within 5 days}) / (\text{Count of all messages available for transmission in reporting period})] \times 100</math></p>			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALECs, ALECs in the aggregate, by ILEC (if analog applies) and by ILEC Affiliates			
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• Resale</li> <li>• UNE</li> <li>• Jointly provided switched access (associated with meet point billing)</li> </ul>			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for certain levels of disaggregation for this measurement.			
	Disaggregation Level	ALEC	Competitive Comparison	
			<b>Parity</b>	<b>Benchmark</b>
	Resale	ALEC End user messages	Sprint End user messages	
	UNE – Unbundled Network Element	ALEC billing messages	Sprint End user messages	
Access (Associated with Meet Point Billing Only)	ALEC access billing messages		95% within 5 days	
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>▪ The reporting period used will be calendar month (based upon the message process date).</li> <li>▪ Only Automated Message Accuracy (AMA) messages recorded by Sprint LTD are included. Alternate Billed Message and Connecting Company messages recorded by other companies are excluded.</li> <li>▪ Long duration calls are excluded because the message date does not accurately reflect the date on which the message was recorded. Long duration calls are defined as calls that remain connected through two successive midnights.</li> </ul>			
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> <li>• This measurement assumes a daily transmission of usage to the</li> </ul>			

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ALECs. If the ALECs do not request daily transmissions, the measurement still applies based upon transmission availability date, however the actual timeliness of the usage received by the ALEC will vary depending upon their requirements for frequency of transmissions (e.g. weekly).

# Sprint Performance Measurement Plan

## Billing

## Measure 30

**Title:** Wholesale Bill Timeliness

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	This measure captures the elapsed number of calendar days between the scheduled close of a Bill Cycle and the ILEC's transmission availability of the associated invoice to the ALEC.		
<b>Method of Calculation</b>	[(Count of Invoices where difference between distribution date and bill date is less than or equal to 10) / (Count of Total Invoices Distributed within the Reporting Period)] x100		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, and by ILEC Affiliates		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• Resale</li> <li>• UNE</li> <li>• Facilities/Interconnection</li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
			<b>Parity</b> <b>Benchmark</b>
	Resale	ALEC Invoices	99% within 10 calendar days
	UNE	ALEC Invoices	99% within 10 calendar days
	Facilities/Interconnection	ALEC Invoices	99% within 10 calendar days
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Includes only mechanized bills.</li> <li>• Excludes paper bill, magnetic bill, CD ROM bill or Custom Bill diskette bill.</li> </ul>		
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>		

# Sprint Performance Measurement Plan

## Billing

## Measure 31

**Title:** Usage Completeness

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the percentage of usage charges appearing on the correct bill. *Correct bill = next available bill		
<b>Method of Calculation</b>	[(Count of usage charges on the bill that were recorded within last 30 billing days) / (Total count of usage charges on the bill)] x 100		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, by ILEC (if analog applies) and by ILEC Affiliates		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• Resale</li> <li>• UNE</li> <li>• Facilities/Interconnection</li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for certain levels of disaggregation for this measurement.		
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
			<b>Parity</b> <b>Benchmark</b>
	Resale	IntraLATA toll messages sent-paid	Sprint IntraLATA toll messages sent-paid
UNE	Minutes of use		95% complete
Facilities/Interconnection	Mminutes of use		95% complete
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Excludes summarized charges.</li> <li>• Billing dataset will be defined as charges occurring in past monthly period and processed within 3 calendar days of the end of the billing month.</li> <li>• Resale long duration calls are excluded because the message date does not accurately reflect the date on which the message was recorded. Long duration calls are defined as calls that remain connected through two successive midnights.</li> </ul>		
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>		



# Sprint Performance Measurement Plan

## Billing

## Measure 32

**Title:** Recurring Charge Completeness

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the percentage of fractional recurring charges appearing on the correct bill. * Correct bill = next available bill		
<b>Method of Calculation</b>	[(Count of fractional recurring charges that are on the correct bill*) / (Total count of fractional recurring charges that are on the bill)] x 100		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, by ILEC (if analog applies) and by ILEC Affiliates		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• Resale</li> <li>• UNE</li> <li>• Facilities/Interconnection</li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for certain levels of disaggregation for this measurement.		
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
			<b>Parity</b> <b>Benchmark</b>
	Resale	Number of fractional OCCs	Number of fractional OCCs
UNE	% charges on correct bill		90% Complete
Facilities/Interconnection	% charges on correct bill		90% Complete
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Billing dataset will be defined as charges occurring in past monthly period and processed within 3 calendar days of the end of the billing month.</li> <li>• Excludes late charges resulting from mandated billing changes if Sprint makes its changes on time.</li> </ul>		
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>		

# Sprint Performance Measurement Plan

## Billing

## Measure 33

**Title:** Non-Recurring Charge Completeness

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the percentage of non-recurring charges appearing on the correct bill. * Correct bill = next available bill		
<b>Method of Calculation</b>	[(Count of non-recurring charges that are on the correct bill) / (Total count of non-recurring charges that are on the bill)] x 100		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, by ILEC (if analog applies) and by ILEC Affiliates		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• Resale</li> <li>• UNE</li> <li>• Facilities/Interconnection</li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for certain levels of disaggregation for this measurement.		
	Disaggregation Level	ALEC	Competitive Comparison
			<b>Parity</b> <b>Benchmark</b>
	Resale	Total number of non-recurring OCCs	Total number of non-recurring OCCs
UNE	% of charges on correct bill		90% complete
Facilities/Interconnection	% of charges on correct bill		90% complete
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Billing dataset will be defined as charges occurring in past monthly period and processed within 3 calendar days of the end of the billing month.</li> <li>• Excludes late charges resulting from mandated billing changes if Sprint makes its changes on time.</li> </ul>		
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>		

# Sprint Performance Measurement Plan

## Billing

## Measure 34

**Title:** Bill Accuracy

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the percentage of the total bill amount that is not adjusted by correcting service orders or adjustments on a rolling six month average.		
<b>Method of Calculation</b>	$(\text{Total monies billed without corrections on a rolling six month average}) / (\text{Total monies billed on a rolling six month average}) \times 100$		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALEC, ALECs in the aggregate, by ILEC (if analog applies ) and by ILEC Affiliates		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• Resale                             <ul style="list-style-type: none"> <li>- Usage</li> <li>- Recurring Charges</li> <li>- Non-Recurring Charges</li> </ul> </li> <li>• UNE                             <ul style="list-style-type: none"> <li>- Usage</li> <li>- Recurring Charges</li> <li>- Non-Recurring Charges</li> </ul> </li> <li>• Facilities/Interconnection                             <ul style="list-style-type: none"> <li>- Usage</li> <li>- Recurring Charges</li> <li>- Non-Recurring Charges</li> </ul> </li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for certain levels of disaggregation for this measurement.		
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
	<b>Resale</b>		<b>Parity                      Benchmark</b>
	Usage	Total Dollars billed and adjustments for usage	Total Dollars billed and adjustments for usage – Diagnostic Only
	Recurring Charge	Total Dollars billed and adjustments for recurring charges	Total Dollars billed and adjustments for recurring charges – Diagnostic Only
	Non-recurring Charges	Total Dollars billed and adjustments for non-recurring charges	Total Dollars billed and adjustments for non-recurring charges – Diagnostic Only
	<b>UNE</b>		
	Usage	Total Dollars billed and adjustments for usage	Diagnostic Only
	Recurring Charge	Total Dollars billed and adjustments for recurring	Diagnostic Only

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	Non-recurring Charges	Total Dollars billed and adjustments for nonrecurring		Diagnostic Only
	<b>Facilities/Interconnection</b>			
	Usage	Total Dollars billed and adjustments for usage		Diagnostic Only
	Recurring Charges	Total Dollars billed and adjustments for recurring		Diagnostic Only
	Non-recurring Charges	Total Dollars billed and adjustments for nonrecurring		Diagnostic Only
<b><i>Business Rules</i></b>	<ul style="list-style-type: none"> <li>• Excludes Uncollectable status accounts, restoration charges, non-recurring charges billed in installments, non-regulated charges, refunds of deposits, transfer of payments or balances, returned check charges, taxes, and surcharges.</li> <li>• Excludes adjustments issued for reasons not related to bill accuracy.</li> </ul>			
<b><i>Notes</i></b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> <li>• Sprint will propose a benchmark in the 2003 filing, per agreement of 2002 Workshops.</li> </ul>			

# Sprint Performance Measurement Plan

## Database Updates

## Measure 37

**Title:** Database Update Timeliness

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Measures the percentage of Directory Assistance and Directory Listings updates to databases within 24 hours.			
<b>Method of Calculation</b>	(Count of updates completed within 24 hours in reporting period) / (Count of updates completed in reporting period) x 100			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALECs, ALECs in the aggregate , ILEC and ILEC Affiliates			
<b>Reported By</b>	Service Order generated updates			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	<b>Sprint:</b> Service Order Updates – Parity			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
	Service Orders	DA/DL Updates	<b>Parity</b> DA/DL Updates	<b>Benchmark</b>
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• The start time of requests received after the end of the business day will be the beginning of the next business day.</li> <li>• Business day is defined as published hours of operation for the ILEC ordering center.</li> </ul>			
<b>Notes</b>	<ul style="list-style-type: none"> <li>• ALECs reserve the right to request additional databases be included in this measure.</li> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>			

# Sprint Performance Measurement Plan

## Database Updates

## Measure 38

**Title:** Percent Database Accuracy

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	<p>The percentage of E911 and DA records that were updated by Sprint in error. The data required to calculate this measurement will be provided by the ALEC. The ALEC will provide the number of records transmitted and the errors found. Sprint will verify the records determined to be in error to validate that the records were input by Sprint incorrectly. An update is completed without error if the database completely and accurately reflects the activity specified on the order submitted by the ALEC.</p> <ul style="list-style-type: none"> <li>• E911 Databases</li> <li>• Directory Assistance/Listings Database</li> </ul>			
<b>Method of Calculation</b>	$\left[ \frac{\text{Count of Updates Completed without error}}{\text{Count of Updates Completed}} \right] \times 100$			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	Individual ALECs, ALECs in the aggregate, by ILEC (if analog applies) and by ILEC Affiliates			
<b>Reported By</b>	<p>For E911 Database:</p> <ul style="list-style-type: none"> <li>• Service Order generated updates</li> <li>• Direct gateway input</li> </ul> <p>For DA/Listings:</p> <ul style="list-style-type: none"> <li>• Service Order generated updates</li> </ul>			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for this measurement.			
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
			<b>Parity</b>	<b>Benchmark</b>
	E911			
	Service Order	Number Updates	Number Updates	
	Direct Gateway			TBD
	Directory Assistance / Directory Listing			
	Service Order	Number Updates	Number Updates	
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Excludes ALEC caused errors</li> </ul>			
<b>Notes</b>	<ul style="list-style-type: none"> <li>• ALECs reserve the right to request additional databases be included in this measure.</li> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> <li>• There is insufficient historical data to develop a valid benchmark for To Be Determined (TBD) disaggregation levels.</li> </ul>			

# Sprint Performance Measurement Plan

## Database Updates

## Measure 39

**Title:** E911 MS Database Update

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the percentage of E911 database updates completed within 48 hours.		
<b>Method of Calculation</b>	(Number of records updated within 48 hours) / (Total number of records updated) x 100		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALECs, ALECs in the aggregate, by ILEC (if analog applies) and by ILEC Affiliates		
<b>Reported By</b>	Update types		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Sprint is required to provide a retail analog for certain levels of disaggregation for this measurement.		
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
			<b>Parity</b> <b>Benchmark</b>
	Service Order Update	911 Updates	911 Updates
Direct Gateway Update	% Updates within 48 hours		99% in 48 hours
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Excludes scheduled system outages.</li> <li>• Excludes Carrier caused delays due to requests to put file on hold or delays in processing records due to invalid data or invalid file formats (i.e. ALEC caused errors).</li> <li>• Interval is measured in clock hours.</li> </ul>		
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> <li>• For this measurement, Sprint will provide a retail analog for retail to resale customers and a benchmark for those facility based ALEC carriers that use Sprint to load their ALI records to the PSAPs via file transfer methods</li> </ul>		

