LCI International
Worldwide Telecommunications

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

July 31, 1997

William F. Caton, Secretary
Federal Communications Commission
Room 222
1919 M Street, NW
Washington, DC 20554

Re: CC Docket No. 96-98, RM 9101

Dear Mr. Caton:

Enclosed please find an original and four copies of Appendices A and B to LCI International Telecom Corp.' Reply Comments to CC Docket No. 96-98, RM 9101. The Appendices inadvertently were not attached to our Reply Comments.

If you have any questions or require additional information, please phone Mike Hazzard at 703-836-7370.

Sincerely,

Douglas W. Kinkoph

Enclosures

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Appendix A

§ 51.___ Terms and Definitions

Affected Parties. Each of the six largest predominantly facilities-based IXCs; each of the four largest facilities-based non-IXC and non-ILEC providers of local telephone service (as identified by the Common Carrier Bureau of the FCC); the Competitive Telephone Association; the Association for Local Telecommunications Services; each of the ten largest ILECs; and the United States Telephone Association.

Government Observers/Participants. Five persons appointed by the FCC, five persons appointed by the United States Department of Justice (DOJ), and five persons appointed by the National Association of Regulatory Utility Commissioners (NARUC).

ILEC/ILEC Affiliate/Subsidiary. Any ILEC subject to this order.

Network Platform. The unbundled combined network elements, which the Act and this Commission's orders require ILECs to furnish to CLECs.

OSS. All functions to which the Commission has ordered ILECs to provide parity of access to CLECs.

Performance Standards.[1] The measurement categories, default performance benchmarks, and measurement methodologies adopted by the Commission that appear in § 51.___.

§ 51.___ Industry/Government Negotiations on Performance Standards [Alt. A]

(a) The affected parties shall meet to establish agreed upon measurement categories, default performance benchmarks, and measurement methodologies, which collectively shall be denominated "performance standards." All meetings of the affected parties also shall be attended by the government observers/participants, who may observe, organize, lead, and/or otherwise participate in the meetings as they deem appropriate.

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[1] Due to the recent adoption of terminology agreed upon by LCUG member companies, LCI has made the following modifications relative to the terminology it uses throughout its brief and Appendices A and B.

Performance Intervals has become Performance Benchmarks
Measurement Formulas has become Measurement Methodologies

The purpose of these changes is to ensure a consistent use of terminology among LCUG companies. No substantive changes have been made.

(b) Within ten days after [date of entry of order], the representatives of each affected party and of the government observers/participants shall be identified to the Common Carrier Bureau of the Commission, which shall make the identities publicly available. The affected parties and government observers/participants, no later than eleven days after [date of entry of order] shall organize themselves into sub-groups which meet separately to consider each of the topics set forth below.

(c) Within fifteen days after [date of entry of order], the denominated affected parties shall provide to each other and all other participants in the meetings, all data relating to current ILEC performance standards (or information from which such standards might be derived), both for resale and unbundled network elements (including the network platform) in monthly reports from January 1, 1997 forward. Such data shall be accompanied by, but not limited to, a full text explanation of the information provided.

(d) Within twenty days after [date of entry of order], meetings shall be commenced to develop and agree upon performance benchmarks and measurement methodologies for the following measurement categories: pre-ordering; ordering and provisioning; maintenance and repair; billing; operator services and directory assistance; network performance; and interconnection, unbundled network elements, and unbundled network element combinations.

(e) Not later than the forty-eighth day after [date of entry of order], (i) the ILEC affected parties, jointly, and (ii) the non-ILEC affected parties, jointly, each shall file a report with the Commission setting forth the status and results of the meetings. Each such report shall set forth (i) all performance standards issues upon which agreement has been reached; (ii) all performance standards issues upon which agreement has not been reached; and (iii) detailed statements as to each issue for which agreement was not reached, along with any observations desired as to other issues. The DOJ and NARUC-appointed state government observers/participants shall have the right, within ten days after the affected parties' filings, to file documents commenting upon the affected parties' filings, and otherwise reflecting their observations and views.

(f) Upon receipt of the reports referenced in subparagraph (e), the Commission shall assess their content, along with other information then available to it, and shall issue a final rule within sixty days establishing performance standards. In so doing, the Commission may accept, or may set aside, all or any part of the performance standards upon which agreement was reached.

§ 51.___ Commission to Set Performance Standards [Alt. B]

(a) Each ILEC shall disclose: (i) each measurement category for which it has established performance standards for itself, together with appropriate historical data, performance benchmarks, measurement methodologies, and reporting requirements; and (ii) each measurement category for which it has not established performance benchmarks or reporting requirements for itself.

(b) Thirty days from [date of entry of order], for each of the measurement categories set forth in § 51.___, an ILEC shall measure, using the measurement methodologies set forth in § 51.___, its performance benchmarks with respect to the provision of access to OSS for itself and its performance benchmarks with respect to carriers seeking access to its OSS. [NOTE see (c) below]

(c) For purposes of determining whether an ILEC is providing nondiscriminatory access to its OSS, the Commission shall first consider the data included in the monthly reports that it receives from the ILEC pursuant to the reporting requirements established in § 51.___. In the absence of information for any particular measurement category regarding an ILEC's performance benchmarks with respect to its own access to OSS, the Commission shall use the default performance benchmarks set forth in § 51.___ to determine whether the ILEC is providing nondiscriminatory access to its OSS.