# Sprint Performance Measurement Plan

## Collocation

## Measure 40

**Title:** Time to Respond to a Collocation Request

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the percentage of time the ILEC responds to a ALEC complete collocation request, within the allotted time.		
<b>Method of Calculation</b>	<p><b>Space Availability:</b>  <math display="block">\frac{[(\text{Count of Complete Requests returned within 15 calendar days}) / (\text{Count of requests returned for Space Availability})] \times 100}{}</math></p> <p><b>Price and Schedule Quote:</b>  <math display="block">\frac{[(\text{Count of Complete Requests Returned within 15 calendar days}) / (\text{Count of requests returned for Price and Schedule Quote})] \times 100}{}</math></p> <p><b>Right Of Way Required:</b>  <math display="block">\frac{[(\text{Count of complete Space Availability requests requiring ROW permits returned within 15 calendar days}) / (\text{Count of Space Availability requests returned that required ROW permits})] \times 100}{}</math></p> <p><b>ICB (Individual Case Basis) Quote:</b>  <math display="block">\frac{[(\text{Count of complete ICB Price and Schedule Quote requests returned within 15 calendar days}) / (\text{Count of ICB Price and Schedule Quote requests})] \times 100}{}</math></p>		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALECs, ALECs in the aggregate and by ILEC Affiliates		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• All Collocation Types: Caged, Cageless, Virtual, and Other</li> <li>• Space Availability</li> <li>• Price and Schedule Quote</li> <li>• Space Availability Requests Requiring ROW Permits</li> <li>• Price and Schedule Quotes for non-Commission Approved Price List requests with Individual Case Basis (ICB) requirements</li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standards</b>	Benchmark		
	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>
			<b>Parity                      Benchmark</b>
	Space Availability:		
	Physical Caged	Space Availability Requests	100% in 15 Calendar days
	Physical Cageless	Space Availability Requests	100% in 15 Calendar days
	Virtual	Space Availability Requests	100 % in 15 Calendar days
	Other	Space Availability Requests	100% in 15 Calendar days
	<b>ROW</b>	Space Availability Requests	100% in 15 Calendar days



## *Sprint Performance Measurement Plan*

	<b>Price and Schedule Quote</b>		
	Physical Caged	Price and Schedule Quotes	100% in 15 Calendar days
	Physical Cageless	Price and Schedule Quotes	100% in 15 Calendar days
	Virtual	Price and Schedule Quotes	100% in 15 Calendar days
	Other	Price and Schedule Quotes	100% in 15 Calendar days
	ICB Requests	ICB Price and Schedule Quotes	100% within 15 Calendar days
<b><i>Business Rules</i></b>	<ul style="list-style-type: none"> <li>• Excludes orders canceled by ALEC</li> <li>• Excludes requests/applications that are incomplete and must be returned to ALEC for completion. The new completed version counts as a new request.</li> <li>• If an ALEC submits ten or more applications within ten calendar days the initial 15 day response period will increase by 10 days for every additional 10 applications.</li> <li>• Sprint will provide a tracking log for ROW requests that provide the following component: Name of agency contacted, date ROW request submitted to the agency, and date ROW received from agency.</li> </ul>		
<b><i>Notes</i></b>	<ul style="list-style-type: none"> <li>• Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.</li> </ul>		

# Sprint Performance Measurement Plan

## Collocation

## Measure 41

**Title:** Time to Provide a Collocation Arrangement

<i>Area</i>	<i>Requirement Description</i>		
<b>Description</b>	Measures the percentage of time the ILEC responds to the ALEC approved* collocation request, within the allotted time.  *Approved means ILEC approves the application and has received, from ALEC, financial payment or bond.		
<b>Method of Calculation</b>	<b>New Arrangement (Physical Caged, Physical Cageless, Other):</b> [(Count of Collocation Arrangements completed within 90 calendar days) / (Count of Collocation Arrangements Completed)] x 100  <b>New Arrangement (Virtual):</b> [(Count of Collocation Arrangements completed within 60 calendar days) / (Count of Collocation Arrangements Completed)] x 100  <b>Augment Arrangement:</b> [(Count of Collocation Arrangements completed within 45 calendar days) / (Count of Collocation Arrangements Completed)] x 100		
<b>Report Period</b>	Monthly		
<b>Report Structure</b>	Individual ALECs, ALECs in the aggregate and by ILEC Affiliates		
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• All Collocation Types: Caged, Cageless, Virtual, and Other</li> <li>• New</li> <li>• Augment</li> </ul>		
<b>Geographic Level</b>	Statewide		
<b>Measurable Standard</b>	Disaggregation Level	ALEC	Competitive Comparison
			Parity                      Benchmark
	<b>New Arrangement</b>		
	Physical Caged	Collocation Arrangements	100% within 90 days
	Physical Cageless	Collocation Arrangements	100% within 90 days
	Virtual	Collocation Arrangements	100% within 60 days
	Other	Collocation Arrangements	100% within 90 days
	<b>Augment Arrangement</b>		
	Physical Caged	Collocation Arrangements	100% within 45 days
	Physical Cageless	Collocation Arrangements	100% within 45 days
	Virtual	Collocation Arrangements	100% within 45 days
	Other	Collocation Arrangements	100% within 45 days
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Excludes orders canceled by ALEC</li> <li>• Excludes requests/applications that are incomplete and must be returned to ALEC for completion</li> </ul>		

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### *Notes*

- Sprint agrees to provide affiliate data to the PSC and ALECs under proprietary information provisions.

# Sprint Performance Measurement Plan

## Interfaces

## Measure 42

**Title:** Percentage of Time Interface is Available

<i>Area</i>	<i>Requirement Description</i>					
<b>Description</b>	Measures percent of time OSS interface is available compared to scheduled availability.					
<b>Method of Calculation</b>	$\frac{[(\text{Number of Scheduled Interface Available Hours}) - (\text{Number of Unscheduled Interface Unavailable Hours})]}{(\text{Scheduled Interface Available Hours})} \times 100$					
<b>Report Period</b>	Monthly					
<b>Report Structure</b>	ALECs in the aggregate					
<b>Reported By</b>	By interface type accessed by ALECs					
<b>Geographic Level</b>	Statewide					
<b>Measurable Standards</b>	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>			
	Ordering	IRES Availability	<table border="1" style="width: 100%;"> <tr> <td style="text-align: center;"><b>Parity</b></td> <td style="text-align: center;"><b>Benchmark</b></td> </tr> <tr> <td></td> <td style="text-align: center;">98.5% of scheduled hours</td> </tr> </table>	<b>Parity</b>	<b>Benchmark</b>	
<b>Parity</b>	<b>Benchmark</b>					
	98.5% of scheduled hours					
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Outage hours are obtained from outage reports</li> <li>• Any change requests for extended availability during the reporting period are added to the scheduled hours.</li> <li>• Scheduled interface availability hours:                             <ul style="list-style-type: none"> <li>• 8AM - 8PM EST (Monday-Friday)</li> <li>• Excludes non-business days and ILEC published holidays</li> <li>• ALECs are notified via e-mail in advance of changes to the published availability schedule</li> </ul> </li> </ul>					
<b>Notes</b>	<ul style="list-style-type: none"> <li>• Sprint has one interface which does both pre-ordering and ordering; therefore, both of these functions are reported under ordering.</li> <li>• Any outage in a source system that inhibits the system from performing pre-ordering or ordering functions is considered an outage.</li> </ul>					

# Sprint Performance Measurement Plan

## Interfaces

## Measure 44

**Title:** Center Responsiveness

<i>Area</i>	<i>Requirement Description</i>			
<b>Description</b>	Measures the average time it takes the ILEC's work center to answer a call.			
<b>Method of Calculation</b>	(Date and Time of Call answer -- (Date and Time of Call Receipt)/ (Total calls answered by center))			
<b>Report Period</b>	Monthly			
<b>Report Structure</b>	ALECs in the aggregate, and by ILEC (if analog applies)			
<b>Reported By</b>	<ul style="list-style-type: none"> <li>• ILEC Ordering Center</li> <li>• ILEC Repair Center</li> </ul>			
<b>Geographic Level</b>	Statewide			
<b>Measurable Standards</b>	<b>Disaggregation Level</b>	<b>ALEC</b>	<b>Competitive Comparison</b>	
			<b>Parity</b>	<b>Benchmark</b>
	Ordering Center	ACD Inc Calls		20 Sec
	Repair Center (Designed)	ACD Inc Calls	Parity by design	
	Repair Center (Non-Designed)	ACD Inc Calls		20 Sec
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>• Does not include abandoned calls.</li> <li>• Measured by individual queue, if applicable, in each ILEC center.</li> </ul>			
<b>Notes</b>				

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## **REPORTING PROCESS**

Performance reports will be provided by the twentieth calendar day of the month succeeding the reporting period, unless otherwise approved by the Commission. The reporting period is the calendar month, unless otherwise noted. Positive reporting will be done for all measures, even those reported on an exception only basis.

If the ALEC announces they will discontinue service to all of their end users, performance reporting for the ALEC will cease on the last day of the month of the discontinuation month.

When reporting begins on a new measure or for a new ALEC, Sprint is only required to report results after a full calendar month of data is available. ALEC failure to provide an Operating Company Number (OCN) on orders will result in those orders being excluded from the ALEC Service Performance Measurements. Exclusions based on application of business rules apply to both the numerator and denominator of the Method of Calculation with the exception of Measure 2.

For those measures where results appear to be statistically less than parity or not meeting the benchmark level, Sprint will perform analysis of the data upon ALEC request. This analysis will detail the underlying causes contributing to the reported performance results. Within 90 days of the web-site publication of monthly results, a report recipient may request an analysis of a measurement that is less than parity or not meeting the benchmark. Sprint will provide the analysis within 45 days of the request.

Authorized users will have access to monthly reports through an interactive website. Each ALEC will have access to its own data, aggregate ALEC data, and Sprint Retail data. The Public Service Commission will have access to reports for all entities, including Sprint Affiliate data. Sprint Affiliate data will not be included in ALEC aggregate data.

In addition to the performance measure results themselves, upon request Sprint will provide data which comprise the results and which are readily available from the systems that provides the reportable data. Raw data will be archived for a period of 24 months to provide an adequate audit trail and will be retained with sufficient detail so that ALECs can reasonably reconcile the data captured by Sprint (for the ALEC) with its own internal data. Furthermore, data that relates to Sprint's own performance will be retained, at a consistent level of disaggregation comparable to that reported for the ALECs.

If revisions to the reports are required after the reporting due date, Sprint will repost results (if accurate data can be reconstructed) and publish a notification of the repost, along with the reason for reposting on the web site. Sprint will archive the repost notifications and make them available on the reporting web site for 12 calendar months and in archive an additional 12 months.

If there is noncompliance at the aggregate level in three consecutive months for a given level of disaggregation, Sprint shall provide to the Commission a report of root cause analysis on a

## *Sprint Performance Measurement Plan*

monthly basis. Sprint's root-cause analysis shall include a plan for corrective action with key activities and critical completion dates for implementation.

# Sprint Performance Measurement Plan

## III. SERVICE GROUP TYPES

Service Group Type	Sprint	ALEC
<b>RESALE</b>		
Residential POTS	Residential POTS	Residential POTS
Business POTS	Business POTS	Business POTS
ISDN BRI	ISDN BRI	ISDN BRI
Centrex	Centrex	Centrex
PBX	PBX	PBX
DDS	DDS	DDS
DS1/ISDN PRI	DS1/ISDN PRI	DS1/ISDN PRI
DS3	DS3	DS3
VGPL/DS0	VGPL/DS0	VGPL/DS0
<b>UNBUNDLED NETWORK ELEMENTS</b>		
UNE Loops Designed 5.5 dB 2 or 4 wire analog assured 2 wire Digital ISDN Capable	DDS, VGPL/DS0	UNE Loops Designed
UNE Loops xDSL Provisioned	Retail xDSL	UNE Loops xDSL Provisioned
UNE Loops Non-Designed 8dB weighted 2/4 wire analog basic/Coin	Bus. POTS Dispatched	UNE Loops Non-Designed
<b>UNE Ports</b>	DS1/ISDN PRI	UNE Ports
UNE Platform (i.e., loop + port + transport)	Res POTS, Bus POTS, ISDN BRI, Centrex, PBX	UNE Platform
UNE Sub Loops – Voice Grade	Bus. POTS Dispatched	UNE Sub Loops – Voice
UNE Sub Loops – Data	Retail xDSL	UNE Sub Loops – Data
UNE Dedicated Transport	DS1/ISDN PRI, DS3	UNE Dedicated Transport
Line Sharing	Retail xDSL	Line Sharing
Dark Fiber	DS3	Dark Fiber
EELS	DS1/ISDN PRI, DS3, VGPL/DS0	EELS
Interconnection Trunks	ILEC Dedicated Trunks	Interconnection Trunks
LNP	LNP	LNP
Projects	Projects as defined below.	Projects as defined below.

**INTERCONNECTION TRUNKS** will be included in measures: 2, 7, 8, 11, 12, 13, 14, 19, 20, 21, 23, 25, 30, 31, 32, 33, 34.

**LNP** is considered a facilities based service group type. LNP will be a level of disaggregation for the following measures: 2, 4, 9, 15, 17a, 19, 20, 21, and 23. Service orders with multiple service group types will be categorized according to the service group type of the first access line entered on the order.

**PROJECTS** are defined as follows:

“Project is a planned event where terms and conditions in which work is performed is agreed to by both the ALEC, Sprint and any other party engaged in the provisioning process. To allow for successful turn-up of facilities or conversion of facilities, each party must negotiate, in good faith, the timelines that allow required activities to be met, equipment ordered, placed and tested to meet the overall objectives of the project. The timeline must meet the



## *Sprint Performance Measurement Plan*

rule of reasonable and prudent business practices. If the activity is not agreed to be a project, the transaction will be reported in the appropriate service group type.”

### **SERVICE ORDER TYPES**

- **New Service Installations**
- **Service Migrations without Changes**
- **Service Migrations with Changes**
- **Move and Change activities**
- **Feature Changes**
- **Service Disconnects**

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## **IV. AUDITING**

The Florida Public Service Commission (FPSC) ordered at least one annual independent third-party comprehensive audit. Based on the results of the initial independent comprehensive audit and any future reviews outlined in the Review Procedures, FPSC staff shall determine whether the interval for additional comprehensive third-party audits should be modified during the first five years after initial implementation.

The cost for a comprehensive annual audit shall be borne by Sprint within the first five years after implementation of the Florida Plan. During this time period, Sprint reserves the right to seek a waiver if it deems a comprehensive annual audit unnecessary.

Independent third-party auditors and audit scope shall be jointly selected by Sprint and the ALECs prior to initiating any third-party audit. If the parties cannot agree on the independent auditor, FPSC staff shall have final approval.

In addition to an audit, Sprint and the ALECs agree that the ALECs would have the right to mini-audits of individual performance measures during the year. When a ALEC has reason to believe the data collected for a measure is flawed or the reporting criteria for the measure is not being adhered to, it has the right to have a mini-audit performed on the specific measure upon written request (including e-mail), which will include the designation of a ALEC representative to engage in discussions with Sprint about the requested mini-audit. If, 45 days after the ALEC's written request, the ALEC believes that the issue has not been resolved to its satisfaction, the ALEC will commence the mini-audit upon providing Sprint with 5 business days advance written notice. Each ALEC would be limited to auditing five single measures during the year. The ALEC would pay for the mini-audit, including Sprint's reasonable associated costs and expenses, unless Sprint is found to be misreporting or misrepresenting data or to have non-compliant procedures, in which case, Sprint would pay for the mini-audit, including the ALECs' reasonable associated costs and expenses. If, during a mini-audit of individual measures, more than 50% of the measures in a major service category are found to have flawed data or reporting problems, the entire service category will be re-audited at the expense of Sprint. The major service categories for this purpose are:

- Pre-Ordering
- Ordering
- Provisioning
- Maintenance
- Network Performance
- Billing
- Database Updates
- Collocation
- Interfaces

Each mini-audit shall be submitted to the Commission as a proprietary document.

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## **V. REVIEW PROCEDURES**

For the first two years after this Florida Plan is implemented, collaborative reviews between Sprint and the ALECs are scheduled to be conducted every six months by FPSC staff. Based on input from the participants at each review and the need determined therein, FPSC staff will determine whether the interval for the next review should be adjusted.

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## **VI. DEFINITION OF TERMS**

<b>TERM</b>	<b>DEFINITION</b>
Automatic Location Identifier (ALI)	The feature of E911 that displays at the Public Safety Answering Point (PSAP) the street address of the calling telephone number. This feature requires a data storage and retrieval system for translating telephone numbers to the associated address. ALI may include Emergency Service Number (ESN), street address, room or floor, and names of the enforcement, fire and medical agencies with jurisdictional responsibility for the address. The Management System (E911) database is used to update the Automatic E911 Location Identifier databases.
Affiliate	An entity that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership or control with another entity. The Telecommunications Act defines "Own" as owning an equity interest (or equivalent thereof) of more than 10 percent, or as defined by state commissions."
Benchmark Measurable Standards	Benchmark measures have an agreed upon standard to determine compliance due the lack of a meaningful retail analog comparison.
Call Blocking	A condition on a telecommunications network where, due to a maintenance problem or an over capacity situation in a part of the network, some or all originating or terminating calls cannot reach their final destinations. Depending on the condition and the part of the network affected, the network may make subsequent attempts to complete the call or the call may be completely blocked. If the call is completely blocked, the calling party will have to re-initiate the call attempt.
Centralized Data Collection	Centralized Data Collection system collects hourly operational measurement data from switches/trunks groups for the LTD, and provides a direct feed to CIRAS. The information is used for traffic forecasting by trunk capacity planners.
Code Opening	Process by which new NPA/NXXs (area code/prefix) are defined, through software translations to network databases and switches, in telephone networks. Code openings allow for new groups of telephone numbers (usually in blocks of 10,000 or less with number pooling) to be made available for assignment to an ILEC's or ALEC's customers, and for calls to those numbers to be passed between carriers.
Common Channel Signaling System 7 (CCSS7)	A network architecture used to for the exchange of signaling information between telecommunications nodes and networks on an out-of-band basis. Information exchanged provides for call set-up and supports services and features such as CLASS and database query and response.
Common Transport	Trunk groups between tandem and end office switches that are shared by more than one carrier, often including the traffic of both the ILEC and several ALECs.
Completion	The time in the order process when the service has been provisioned and service has been deployed.
Completion Notice	A notice the ILEC provides to the ALEC to inform the ALEC that the requested service order activity is complete.
Coordinated Hot Cut	Coordinated Customer Conversion of Orders that have a due date negotiated between the ILEC, the ALEC, and the customer so that work activities can be performed on a coordinated basis under the direction of the receiving carrier.
Customer Requested Due Date	A specific due date requested by the customer which is either shorter or longer than the standard interval or the interval offered by the ILEC.
Customer Trouble Reports	A report that the carrier providing the underlying service opens when notified that a customer has a problem with their service. Once resolved, the status of the trouble is changed to closed.
Dedicated Transport	A network facility reserved to the exclusive use of a single customer, carrier or pair of carriers used to exchange switched or special, local exchange, or exchange access traffic.

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TERM	DEFINITION
Delayed Order	An order which has been completed after the scheduled due date and/or time
Diagnostic Measurable Standards	This indicates that the results per the measurement will be reported for analysis purposes only and are not subject to determination of compliance or non-compliance.
Directory Assistance Database	A database that contains subscriber records used to provide live or automated operator-assisted directory assistance. Including 411, 555-1212, NPA-555-1212.
Directory Listings	Subscriber information used for DA and/or telephone directory publishing, including name and telephone number, and optionally, the customer's address.
DS-0	Digital Service Level 0. Service provided at a digital signal speed commonly at 64 kbps, but occasionally at 56 kbps.
DS-1	Digital Service Level 1. Service provided at a digital signal speed of 1.544 Mbps.
DS-3	Digital Service Level 3. Service provided at a digital signal speed of 44.736 Mbps.
Due Date	The date provided on the FOC the ILEC sends the ALEC identifying the planned completion date for the order.
End Office Switch	A switch from which an end users' exchange services are directly connected and offered.
Firm Order Confirmation (FOC)	Notice the ILEC sends to the ALEC to notify the ALEC that it has received the ALECs service order, created a service request, and assigned it a due date.
Flow-Through	The term used to describe whether a LSR electronically is passed from the OSS interface system to the ILEC legacy system to automatically create a service order. LSRs that do not flow through require manual intervention for the service order to be created in the ILEC legacy system.
Held Order	An order for which the ILEC has issued a FOC, but whose due date has passed without it being completed.
Installation	The installation activity required to activate a service request.
Installation Troubles	A trouble, which is identified after service order activity and installation have been completed, on a customer's line. It is likely attributable to the service activity (within a defined time period).
Inside Wiring	The telecommunications wiring located at a customer's premises that extends beyond the demarcation point.
Interconnection Trunks	A network facility that is used to interconnect two switches generally of different local exchange carriers
Interface Outage	A planned or unplanned failure resulting in the unavailability or access degradation of a system.
Jeopardy	A failure in the service provisioning process which results potentially in the inability of a carrier to meet the committed due date on a service order
Jeopardy Notice	The actual notice that the ILEC sends to the ALEC when a jeopardy condition has been identified.
Lack of Facilities	A shortage of cable facilities identified after a due date has been committed to a customer, including the ALEC. The facilities shortage may be identified during the inventory assignment process, or during the service installation process. If no facilities are available, the ILEC will issue a jeopardy.

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TERM	DEFINITION
Line Sharing	Unbundling of the local loop to make the high-frequency portion of the local loop available to ALECs, while the physical line and low-frequency voice path continues to be provided by the ILEC. Line Sharing allows customers to receive both services (voice and data) on the same line, eliminating the need for consumers to procure a second line.
Local Exchange Routing Guide (LERG)	A Telcordia master file that is used by the telecom industry to identify NPA-NXX routing and homing information, as well as network element and equipment designations. The file also includes scheduled network changes associated with activity within the North American Numbering Plan (NANP).
Local Exchange Traffic	Traffic originated on the network of a LEC in a local calling area that terminates to another LEC in a local calling area.
Local Number Portability	A network technology which allows end user customers to retain their telephone number when moving their service between local service providers. This technology does not employ remote call forwarding, but actually allows the customer's telephone number to be moved and redefined in the network of the new service provider. The activity to move the telephone number is called "porting".
Local Service Confirmation	OBF term for a FOC
Mechanized Bill	A bill that is delivered via electronic transmission.
Meet Point Billing	A billing arrangement used when two or more LECs jointly provide access to and from an interexchange carrier (IEC) for inter LATA traffic. This arrangement can be Single Bill, where one LEC bills the IEC on behalf of both LECs and remits payment to the other LEC or Multiple Bill, where each LEC bills their portion directly to the IEC.
Missed Commitment Notification	A notice from ILEC to inform ALEC that the committed due date on an order has been missed.
Non-Recurring Charge	A rate charged for a product or a service that is assessed on a one-time basis.
NXX, NXX Code or Central Office Code	The three digit switch entity indicator that is defined by the "D", "E", and "F" digits of a 10-digit telephone number within the NANP. Each NXX Code contains 10,000 station numbers.
Ordering and Billing Forum (OBF)	Industry forum which works to develop national ordering and billing standards.
Other Charges and Credits	Partial month recurring and non-recurring charges, installation, and other charges other than basic monthly charges appearing on a bill.
Parity Measurable Standards	Indicates a retail analog process or system exists and can report the ILEC and ILEC Affiliate results to be compared to the ALEC results.
Parity by Design	Parity by Design occurs where the same process or system is used for both ALEC and ILEC and does not allow the opportunity to discriminate or to recognize differences between ALEC activity and ILEC activity. As such, the results calculated will apply for all ALECs and ILEC measurable standards.
Permanent Number Portability (also known as Local or Long Term Number Portability)	A network technology which allows end user customers to retain their telephone number when moving their service between local service providers. This technology does not employ remote call forwarding, but actually allows the customer's telephone number to be moved and redefined in the network of the new service provider. The activity to move the telephone number is called "porting".

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TERM	DEFINITION
Physical Collocation	Shall have the meaning set forth in 47 C.F.R. Section 51.5.
Plain Old Telephone Service (POTS)	Refers to basic 2 wire analog residential and business services. Can include feature capabilities (e.g., CLASS features).
Projects	Service requests that exceed the line size and/or level of complexity which would allow for the use of standard ordering and provisioning processes. Generally, due dates for projects are negotiated, coordination of service installations/changes is required and automated provisioning may not be practical.
Provisioning Troubles	A trouble report that is opened for a customer's existing or new service for a trouble identified between the time of the service order creation to the time of order completion. Provisioning troubles that are associated with a ALEC's customers include troubles that occur and are reported during the conversion of an ILEC customer to a ALEC.
Query Types	Pre-ordering information that is available to a ALEC that is categorized according to standards issued by OBF, the FCC and/or the Florida PSC.
Recurring Charge	A rate charged for a product or service that is assessed each successive billing period.
Reject	A status that can occur to a ALEC submitted local service request (LSR) when it does not meet certain criteria. There are two types of rejects: syntax, which occurs if required fields are not included in the LSR and content, which occur if invalid data is provided in a field. A rejected service request must be corrected and re-submitted before provisioning can begin.
Repeat Report	Any trouble report that is a second (or greater) report on the same telephone number/circuit ID and at the same premise address within 30 days. The original report can be any category, including excluded reports, and can carry any disposition code.
Service Group Type	The designation used to identify a category of similar services, e.g., UNE loops
Service Order	The work order created and distributed in ILECs systems and to ILEC work groups in response to a complete, valid service request.
Service Order Type	The designation used to identify the major types of provisioning activities associated with a service request
Service Request	The transaction sent from the ALEC to the ILEC to order services or to request a change(s) be made to existing services.
Standard Interval	The interval that the ILEC quotes to its customers with respect to how long it will take to provision a service request. These intervals are standardized by specific service type and type of service modification requested ILECs publish these standard intervals in documents used by their own service representatives as well as ordering instructions provided to ALECs. POTS services do not have standard intervals; their installation intervals are based on force available and workload. They may change as frequently as twice a day.
Subsequent Reports	A trouble report that is taken on a previously reported trouble prior to the date and time the initial report has a status of "cleared".
Summarized Charges	Billing charges that are aggregated on the bill, rather than individually itemized, e.g., local usage minutes on resale or retail calls, which are listed on the bill as "xx" minutes with no call detail.

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<b>TERM</b>	<b>DEFINITION</b>
Tandem Switch	Switch used to connect and switch trunk circuits between and among Central Office switches.
Time to Restore	The time interval from the receipt, by the ILEC, of a trouble report on a customer's service to the time service is fully restored to the customer.
Trouble Cause Code	A code identifying the known or suspected cause of a trouble condition.
Trouble Disposition	A code identifying the end result of diagnostic and/or repair activities on a customer trouble report.
Usage Data	Data generated in network nodes to identify switched call data on a detailed or summarized basis. Usage data is used to create customer invoices for the calls.
Usage Records	The individual call records created in a switch to report the date, time, duration, calling and called numbers associated with a given call
Virtual Collocation	Shall have the meaning set forth in 47 C.F.R. Section 51.5.



# *Sprint Performance Measurement Plan*

## **VI. GLOSSARY OF ACRONYMS**

<b>ACRONYM</b>	<b>DESCRIPTION</b>
ALEC	Alternative Local Exchange Carrier (term equivalent to CLEC)
ALI	Automatic Location Identifier (for E911 systems)
AS	Affecting Service (type of trouble condition)
BDT	Billing Data Tape
BRI	Basic Rate Interface (type of ISDN service)
CHC	Coordinated "Hot" Cut
CKT	Circuit
CLEC	Competitive Local Exchange Carrier (term equivalent to ALEC)
CO	Central Office
CPE	Customer Premises Equipment
CSR	Customer Service Record
DA	Directory Assistance
dB	Decibel
DDS	Digital Data Service
DID	Direct Inward Dialing
DS0	Digital Service 0
DS1	Digital Service 1
DS3	Digital Service 3
E911 MS	E911 Management System
EAS	Equal Access Service
EDI	Electronic Data Interchange
FOC	Firm Order Confirmation
GUI	Graphical User Interface
HDSL	High-bit-rate Digital Subscriber Line
HICAP	High Capacity Digital Service
IEC	Inter-exchange Carrier
ILEC	Incumbent Local Exchange Carrier
IRES	Integrated Request Entry System
N, T, C	Service Order Types - N(new), T(to or transfer), and C(change)
ISDN	Integrated Services Digital Network
IW	Inside Wire
LATA	Local Access Transport Area
LERG	Local Exchange Routing Guide
LNP	Local (or Long Term) Number Portability

## *Sprint Performance Measurement Plan*

ACRONYM	DESCRIPTION
LSMS	Local Service Management System
LSR	Local Service Request
MRC	Missed Appointment Reason Code
NANP	North American Numbering Plan
NDM	Network Data Mover
NPAC	Number Portability Administration Center
NXX	Telephone number prefix
OBF	Ordering and Billing Forum
OOS	Out of service (type of trouble condition)
OSS	Operations Support System
PBX	Private Branch Exchange
PON	Purchase Order Number
POTS	Plain Old Telephone Service
PRI	Primary Rate Interface (type of ISDN service)
PSC	Public Service Commission (term equivalent to PUC)
PUC	Public Utilities Commission (term equivalent to PSC)
SCP	Service Control Point
SGT	Service Group Type
SOT	Service Order Type
SS7	Signaling System 7
STP	Signaling Transfer Point
TN	Telephone Number
UNE	Unbundled Network Element
VGPL	Voice Grade Private Line
xDSL	(x) Digital Subscriber Line

## VII. Performance Measurement Plan Attachments

## *Sprint Performance Measurement Plan*

### **A. JEOPARDY CODES Sprint Due Date - Specials**

<b>Jeopardy Code</b>	<b>Description</b>
1	Incorrect or Incomplete Order
2	Related Order Not Issued
3	Related Order Not Completed
4	Pending Cancellation
5	Pending Due Date Change
6	Local Facilities Not Available or Late
7	Local Facilities Incorrectly Assigned
8	Local Facility Records Incorrect
9	Late Local Loop Makeup
10	Defective Local Facility
11	Access Customer Facilities Not Available
12	Connecting Company Facilities Not Available
13	CIRAS Records Incomplete or Inaccurate
14	Intracompany Facilities Not Available
15	Incorrect or Late Engineering
16	This code is not currently used
17	Translation Late or Unavailable
18	Unable to Meet Design Requirements
19	Central Office Equipment Not Installed
20	Circuit Order Equipment Late or Not Available
21	Defective Equipment
22	Customer Not Ready to Test or Accept Service
23	Customer Reason/Other than Code #22
24	Change of Due Date/Customer Reason
25	Access Denied by End User Customer
26	System Not Available
27	System Edit/Error
28	Lack of Manpower
29	Weather Conditions
30	Work Completed on Time-Reported Late
31	Not Installed as Engineered
32	Connecting Company Not Ready
33	Original Date Met, Field RID Required Changes
34	Natural Disaster
35	Union Issues

## *Sprint Performance Measurement Plan*

36	Overtime/budget Restriction
37	Order/tech not dispatched
38	Dark Fiber LAM interval
39	Maintenance resource priority
40	Date not signed off by owner
41	No Response to Escalation
42	Worked on Time Admin Change
50	Manpower
51	Workload
52	Due Date priority
53	Delay in table updates
54	EOC info received late from CIRAS
55	Systems outage
56	Entered late by representative
57	Late issuance of connecting company order

Note: Bolded codes are customer exclusion reasons

## *Sprint Performance Measurement Plan*

### **B. MISSED APPOINTMENT REASON CODES Sprint - Retail**

<b>Code</b>	<b>Customer Reasons - Description</b>
AB	This code will indicate working service was found at the time of installation and delayed the original due date installation.
CL	The due date was not met due to inaccurate or incomplete information received from the customer to work the service order.
RD	The customer called and requested a different date prior to the appointed due date.
SA	Plant employee attempted to complete order on appointed date but could not gain access to the customer's premise.
SO	The installation was delayed because customer requested an instrument that is not normally offered and it had to be special ordered.
SR	The customer indicated he was not ready for completion of the request on the original due date or provided incomplete or incorrect information which prohibited completion of the request on the original due date (trip was made).

### **MISSED APPOINTMENT REASON CODES Sprint - Retail**

<b>Code</b>	<b>Company Reasons - Description</b>
PL	Unanticipated plant workload precluded the completion of the order on the original due date.
SE	Request was delayed because there was a temporary lack of standard station equipment.
PF	Lack of plant facilities delayed the completion of the order.
PB	Bad cable pair or cable plant exists.
IW	Inclement weather delayed installation.
CE	Commercial provided incomplete or inaccurate information.
ME	Marketing provided incomplete or inaccurate information.
CO	Any other Company Reason.

# *Sprint Performance Measurement Plan*

## **C. DISPOSITION CODES**

### **Sprint**

<b>Code</b>	<b>Description</b>
CAN	Cancellation of ticket at customer request
CC	Came Clear
CO	Central Office – The trouble was found in central office equipment. This includes concentrators, remotes, OPMs.
<b>CPE</b>	Customer Provided Equipment – Trouble found in the end user's equipment or wiring. This also includes extended demarc. If the problem was customer action, XCC is used.
FAC	Facility – Anything from the local distribution frame protector to the protector on the end user site.
INF	Ticket created for informational purposes only
HSD	High Speed Data
OTH	Other – Sprint LTD Network
ND	Natural Disaster -- Hurricane, Earthquake, Tornado, Volcano, Typhoon
STN	Station – Network Interface Devices (NIDs), loopback devices, jacks, up to the demarc
<b>TOK</b>	Test Okay/No Trouble Found – Could not identify the problem the customer reported either through remote or field testing.
<b>XCC</b>	IXC/CLEC/ALEC
<b>CCO</b>	Connecting Company – The problem was identified in connecting company network or equipment, referrals to connecting company.
TT	Translations Trouble
UNK	Unknown
PRV	Provisioning Trouble

Note: Bolded codes are customer reason exclusion codes

## VIII. Performance Measurement Plan Compliance Methodology

February 1, 2003



# *Sprint Performance Measurement Plan*

## **Overview**

The Telecommunications Act of 1996 ("the Act"), and the FCC's associated rules, require incumbent local exchange carriers ("ILECs") to provide competitive local exchange carriers ("ALECs") with nondiscriminatory access to operations support systems ("OSS"). In the August 1996 Local Competition First Report and Order, the FCC commented generally that ILECs must provide ALECs with access to the pre-ordering, ordering, provisioning, billing, repair, and maintenance OSS sub-functions pursuant to the Act, such that ALECs are able to perform such OSS sub-functions in "substantially the same time and manner" as the ILECs can for themselves. In August of 1997, the FCC's *Ameritech Opinion* analyzed the nondiscriminatory access requirements of §251(c) to a Regional Bell Operating Company's ("RBOC's") §271 application, and clarified that for those OSS sub-functions with retail analogs, a RBOC "must provide access to competing carriers that is equal to the level of access that the RBOC provides to itself, its customers or its affiliates, in terms of quality, accuracy and timeliness." The FCC further clarified in the *Ameritech Opinion* that for those OSS functions with no retail analog, a BOC must offer access sufficient to allow an efficient competitor "a meaningful opportunity to compete."

This document describes the method used to determine parity and benchmark compliance for measures in the Sprint Performance Measurement Plan (PMP). Also described are the associated provisions that are necessary counterparts to the parity methodology (e.g., forgiveness and materiality) and benchmark methodology (e.g., small sample adjustments), and provisions that are associated with determination of compliance. This methodology is appropriate for Sprint and yields actionable compliance information regarding Sprint's service to ALEC customers.

# *Sprint Performance Measurement Plan*

## **1. General Principles**

- 1.1 The Compliance Methodology described herein is to be associated with the state commission approved Sprint Performance Measurement Plan (the “PMP”).
- 1.2 The Compliance Methodology describes the method for determining compliance for parity measures (those measurements where the level of service that Sprint provides to ALECs can be compared to the level of service Sprint provides to its retail customers), and for benchmark measures (those measurements for which there is no comparable level of service between the service Sprint provides to ALECs and the service Sprint provides to its retail customers).
- 1.3 Sprint will calculate compliance on a submeasure basis for each reportable ALEC under the provisions of this methodology. A submeasure is the individual, disaggregated reported result for each measurement defined in Sprint’s PMP.
- 1.4 For parity measurements, Sprint will use statistical testing to determine whether any submeasure differences between Sprint’s retail results and Sprint’s results for the individual ALEC, are statistically significant. Various statistical testing methodologies will be used for measures reported as means (averages), proportions (percentages) and rates.
  - 1.4.1 For parity measurements, where a submeasurement difference between Sprint’s retail results and the results for the individual ALEC is found to be statistically significant, a measure of severity (see Attachment B) will be calculated.
- 1.5 For benchmark measurements, Sprint’s performance results for each ALEC will be compared to the benchmark defined in the PMP, without the use of statistical testing for significance. If Sprint’s performance results for the ALEC are observed to be at a level of service that does not meet the benchmark, the result will be considered noncompliant..
  - 1.5.1 For benchmark measurements, if the result is found to be noncompliant, a measure of severity (see Attachment B) will be calculated.
- 1.6 The determination of compliance is further subject to certain Compliance Accuracy Provisions as described in this document.
- 1.7 Compliance will not be calculated for specific (sub)measurements per the PMP:
  - 1.7.1 For any measurement or submeasurement classified in the PMP as “Diagnostic Only”, “Parity by Design” or with benchmark level “TBD”.
  - 1.7.2 For any result that contains 4 or fewer Sprint or ALEC transactions. These results will be reported but no compliance will be assessed.

# Sprint Performance Measurement Plan

## 2. Compliance Methodology for Benchmark Measurements

2.1 Sprint service performance levels that do not achieve the benchmarks will be considered noncompliant. No statistical evaluation is performed for benchmark submeasures to determine compliance.

2.2 A measure of severity,  $D_B$  (called "D sub B", see Attachment B), will be calculated for each noncompliant benchmark submeasure, based upon the difference between the service performance levels Sprint provides to each individual ALEC, and the benchmark standard.

2.2.1 The following table sets forth the severity level for benchmark *proportion* measures, per affected ALEC per submeasure, when service does not meet the benchmark:

BENCHMARK PROPORTION MEASURES	
Performance Level	Severity Level
$0 < D_B < 5$	Minor
$5 \leq D_B < 15$	Moderate
$D_B \geq 15$	Severe

2.2.2 A different performance level is appropriate for benchmark *mean* measures. The following table sets forth the severity level for benchmark *mean* measures, per affected ALEC per submeasure, when service does not meet the benchmark:

BENCHMARK MEAN MEASURES	
Performance Level	Severity Level
$0 < D_B < 25$	Minor
$25 \leq D_B < 50$	Moderate
$D_B \geq 50$	Severe

## 3. Statistical Testing Methodology for Parity Measurements

3.1 Statistical testing will be conducted when there are at least 5 transactions each for Sprint retail and individual ALEC. Results for 4 or fewer transactions will be reported for diagnostic purposes.

3.2 The general statistical testing methodology is to conduct a hypothesis test with  
 $H_0$  : ALEC performance is "better than or equal to" Sprint performance.  
 $H_1$  : ALEC performance is "worse than" Sprint performance.

3.2.1 Calculations are made under the assumption that larger performance measurement values indicate worse service. For measures where this assumption does not hold

## *Sprint Performance Measurement Plan*

true (i.e. larger values indicate better service), the calculation of a test statistic will be reversed. In other words, a difference between Sprint and ALEC service will always be shown as a numerically negative difference when ALEC service is worse.

3.3 Any statistical test yielding a p-value will be converted to a z-score for purposes of reporting consistency, and to enable calculation of the severity value.

3.4 A significance level, or Type I error rate, of 10% will be used for testing purposes.

3.4.1 This results in a critical value of  $-1.2817$  for z-scores. Any z-score less than or equal to  $-1.2817$  will result in a rejection of  $H_0$ .

3.4.2 Modifications are made to the traditional t-statistic typically used for testing the difference between two means (due to sensitivity to testing assumptions). The “adjusted, asymmetric two-sample t-test” is designed to test the difference between means, without sensitivity to a larger ALEC variance, while adjusting for bias caused by population skewness. Instead of pooling the variances from both Sprint retail and ALEC observations, only using Sprint variance increases the ability of the test statistic to identify a difference in means should the ALEC have a greater variation. A modified z-score is calculated at the cell level by converting the adjusted, asymmetric t-test statistic via the respective probability density function.

3.5 All statistical tests will be performed at the submeasure level, per ALEC.

3.5.1 Statistical comparisons made at the cell-level, when applicable, will be aggregated into a single test statistic at the submeasure level.

3.5.2 Attachment A outlines all statistical techniques utilized for any cell-level comparisons, as well as all test statistics.

3.6 When approved by the Commission on a measurement/submeasurement basis, Sprint’s retail data and ALEC data will be compared at levels that provide the most accurate parity comparisons (i.e., wire center, etc...).

3.6.1 For statistical validity, the parity comparison between ALEC and Sprint retail data will be made with data generated from similar processes and conditions. Since the performance data are collected from daily operations, they are “observed” results. These observed results, or observational data, may not be produced under similar procedures and conditions.

3.6.1.1 This level of comparison is to ensure a “like-to-like” comparison, and is referred to as the “cell level”. The like-to-like comparison is a necessary condition for achieving correct statistical testing results for both Sprint retail and ALEC data.

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- 3.6.1.1.1 For example, suppose a new ALEC starts operations around a single wire center. For some period of time, a large percentage of the ALEC's service orders are 'N' (New) orders. When compared to Sprint's retail service orders that included 'N', 'C' and 'T' (New, Change, and Transfer) orders, Sprint may be called out of parity erroneously because 'N' orders typically take longer than 'C' or 'T' orders. By comparing only the Sprint 'N' orders to ALEC 'N' orders, a true result can be obtained.
- 3.6.1.1.2 Cell-level comparisons are for statistical accuracy, and do not necessitate additional detail in the reported submeasure level as defined in the PMP.
- 3.6.2 Cell level comparisons will be proposed by Sprint and submitted for approval by the Commission on a per-submeasure or per-measure basis.
  - 3.6.2.1 Measurement/submeasurements with Commission-approved cell-level comparisons are listed in Attachment C.
  - 3.6.2.2 When like-to-like comparisons are approved for a specific measure or submeasure, results will be calculated using various statistical techniques appropriate for cell level comparisons (see Attachment A for detailed methodology).
  - 3.6.2.3 When there is more than one cell for a submeasure, the z-scores at the cell level will be aggregated into one overall test statistic, called the “truncated z-score” (see Attachment A), which is used to determine whether a statistically significant difference exists at the submeasure level. A submeasure with a single cell will not be aggregated into the truncated z-score, but will simply use the z-score as calculated for the cell.
  - 3.6.2.4 If entries in comparison cells are exactly proportional over a covariate, the aggregated index should be very nearly the same as if comparisons on the covariate had not been done. In other words, if relative performance between Sprint retail and ALEC service at the cell level is equivalent (for all cells) to relative performance at the reporting level, then the aggregated z-score should be roughly the same as a modified z-score applied at the reporting level.
  - 3.6.2.5 The contribution of each comparison cell should depend on the number of observations in the cell.
  - 3.6.2.6 Cancellation between comparison cells will be limited. In other words, positive outcomes should not be allowed to cancel negative ones.

## *Sprint Performance Measurement Plan*

3.7 A measure of severity,  $D_p$  (called “D sub P”, see Attachment B) will be associated with a difference between the service performance levels Sprint provides to each individual ALEC and the service performance levels Sprint provides to its retail customers when service is determined to be out of parity.

3.7.1 The following table sets forth the parity severity levels, per affected ALEC per submeasure, when the result is found to be noncompliant:

PARITY MEASUREMENTS	
Measure of severity	Severity Level
$0 <  D_p  < .5$	Minor
$.5 \leq  D_p  < 2$	Moderate
$ D_p  \geq 2$	Severe

### **4. Compliance Accuracy Provisions**

4.1 The use of statistical testing for parity measures helps to mitigate the risk of noncompliance due simply to random variation in processes. However, due to the nature of the statistical tests, the expectation is that noncompliance will periodically be assessed even when a state of consistent parity exists (called a Type I error). To compensate for the impact of Type I errors, Sprint will utilize the following forgiveness plan to improve the accuracy of compliance assessment. This forgiveness plan is applied separately for each submeasure and each ALEC as follows:

4.2 Sprint’s noncompliance will be forgiven on a submeasure basis only when certain criteria are met. These criteria are:

4.2.1 For every submeasure, per ALEC, the first accrued forgiveness will occur upon the first month of activity, and again every six (6) months of activity thereafter.

4.2.2 Each forgiveness must be used within six (6) months upon accrual. In other words, an accrued forgiveness is lost if not used within six (6) months.

4.2.3 If there is no activity for a particular submeasure, per ALEC, for twenty-four (24) consecutive months, the process of accruing forgivenesses will begin again upon the next month of activity. In other words, Sprint will not track inactivity beyond twenty-four (24) months for the purpose of accruing forgivenesses.

4.2.4 A forgiveness can only be used to offset noncompliance for the same submeasure, and ALEC, for which the forgiveness was originally accrued.

4.2.5 If a forgiveness is available to be used, it must be used at the first opportunity, with the following exception:

## *Sprint Performance Measurement Plan*

- 4.2.6 A forgiveness may never be used, for a particular submeasure and ALEC, in consecutive months.
- 4.2.7 Available forgivenesses may not offset a severe non-compliance.

### 4.3 Sprint will implement materiality thresholds:

- 4.3.1 Materiality thresholds mitigate situations where benchmark results or parity comparisons misidentify differences as significant. This is due to the fact that small-sample benchmark results, or parity statistical significance, is not necessarily synonymous with business significance. Situations that produce misidentification of differences as significant include but are not limited to the following:

- 4.3.1.1 Small samples for parity measures. For measures typically associated with small samples, the measure itself can be highly sensitive to small differences in service. Similar to the small sample adjustment used for benchmark proportion measures, small samples for parity measures (especially proportion and rate measures) can result in the need for perfect or near-perfect service in order to be deemed compliant. For example, the measure *Trouble Report Rate* is defined as the number of trouble tickets per month divided by the number of access lines the customer has. Due to small ALEC transaction sizes, a single trouble report for a ALEC with few access lines can produce non-compliance. Since one trouble report for a month does not have a significant impact on the ALEC's ability to compete, this is a statistically significant difference that is not synonymous with business significance.

### **Measurement 19**

The following adjustment table applies to all submeasures in Measurement 19, and will be applied when a statistically significant difference is identified:

<b>Number of ALEC Access Lines (ALEC Denominator)</b>	<b>Permitted Troubles</b>
1 to 4	n/a (no compliance assessment)
5 to 24	1
25 to 74	2
75 or more	3

For example: For a ALEC with 100 access lines and 1 trouble, accompanied by a statistically significant difference, this table indicates that more than 3 troubles would be required before a significant business impact would occur. As a note for how *not* to use this table, consider a ALEC with 4 troubles and better than parity service (i.e. the ALEC is receiving better service than the retail results). This table does not indicate that no more than 3 troubles are ever allowable. It is used only when there is a statistically significant difference identified.

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4.3.1.2 Large samples for parity measures. Submeasures with a high volume of ALEC transactions produce statistical comparisons that are overly sensitive to small differences between Sprint and ALEC results. This can produce non-compliance when the actual difference in Sprint and ALEC results is very small. For example, if a ALEC has thousands of submeasure transactions in a month, there may be a statistically significant difference, but only a slight difference in results (i.e., a difference of 0.4% on *Usage Completeness*). Since this type of difference does not significantly impact the ALEC’s ability to compete, this is a statistically significant difference that is not synonymous with business significance.

4.4 For benchmark proportion measures, small samples can result in the need for service beyond the benchmark in order to achieve compliance. For instance, the only way to achieve a 95% benchmark with 19 orders would be to fail on none. One failure would result in performance of 94.7%. The small sample adjustments to benchmark proportion measures would, for example, allow for 1 failure in the 19 orders to achieve compliant performance.

4.4.1 Sprint will implement the following table for Small Sample Adjustments to all Benchmark Proportion Measures:

<b>Small Sample Adjustments to Benchmark Proportion Measures</b>							
<b>90% Benchmark</b>		<b>95% Benchmark</b>		<b>98% Benchmark</b>		<b>99% Benchmark</b>	
Sample Size (ALEC Denominator)	Maximum Permitted Misses	Sample Size (ALEC Denominator)	Maximum Permitted Misses	Sample Size (ALEC Denominator)	Maximum Permitted Misses	Sample Size (ALEC Denominator)	Maximum Permitted Misses
1 to 4	n/a	1 to 4	n/a	1 to 4	n/a	1 to 4	n/a
5 to 9	1	5 to 19	1	5 to 49	1	5 to 97	1
10 to 20	2	20 to 40	2	50 to 99	2	98 to 202	2
21 to 31	3	41 to 63	3	100 to 149	3	203 to 319	3
32 to 44	4	64 to 88	4	150 to 199	4	320 to 445	4
45 to 50	5	89 to 100	5	200 to 250	5	446 to 500	5

4.5 Sprint may perform a limited root-cause analysis process within 45 days of the issuance of the monthly performance reports to provide a reasonable opportunity to explain exceptional conditions. When a root-cause analysis is invoked, Sprint will have the burden of proving that but for the occurrence of an “exceptional condition” Sprint would have succeeded on the submeasure.

4.5.1 Examples of these exceptional conditions include, but are not limited to the following:

4.5.1.1 Significant activity by a third party external to and not controlled by Sprint (e.g., damaged facilities, third party systems, bomb threats)

4.5.1.2 Failure of a ALEC process or system (e.g., ALEC switch failure, ALEC backlog of orders)



## *Sprint Performance Measurement Plan*

4.5.1.3 Environmental events not considered force majeure (e.g., fire or other hazardous condition)

4.5.1.4 Force majeure events

4.5.2 Sprint will not be required to utilize a forgiveness if it is determined that noncompliance is not warranted due to an exceptional condition under this section.

4.5.3 If Sprint finds that an exceptional condition had a significant impact on Sprint's ability to provide compliant service, Sprint will exclude the affected data from results and publish a notification and full justification on the reporting website.

4.5.3.1 If the exceptional condition was identified after the affected results were reported, Sprint will exclude the affected data from results, publish a notification and full justification on the reporting website, and repost the results in accordance with the Reporting Obligations section of this Methodology.

4.5.4 Commission Staff or a ALEC may initiate a request for a review of differences associated with the assessment of exceptional conditions. If modification of reports is found to be appropriate, Sprint will repost the results in accordance with the Reporting Obligations section of this Methodology.

4.5.4.1 If the review process does not yield a mutually acceptable outcome, Commission Staff or a ALEC may initiate a request for an expedited hearing process in accordance with the Commission's rules to resolve differences. If modification of reports is requested by the Commission, Sprint will repost the recommended results in accordance with the Reporting Obligations section of this Methodology.

## **5. Reporting Obligations**

5.1 The due date for reporting performance measurements will be no later than the 20<sup>th</sup> calendar day of the month, unless otherwise approved by the Commission.

5.2 Sprint must publish results for all "reportable" ALECs. Reportable ALECs meet all of the following criteria:

5.2.1 The ALEC must have placed one (1) or more ALEC product orders in the past six (6) months.

5.2.2 The ALEC must have one (1) or more ALEC access lines.

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5.2.3 The ALEC must utilize an electronic ordering interface (i.e., IRES, FTP) to submit orders.

5.3 If stated in the Performance Measurement Plan, additional reporting obligations will apply.

### **6. Uniform Business Rules**

6.1 To ensure a unified plan across Sprint LTD states, Sprint will propose to the Florida Commission changes to measurement business rules ordered in other Sprint LTD states if applicable to the Florida PMP.

6.1.1 When other Sprint LTD states issue an order approving changes to the Sprint PMP measurement business rules, and those changes are applicable to the Florida PMP, Sprint will notify the Commission of performance measurement changes by other states, and file such changes in the appropriate docket. Such changes will be filed within 15 days of the order being issued in other states. Interested ALECs and Commission Staff shall be allowed an opportunity to review such changes before a recommendation is brought before the FPSC.

# *Sprint Performance Measurement Plan*

## Attachment A

### Statistical Calculations for Parity Submeasurements

**Statistical methods:**

<i>SAMPLE SIZE</i>	<i>TYPE OF MEASURE</i>	<i>STATISTICAL METHOD (WITHOUT CELL LEVEL COMPARISONS)</i>	<i>STATISTICAL METHOD (WITH CELL LEVEL COMPARISONS)</i>
“small”	mean	Permutation Testing	Permutation Testing (p-value converted to a z-score)
	proportion	Fisher’s Exact Test (i.e. Hypergeometric)	Standard Z, with finite population correction
	rate	Binomial Test	Standard Z, with finite population correction
“large”	mean	Modified Z, with skewness correction (Sprint variance used, rather than pooled variance)	Modified Z, with skewness correction (Sprint variance used, rather than pooled variance)
	proportion	Standard Z, with finite population correction	Standard Z, with finite population correction
	rate	Standard Z, with finite population correction	Standard Z, with finite population correction

**Statistical functions definitions:**

$\Phi^{-1}(x)$  Inverse cumulative standard normal distribution function.

$pt(t, df)$  Cumulative distribution function of a t-statistic with df degrees of freedom.

$BN(x, n, p)$  Binomial distribution density function. The probability of observing x of n successes with a probability p of success.

$CBN(x, n, p)$  Cumulative binomial distribution function.

$$CBN(x, n, p) = P(B \leq x) = \begin{cases} 0 & (x < 0) \\ \sum_{k=0}^x BN(k) & (0 \leq x \leq n) \\ 1 & (x > n) \end{cases}$$

$HG(q, m, n, k)$  Hypergeometric distribution density function where q represents the number of red balls out of a sample of size k drawn from an urn containing m red balls and n black ones.

## *Sprint Performance Measurement Plan*

$CHG(q, m, n, k)$	Cumulative hypergeometric distribution.
	$CHG(q, m, n, k) = P(H \leq q) = \begin{cases} 0 & (q < \max(0, k - m)) \\ \sum_{h=\max(0, k-m)}^q HG(h) & (\max(0, k - m) \leq q \leq \min(k, m)) \\ 1 & (q > \min(k, m)) \end{cases}$
$rank(x)$	Ranks the input variables. In case of ties, the average rank is calculated.
$choose(n, k)$	Calculates the binomial coefficients.

### **Global variable definitions:**

$L$	=	The total number of occupied cells. <sup>1</sup>
$j$	=	An index counter indicating cell number.
$n_{1j}$	=	The number of Sprint transactions in cell j.
$n_{2j}$	=	The number of ALEC transactions in cell j.
$n_j$	=	The total number of transactions in cell j.
$X_{1jk}$	=	Individual Sprint transactions in cell j.
$X_{2jk}$	=	Individual ALEC transactions in cell j.
$\Phi^{-1}$	=	Inverse cumulative standard normal distribution function.

### **Mean Performance Measures<sup>2</sup>**

At this time, the following calculations will apply to parity submeasures contained in measures 6, 7, 13, 14, 21, 28, and 44. Any subsequent change to measure classification (mean, proportion, rate) to a measure or submeasure in the PMP will take precedence over this list.

### **Variable definitions:**

<b><i>STATISTIC</i></b>	<b><i>DEFINITION</i></b>	<b><i>EXPLANATION</i></b>
$\bar{X}_{1j} = \frac{1}{n_{1j}} \sum_{k=1}^{n_{1j}} X_{1jk}$	Sprint sample mean of cell j.	Add observations and divide by the number of observations.
$\bar{X}_{2j} = \frac{1}{n_{2j}} \sum_{k=1}^{n_{2j}} X_{2jk}$	ALEC sample mean of cell j.	Add observations and divide by the number of observations.

<sup>1</sup> If comparisons are performed at the submeasure level, L = 1 and only one cell (the submeasure) exists. If comparisons are performed at the cell level, L may exceed 1 and more than one cell may exist (see Attachment C for the list of (sub)measurements approved for comparison at the cell level).

<sup>2</sup> Only perform STEP 4 and STEP 5 if L > 1 (e.g., if this is a cell-level comparison, and there is more than one cell with CLEC activity, then perform STEP 4 and STEP 5).

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$$s_{1j}^2 = \frac{1}{n_{1j} - 1} \sum_{k=1}^{n_{1j}} (X_{1,jk} - \bar{X}_{1j})^2$$

Sprint sample variance in cell j. May be NA for very small sample sizes.

Subtract each observation by its mean, square the difference, add them all up, and divide by the number of observations minus 1.

$$s_{2j}^2 = \frac{1}{n_{2j} - 1} \sum_{k=1}^{n_{2j}} (X_{2,jk} - \bar{X}_{2j})^2$$

ALEC sample variance in cell j. May be NA for very small sample sizes.

Subtract each observation by its mean, square the difference, add them all up, and divide by the number of observations minus 1.

$$\gamma_{1j} = \frac{\frac{1}{n_{1j}} \sum_{k=1}^{n_{1j}} (X_{1,jk} - \bar{X}_{1j})^3}{\left[ \frac{1}{n_{1j}} \sum_{k=1}^{n_{1j}} (X_{1,jk} - \bar{X}_{1j})^2 \right]^{3/2}}$$

The Sprint sample skewness in cell j. May be NA for very small sample sizes.

Subtract each observation by its mean, cube the difference, add them all up, and divide by the number of observations. Then divide that number by the cubed square root of the population variance.

$$\gamma_{2j} = \frac{\frac{1}{n_{2j}} \sum_{k=1}^{n_{2j}} (X_{2,jk} - \bar{X}_{2j})^3}{\left[ \frac{1}{n_{2j}} \sum_{k=1}^{n_{2j}} (X_{2,jk} - \bar{X}_{2j})^2 \right]^{3/2}}$$

The ALEC sample skewness in cell j. May be NA for very small sample sizes.

Subtract each observation by its mean, cube the difference, add them all up, and divide by the number of observations. Then divide that number by the cubed square root of the population variance.

XY<sub>j</sub>

Combined Sprint and ALEC samples.

Concatenate the Sprint and ALEC samples into a single variable.

### STEP 1: Calculate Cell Weights

$$W_j = \sqrt{\frac{n_{1j} n_{2j}}{n_j}}$$

For each cell, multiply the Sprint sample size and the ALEC sample size, divide by their sum, and take a square root.

If all Sprint and ALEC transactions within a cell have identical performance measures (e.g. service durations), set  $W_j = 0$ .

### STEP 2: Calculate a Z-statistic for each cell

a. If  $W_j = 0$ , then set  $Z_j = 0$ .

b. If  $\min(n_{1j}, n_{2j}) > 6$  and  $s_{1j}^2 > 0$

## Sprint Performance Measurement Plan

$$T_j = \begin{cases} t_j + \frac{g}{6} \left( \frac{n_{1j} + 2n_{2j}}{\sqrt{n_{1j} n_{2j} (n_{1j} + n_{2j})}} \right) \left( t_j^2 + \frac{n_{2j} - n_{1j}}{n_{1j} + 2n_{2j}} \right) & t_j \geq t_{\min j} \\ t_j + \frac{g}{6} \left( \frac{n_{1j} + 2n_{2j}}{\sqrt{n_{1j} n_{2j} (n_{1j} + n_{2j})}} \right) \left( t_{\min j}^2 + \frac{n_{2j} - n_{1j}}{n_{1j} + 2n_{2j}} \right) & \text{otherwise} \end{cases},$$

where

$$t_j = \frac{\bar{X}_{1j} - \bar{X}_{2j}}{s_{1j} \sqrt{\frac{1}{n_{1j}} + \frac{1}{n_{2j}}}},$$

$$t_{\min j} = \frac{-3\sqrt{n_{1j} n_{2j} n_j}}{g(n_{1j} + 2n_{2j})}$$

and  $g$  is the median value of all values of  $\gamma_{1j}$  over all cells within the submeasure (reporting level) such that

- i)  $\gamma_{1j} > 0$
- ii)  $n_{1j} > 6$ , and
- iii)  $n_{1j} > n_{3q}$ , where  $n_{3q}$  is the 3 quartile of all  $n_{1j}$  in cells where (i) and (ii) are true.

If no cells within a submeasure exist that satisfy conditions (i) - (iii), then set  $g = 0$ .

Calculate the p-value from the  $T_j$  statistic with  $n_{1j} - 1$  degrees of freedom using

$$P_j = pt(T_j, n_{1j} - 1).$$

Calculate the z-score  $Z_j$  from this p-value<sup>3</sup> as  $Z_j = \Phi^{-1}(P_j)$ .

c. If  $[\min(n_{1j}, n_{2j}) \leq 6$  OR  $s_{1j}^2 = 0]$  AND  $W_j > 0$  (from part 1):

1) Calculate the number of possible permutations

$$N_{\text{perms}} = \text{choose}(n_j, n_{1j})$$

2) If  $n_{1j} = n_{2j} = 1$ , then  $Z_j = \begin{cases} 0.6744898 & X_{1j} > X_{2j} \\ 0 & X_{1j} = X_{2j} \\ -0.6744898 & X_{1j} < X_{2j} \end{cases}$ .

<sup>3</sup> Set the z-score to  $T_j$  if the p-value is 0 or 1.

## *Sprint Performance Measurement Plan*

- 3) If only  $n_{1j} = 1$  then let  $R_0$  equal the rank of the Sprint observation in the combined sample  $XY_j$ . Calculate  $Z_j = \Phi^{-1}\left(\frac{R_0 - 0.5}{n_j}\right)$ .
- 4) If only  $n_{2j} = 1$  then let  $R_0$  equal the rank of the ALEC observation in the combined sample  $XY_j$ . Calculate  $Z_j = -\Phi^{-1}\left(\frac{R_0 - 0.5}{n_j}\right)$ .
- 5) If  $\min(n_{1j}, n_{2j}) \geq 2$  and  $Nperms \leq 1000$  then
  - i) Generate all possible permutations of sizes  $n_{1j}$  and  $n_{2j}$  from the combined sample  $XY_j$ .
  - ii) For each permuted sample, calculate the sum of sample of size  $n_{1j}$ .
  - iii) Let  $R_0$  equal the rank of the observed sum within all of the permuted sums. Calculate  $Z_j = \Phi^{-1}\left(\frac{R_0 - 0.5}{Nperms}\right)$ .
- 6) If  $\min(n_{1j}, n_{2j}) \geq 2$  and  $Nperms > 1000$  then
  - i) Generate 1,000 random permutations of sizes  $n_{1j}$  and  $n_{2j}$  from the combined sample  $XY_j$ .
  - ii) For each permuted sample, calculate the sum of the sample of size  $n_{1j}$ .
  - iii) Let  $R_0$  equal the rank of the observed sum within the 1000 permuted sums and calculate  $Z_j = \Phi^{-1}\left(\frac{R_0 - 0.5}{1001}\right)$ .

STEP 3: Truncate Z-statistic for each cell

$$\text{For each cell, } Z_j^* = \begin{cases} Z_j & L = 1 \\ \min(0, Z_j) & \text{otherwise} \end{cases}$$

Note that there is no truncation step if there is only one cell in the submeasure calculation.

STEP 4: Calculate the theoretical mean and variance of the truncated statistic under parity.

1. If for cell  $j$ ,  $W_j = 0$ , set  $ExpectedMean_j^{parity}$ ,  $ExpectedVariance_j^{parity}$ , and  $ExpectedSkew_j^{parity}$  all equal to 0.
2. If  $\min(n_{1j}, n_{2j}) > 6$  and  $s_{1j}^2 > 0$ 
  - a.  $ExpectedMean_j^{parity} = -\frac{1}{\sqrt{2\pi}}$ .
  - b.  $ExpectedVariance_j^{parity} = \frac{1}{2} - \frac{1}{2\pi}$

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- c.  $ExpectedSkew_j^{parity} = -\left(\frac{1}{2\sqrt{2\pi}} + \frac{2}{(2\pi)^{\frac{3}{2}}}\right)$
3. If  $\min(n_{1j}, n_{2j}) \leq 6$  OR  $s_{1j}^2 = 0$
- a. Let  $N_j = \min(Nperms, 1000)$
  - b. For  $i = 1, \dots, N_j; z_{ji} = \min\left\{0, \Phi^{-1}\left(\frac{i-0.5}{N_j}\right)\right\}$ .
  - c.  $\Theta_{ji} = \frac{1}{N_j}$
  - d.  $ExpectedMean_j^{parity} = \sum_{i=1}^{N_j} \Theta_{ji} z_{ji}$
  - e.  $ExpectedVariance_j^{parity} = \sum_{i=1}^{N_j} \Theta_{ji} z_{ji}^2 - (ExpectedMean_j^{parity})^2$
  - f.  $ExpectedSkew_j^{parity} = \sum_i \Theta_{ji} z_{ji}^3 - 3ExpectedMean_j^{parity} \times ExpectedVariance_j^{parity} - [ExpectedMean_j^{parity}]^3$

STEP 5: Calculate the initial aggregate test statistic.

$$Z_0^T = \begin{cases} Z_1 & L = 1 \\ Z^T = \frac{\sum_j W_j (Z_j^* - ExpectedMean_j^{parity})}{\sqrt{\sum_j W_j^2 \times ExpectedVariance_j^{parity}}} & otherwise \end{cases}$$

STEP 6: Calculate the final aggregate test statistic.

1. If  $L = 1$ , we use the cell modified Z statistic.  $Z^T = Z_0^T = Z_1$ .
2. If  $L > 1$ , do the following.
  - a. Calculate the aggregate skewness coefficient.

$$g_{agg} = \frac{\sum_j W_j^3 \times ExpectedSkew_j^{parity}}{6 \times \left(\sum_j W_j^2 \times ExpectedVariance_j^{parity}\right)^{\frac{3}{2}}}$$



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b. If  $Z_0^T > -\frac{1+4g_{agg}^2}{4g_{agg}}$  or  $-10^{-6} < g_{agg} < 0$  then  $Z^T = Z_0^T$ .

c. Otherwise

$$Z^T = \frac{-1 + \sqrt{1 + 4g_{agg}^2 + 4g_{agg} Z_0^T}}{2g_{agg}}$$

# Sprint Performance Measurement Plan

## Proportion Performance Measures<sup>4</sup>

The following calculations will apply to parity submeasures contained in measures 5, 8, 11, 12, 15, 17a, 20, 22, 23, 26, 31, 32, 33, 34, 37, 38, and 39. Any subsequent change to measure classification (mean, proportion, rate) to a measure or submeasure in the PMP will take precedence over this list.

### Variable definitions:

- $a_{1j}$  = Number of Sprint cases possessing an attribute of interest in cell j.
- $a_{2j}$  = Number of ALEC cases possessing an attribute of interest in cell j.
- $a_j$  = Number of cases possessing an attribute of interest in cell j.

**\*\*NOTE:** All measurements made using the number of *misses* (or negative measurement value).\*\*

STEP 1: Calculate Cell Weights.

$$W_j = \sqrt{\frac{n_{1j}n_{2j}}{n_j} \frac{a_j}{n_j} \left(1 - \frac{a_j}{n_j}\right)}$$

For each cell, multiply the Sprint sample size and the ALEC sample size, the proportion of affected transactions and the proportion of non-affected transactions, divide by the total number of transactions, and take a square root.

STEP 2<sup>5</sup>: Calculate a Z-statistic for each cell.

If  $W_j = 0$  then set  $Z_j = 0$ .

Else, calculate the Z-statistic as 
$$Z_j = \frac{n_j a_{1j} - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}$$

STEP 3: Truncate Z-statistic for each cell.

For each cell, 
$$Z_j^* = \begin{cases} Z_j & L = 1 \\ \min(0, Z_j) & \text{otherwise} \end{cases}$$

<sup>4</sup> Only perform STEP 4 if  $L > 1$  (e.g., if this is a cell-level comparison, and there is more than one cell with CLEC activity, then perform STEP 4).

<sup>5</sup> If  $L = 1$  and  $W_j = 0$ , then skip STEP 5, STEP 6 and STEP 7 and  $Z^T = 0$ .  $Z^T = 0$  in the following cases: (1)  $P_{\text{Sprint}} = P_{\text{CLEC}} = 100\%$  (when high values are “better”); (2)  $P_{\text{Sprint}} = P_{\text{CLEC}} = 0\%$  (when low values are “better”).

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Note that there is no truncation step if there is only one cell in the submeasure calculation.

STEP 4: Calculate the theoretical mean and variance of the truncated statistic under parity.

1. If for cell  $j$ ,  $W_j = 0$ , set  $ExpectedMean_j^{parity}$ ,  $ExpectedVariance_j^{parity}$ , and  $ExpectedSkew_j^{parity}$  all equal to 0.
2. If  $\min\left\{a_{1j}\left(1 - \frac{a_{1j}}{n_{1j}}\right), a_{2j}\left(1 - \frac{a_{2j}}{n_{2j}}\right)\right\} > 9$ .
  - a.  $ExpectedMean_j^{parity} = -\frac{1}{\sqrt{2\pi}}$ .
  - b.  $ExpectedVariance_j^{parity} = \frac{1}{2} - \frac{1}{2\pi}$ .
  - c.  $ExpectedSkew_j^{parity} = -\left(\frac{1}{2\sqrt{2\pi}} + \frac{2}{(2\pi)^{\frac{3}{2}}}\right)$
3. Else, if  $\min\left\{a_{1j}\left(1 - \frac{a_{1j}}{n_{1j}}\right), a_{2j}\left(1 - \frac{a_{2j}}{n_{2j}}\right)\right\} \leq 9$ .
  - a. Let  $i = \max(0, a_j - n_{2j}), \dots, \min(a_j, n_{1j})$ .
  - b. Calculate  $z_{ji} = \min\left\{0, \frac{n_j i - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}\right\}$  for each value of  $i$ .
  - c. For each value of  $i$ , calculate  $\Theta_{ji} = HG(i, n_{1j}, n_{2j}, a_j)$ .
  - d.  $ExpectedMean_j^{parity} = \sum_{i=1}^{N_j} \Theta_{ji} z_{ji}$ .
  - e.  $ExpectedVariance_j^{parity} = \sum_{i=1}^{N_j} \Theta_{ji} z_{ji}^2 - (ExpectedMean_j^{parity})^2$ .
  - f.  $ExpectedSkew_j^{parity} = \sum_{i=1}^{N_j} \Theta_{ji} z_{ji}^3 - 3ExpectedMean_j^{parity} \times ExpectedVariance_j^{parity} - [ExpectedMean_j^{parity}]^3$

STEP 5: Calculate the initial aggregate test statistic.

1. If  $L = 1$  and  $\min\left\{a_{1j}\left(1 - \frac{a_{1j}}{n_{1j}}\right), a_{2j}\left(1 - \frac{a_{2j}}{n_{2j}}\right)\right\} \leq 9$ ,

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$$Z_0^T = \Phi^{-1}(\alpha)$$

where  $\alpha = CHG(a_{1j}, n_{1j}, n_{2j}, a_j)$ .

$$2. \text{ If } L > 1 \text{ or } \min \left\{ a_{1j} \left( 1 - \frac{a_{1j}}{n_{1j}} \right), a_{2j} \left( 1 - \frac{a_{2j}}{n_{2j}} \right) \right\} > 9,$$

$$Z_0^T = \begin{cases} Z_1 & L = 1 \\ Z^T = \frac{\sum_j W_j (Z_j^* - \text{ExpectedMean}_j^{\text{parity}})}{\sqrt{\sum_j W_j^2 \times \text{ExpectedVariance}_j^{\text{parity}}}} & \text{otherwise} \end{cases}$$

STEP 6: Calculate the final aggregate test statistic.

1. If  $L = 1$ , we use the cell modified Z statistic.  $Z^T = Z_0^T$ .

2. If  $L > 1$ , do the following.

a. Calculate the aggregate skewness coefficient.

$$g_{\text{agg}} = \frac{\sum_j W_j^3 \times \text{ExpectedSkew}_j^{\text{parity}}}{6 \times \left( \sum_j W_j^2 \times \text{ExpectedVariance}_j^{\text{parity}} \right)^{\frac{3}{2}}}$$

b. If  $Z_0^T > -\frac{1 + 4g_{\text{agg}}^2}{4g_{\text{agg}}}$  or  $-10^{-6} < g_{\text{agg}} < 0$  then  $Z^T = Z_0^T$ .

c. Otherwise

$$Z^T = \frac{-1 + \sqrt{1 + 4g_{\text{agg}}^2 + 4g_{\text{agg}}Z_0^T}}{2g_{\text{agg}}}$$

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## Rate Performance Measures<sup>6</sup>

The following calculations will apply to parity submeasures contained in measure 19. Any subsequent change to measure classification (mean, proportion, rate) to a measure or submeasure in the PMP will take precedence over this list.

### Variable definitions:

$b_{1j}$  = Number of Sprint base elements in cell j.

$b_{2j}$  = Number of ALEC base elements in cell j.

$b_j$  = Total number of base elements cell j.

$r_{1j} = n_{1j} / b_{1j}$  = Sprint sample rate of cell j.

$r_{2j} = n_{2j} / b_{2j}$  = ALEC sample rate of call j.

$q_j = b_{1j} / b_j$  = Relative proportion of Sprint elements for cell j.

STEP 1: Calculate Cell Weights.

$$W_j = \sqrt{\frac{b_{1j} b_{2j} n_j}{b_j b_j}}$$

For each cell, multiply the number of Sprint base elements, the number of ALEC base elements and the number of transactions, divide by the total number of base elements squared, and take a square root.

STEP 2<sup>7</sup>: Calculate a Z-statistic for each cell.

If  $W_j = 0$  then set  $Z_j = 0$ .

Else, calculate the Z-statistic as 
$$Z_j = \frac{n_{1j} - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}}$$

STEP 3: Truncate Z-statistic for each cell.

For each cell, 
$$Z_j^* = \begin{cases} Z_j & L = 1 \\ \min(0, Z_j) & \text{otherwise} \end{cases}$$

<sup>6</sup> Only perform STEP 4 if  $L > 1$  (e.g., if this is a cell-level comparison, and there is more than one cell with CLEC activity, then perform STEP 4).

<sup>7</sup> If  $L = 1$  and  $W_j = 0$ , then skip STEP 5, STEP 6 and STEP 7 and  $Z^T = 0$ .  $Z^T = 0$  in the following cases: (1)  $P_{\text{Sprint}} = P_{\text{CLEC}} = 100\%$  (when high values are “better”); (2)  $P_{\text{Sprint}} = P_{\text{CLEC}} = 0\%$  (when low values are “better”).

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Note that there is no truncation step if there is only one cell in the submeasure calculation.

STEP 4: Calculate the theoretical mean and variance of the truncated statistic under parity.

1. If for cell  $j$ ,  $W_j = 0$ , set  $ExpectedMean_j^{parity}$ ,  $ExpectedVariance_j^{parity}$ , and  $ExpectedSkew_j^{parity}$  all equal to 0.

2. If  $\min(n_{1j}, n_{2j}) > 15$  and  $n_j q_j (1 - q_j) > 9$

a.  $ExpectedMean_j^{parity} = -\frac{1}{\sqrt{2\pi}}$ .

b.  $ExpectedVariance_j^{parity} = \frac{1}{2} - \frac{1}{2\pi}$

c.  $ExpectedSkew_j^{parity} = -\left(\frac{1}{2\sqrt{2\pi}} + \frac{2}{(2\pi)^{\frac{3}{2}}}\right)$

3. If  $\min(n_{1j}, n_{2j}) \leq 15$  or  $n_j q_j (1 - q_j) \leq 9$

a. Let  $i = 0, \dots, n_j$ .

b. Calculate  $z_{ji} = \min\left\{0, \frac{i - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}}\right\}$  for each value of  $i$ .

c. For each value of  $i$ , calculate  $\Theta_{ji} = BN(i, n_j, q_j)$ .

d.  $ExpectedMean_j^{parity} = \sum_{i=1}^{N_j} \Theta_{ji} z_{ji}$ .

e.  $ExpectedVariance_j^{parity} = \sum_{i=1}^{N_j} \Theta_{ji} z_{ji}^2 - (ExpectedMean_j^{parity})^2$ .

f.

$ExpectedSkew_j^{parity} =$

$$\sum_{i=1}^{N_j} \Theta_{ji} z_{ji}^3 - 3ExpectedMean_j^{parity} \times ExpectedVariance_j^{parity} - [ExpectedMean_j^{parity}]^3$$

STEP 5: Calculate the initial aggregate test statistic.

1. If  $L = 1$  and  $(\min(n_{1j}, n_{2j}) \leq 15$  or  $n_j q_j (1 - q_j) \leq 9)$ ,

$$Z_0^T = \Phi^{-1}(\alpha)$$

where  $\alpha = CBN(n_{1j}, n_j, q_j)$ .

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2. If  $L > 1$  or  $[\min(n_{1j}, n_{2j}) > 15$  and  $n_j q_j (1 - q_j) > 9]$ ,

$$Z_0^T = \begin{cases} Z_1 & L = 1 \\ Z^T = \frac{\sum_j W_j (Z_j^* - \text{ExpectedMean}_j^{\text{parity}})}{\sqrt{\sum_j W_j^2 \times \text{ExpectedVariance}_j^{\text{parity}}}} & \text{otherwise} \end{cases}$$

STEP 6: Calculate the final aggregate test statistic.

1. If  $L = 1$ , we use the cell modified Z statistic.  $Z^T = Z_0^T$ .
2. If  $L > 1$ , do the following.
  - a. Calculate the aggregate skewness coefficient.

$$g_{\text{agg}} = \frac{\sum_j W_j^3 \times \text{ExpectedSkew}_j^{\text{parity}}}{6 \times \left( \sum_j W_j^2 \times \text{ExpectedVariance}_j^{\text{parity}} \right)^{\frac{3}{2}}}$$

b. If  $Z_0^T > -\frac{1 + 4g_{\text{agg}}^2}{4g_{\text{agg}}}$  or  $-10^{-6} < g_{\text{agg}} < 0$  then  $Z^T = Z_0^T$ .

c. Otherwise

$$Z^T = \frac{-1 + \sqrt{1 + 4g_{\text{agg}}^2 + 4g_{\text{agg}} Z_0^T}}{2g_{\text{agg}}}$$

# *Sprint Performance Measurement Plan*

## **Attachment B**

### **Measures of Severity (parity and benchmark)**

#### **Benchmark Measurements:**

Definition:

$$D_B = \frac{I - B}{B} \times 100\%$$

where **I** is Sprint performance (mean, proportion, or rate) in service to a ALEC, and **B** is the benchmark set as the performance tolerance limit. This calculation assumes that the larger the value of **I**, the worse the service. For measures where this assumption does not hold true, the subtraction in the numerator is reversed. In other words, the numerator should be positive when the service to the ALEC is worse than the benchmark.

Rationale:

Upon determining that Sprint performance (in service to a ALEC) is not meeting the benchmark, the measure of severity will be calculated to represent the percentage difference from the benchmark. For example, if the benchmark is 4 hours and Sprint performance is 5 hours, then  $D_B = \frac{5.0 - 4.0}{4.0} \times 100\%$ , or **D<sub>B</sub> = 25%**. For a benchmark mean measure, this result would be considered a “moderate” deviation from the benchmark. Such a measure for compliance is only valid if the benchmark is set appropriately; set as a tolerance limit as opposed to a target.

#### **Parity Measurements:**

Definition:

Given  $Z^T$  (as calculated in STEP 6, Attachment A, for mean, proportion, and rate measures), define the measure of severity  $D_p$  as:

$$D_p = \sqrt{\frac{1}{N_1} + \frac{1}{N_2}} Z^T$$

where  $N_1$  and  $N_2$  are the number of Sprint and ALEC transactions combined from all cells in a submeasure with  $W_j > 0$  (where  $W_j$  is the cell weight for cell  $j$ , as defined in Attachment A). As described in section 9 of this document,  $Z^T$  is negative when the ALEC is receiving non-compliant service.

Rationale:

Upon determining that an out-of-parity situation exists for a particular submeasure, for a particular ALEC, a measure of severity will be calculated to reflect the magnitude of the performance difference between Sprint’s retail and Sprint’s ALEC service. The statistical tests



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performed to determine whether service is in parity, provide the “yes” or “no” answer to the question of parity service. Further, the z-score itself provides a measure for the degree of certainty as to whether parity service exists. However, this degree of certainty does not indicate the severity of non-compliance, mainly due to the fact that the z-score is highly dependent on the sample size. If the submeasure has a considerably large sample size, yet a small difference between Sprint’s retail and Sprint’s ALEC service, the large sample size could cause the z-score to indicate a high confidence in lack of parity. This high confidence told by the z-score indicates that there is a *statistically* significant difference in service for the ALEC, but it does not indicate that there is a significant difference in service from a *business impact* point of view.

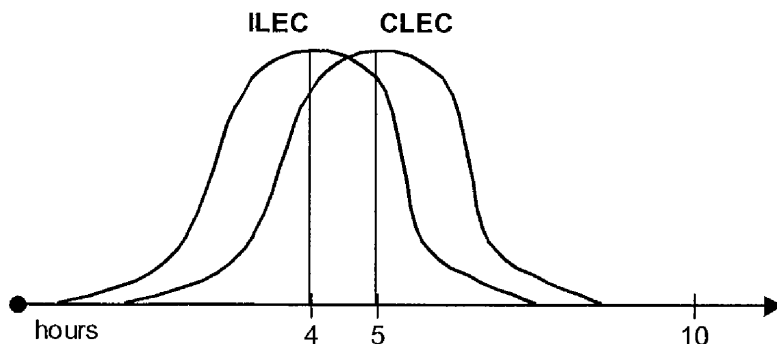
A reasonable measure of severity will provide an indication for how different the Sprint’s ALEC service is from that of Sprint’s service to its retail customers. Because parity service is defined as the ALEC receiving equivalent service to that provided to Sprint’s retail customers, the measure of severity should indicate the difference between Sprint’s retail and Sprint’s ALEC service. In practice, there are important considerations for appropriately calculating such a measure of severity. First, the measure should be consistent with the results of the z-score, accounting for the differences in calculations that result from small samples, truncating, weighting of cells, and adjustments for skewness. Second, the measure of severity should be applicable to all types of measurements (mean, proportion, and rate). These considerations can be taken into account by utilizing the aggregate, truncated z-score,  $Z^T$ ; simply adjusting the z-score so as to not include the sensitivity to sample size.

To visualize how this measure of severity works, consider the example of a mean submeasure having a single cell. In this case, it can be shown that  $D_P$  is simply the difference in mean performance between the Sprint’s retail and Sprint’s ALEC service, measured relative to the dispersion (or standard deviation) of Sprint’s retail service. As an equation, this yields:

$$D_P = \frac{\bar{X}_1 - \bar{X}_2}{s_1}, \text{ where } \bar{X}_1 \text{ is the mean Sprint retail service, } \bar{X}_2 \text{ is the mean Sprint service to}$$

ALECs, and  $s_1$  is the standard deviation of Sprint’s retail service. Under this example, consider the following graphs depicting a scenario in which a ALEC receives out-of-parity service on two different submeasurements (“Submeasurement A” and “Submeasurement B”):

### Submeasurement A



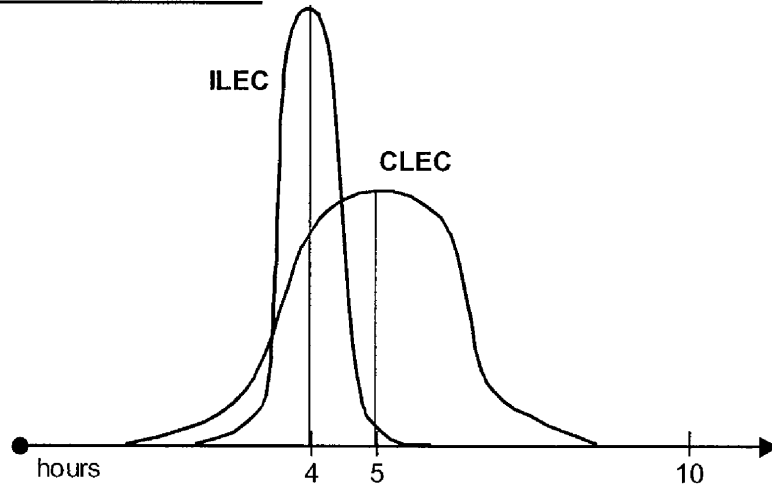
If the service provided on submeasurement A to Sprint’s retail customers has a standard deviation of 1.2 hours, then

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$$D_P = \frac{4.0 - 5.0}{1.2}, \text{ or } D_P = -0.83.$$

So, for submeasurement A, the ALEC receives out-of-parity service that is a “moderate” severity.

### **Submeasurement B**



If the service provided to Sprint’s retail customers on submeasurement B has a standard deviation of 0.4 hours, then

$$D_P = \frac{4.0 - 5.0}{0.4}, \text{ or } D_P = -2.50.$$

So, for submeasurement B, the ALEC receives out-of-parity service that is a “severe” severity.

Notice that the difference in the mean service is the same for both submeasurements. However, because Sprint’s service to its retail customers on submeasurement B has a lower dispersion (or standard deviation) than Sprint’s service on submeasurement A, the severity of the mean difference is higher for submeasurement B.

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## **Attachment C**

### **Parity Measures and Submeasures with Cell-level Comparisons**

Cell-level comparisons (using the statistical methodology described in Attachment A) will be applied to the following measurements:

<b>Measurement Number / Description</b>	<b>Cell Level (i.e., wire center, etc...)</b>
5 - Percentage of Orders Jeopardized	Wire Center, Company Number
6 - Average Jeopardy Notice Interval	Wire Center, Company Number
7 - Average Completed Interval	CLLI Code, Wire Center, Company Number
8 - Percent Completed Within Standard Interval	CLLI Code, Wire Center, Company Number
11 - Percent of Due Dates Missed	CLLI Code, Wire Center, Company Number
12 - Percent Due Dates Missed Due to Lack of Facilities	CLLI Code, Wire Center, Company Number
13 - Delay Order Interval to Completion Date (For Lack of Facilities)	CLLI Code, Wire Center, Company Number
14 - Held Order Interval	Wire Center, Company Number
15 - Provisioning Trouble Reports Prior to Service Order Completion	Company Number
17a - Percentage Troubles in 5 Days for New Orders	CLLI Code, Wire Center, Company Number
19 - Customer Trouble Report Rate	Wire Center, Company Number
20 - Percentage of Customer Trouble Not Resolved Within Estimated Time	CLLI Code, Wire Center, Company Number
21 - Average Time to Restore	CLLI Code, Wire Center, Company Number
22 - POTS Out of Service Less Than 24 Hours	Wire Center, Company Number
23 - Frequency of Repeat Troubles in 30 Day Period	CLLI Code, Wire Center, Company Number
28 - Usage Timeliness	Company Number
31 - Usage Completeness	Company Number
32 - Recurring Charge Completeness	Company Number
33 - Non-Recurring Charge Completeness	Company Number
34 - Bill Accuracy	Company Number
37 - Database Update Timeliness	Company Number
38 - Percent Database Accuracy	Company Number
39 - E911MS Database Update Interval	Company Number

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## **Definitions:**

Company Number – Sprint LTD has two operating companies in FL. Therefore we calculate results at the company level to establish parity before aggregating the results into one FL result.

Wire Center – A building housing one or more end office and/or tandem switches.

CLLI Code – (Common Language Location Identifier) An 11-digit code that Sprint LTD assigns to a Carrier's location to designate the central office or area served by a central office.