(d) To ensure operability and scalability of OSS functions, each ILEC, to meet its burden of demonstrating compliance with the Section 251 OSS access requirements, shall demonstrate through a beta test that each billing site it operates can process the lesser of (i) 10% of its customer base per month for the regions covered by that billing site, or (ii) 20,000 orders per billing site per day. The beta test shall run for not fewer than ninety days and shall include demonstrated OSS access for both resale and unbundled network elements, including the network platform. The beta tests shall be conducted within ninety days of the date of this order, and shall be repeated at ninety-day intervals thereafter, with results reported to the Commission and relevant state public utility commissions, which may take such corrective action under Section IV of these Rules as is appropriate to ensure compliance.

§ 51.___ Reporting Requirements

(a) Each ILEC subject to this order shall provide to each CLEC with which it has a contract, or which is purchasing resale services or unbundled network elements under tariff, a monthly report of the ILEC's performance benchmarks for the preceding twenty-four months. Such reports shall contain data relating to the ILEC itself, any ILEC affiliate/subsidiary, and all CLECs on average, and for the individual CLEC to which the report is made. Such reports also shall describe fully the basis for each measurement reported.

(b) Each ILEC subject to this order shall provide to the Commission, and to each state public utility commission in states in which it is certified as a common carrier, a monthly report of its performance benchmarks. The report shall be made both individually, as to each state in which the ILEC is certified as a common carrier, and on an aggregate basis. The information reported by ILECs under this subparagraph shall be broken out by CLECs as a group, by CLECs individually, by any ILEC affiliate/subsidiary, and by the ILECs' own internal performance benchmarks. All such information shall be publicly disclosed, except the information relative to the individual CLECs, which shall be provided to each CLEC on a confidential basis.

(c) The reporting requirements of subparagraphs (a) and (b) shall begin thirty days from [date of entry of order].

(d) In addition to the actual reporting of performance benchmarks, ILECs shall self-report all measurements, analyze the results, and take corrective action when poor performance or non-parity situations are identified. Corrective action steps shall include schedules and milestones to be developed by the ILECs and CLECs as appropriate to ensure timely implementation of corrective steps. Failure of an ILEC to self-report or take appropriate corrective action steps shall be considered by the Commission in any remedial action brought by it.

(e) Each ILEC shall notify each CLEC with which it has signed a contract, or which is purchasing telecommunications services under tariff, or which is purchasing unbundled network elements of the following: each Universal Service Order Code (USOC) and the English translation thereof for (i) resold services, (ii) services provided by the ILEC to end users but not subject to resale, and (iii) each unbundled network element (or combinations thereof) provided by the ILEC to any CLEC; and all planned changes to software or business processes affecting any CLEC, with full written documentation and explanation of such changes, not less than sixty days prior to the date such changes are planned to go into effect.

§ 51.___ Technical Standards

(a) The ILECs and CLECs who have participated in industry-wide standards-setting bodies shall report to the Commission no later than May 1, 1998 on the progress that has been made on setting technical standards for software interfaces.

(b) If uniform industry-wide technical standards for the software interfaces necessary to transfer customers from an ILEC to a CLEC and back, for from a CLEC to a CLEC, have not been adopted by an industry-wide standards-setting body by May 1, 1998, the Commission shall undertake, on an expedited basis, to receive affected parties' views on appropriate technical standards to be set by the Commission. If Commission action is needed to establish technical standards because industry-wide standards-setting bodies have failed to act, the Commission shall establish appropriate technical standards no later than October 1, 1998.

(c) Upon adoption of technical standards for software interfaces by industry-wide standards setting bodies and/or the Commission, ILECs shall conform to such standards within 120 days. In addition, ILECs shall be required to continue to provide or begin providing access to its OSS by means of fax and Web/GUI interfaces to any CLEC which requests such interfaces.

§ 51.___ Remedial Provisions

(a) The Commission has determined that money damages, in any form, are ineffective to ensure compliance by the ILECs with Section 251.

(b) To remedy violations of Section 251 and this order and related orders, the Commission, after notice and opportunity for hearing, shall prohibit offending ILECs from marketing long distance services to their local customers for a period of time to be determined by the Commission and until full compliance with Section 251 and the Commission's orders is demonstrated through the performance standards reports required in this order.

AUTHORITY: Sections 1, 4, 201, 202, 214, 303, 251, 271 of the Telecommunications Act.

Appendix B

PROPOSED RULES THAT WOULD IMPLEMENT OSS PERFORMANCE STANDARDS

§ 51.__ Access to Operations Support Systems

(a) ***Establishment of Performance Standards.***[1] The measurement categories, default performance benchmarks and measurement methodologies are collectively denominated "performance standards."

Effective [date], for each of the measurement categories set forth herein, an ILEC shall measure, using the measurement methodologies set forth herein, its performance with respect to the provision of access to OSS for itself and its performance with respect to carriers seeking access to its OSS. For purposes of determining whether an ILEC is providing nondiscriminatory access to its OSS, the Commission shall first consider the data included in the monthly reports that it receives from the ILEC pursuant to the reporting requirements established elsewhere in this order. In the absence of information for any particular category or subcategory regarding an ILEC's performance with respect to its own access to OSS, the Commission shall use the default performance benchmarks set forth herein to determine whether the ILEC is providing nondiscriminatory access to its OSS.

In instances in which an ILEC has provided its data and, it is complete, the provision for default performance benchmarks is not applicable. The ILEC's own data (where complete) will be used to determine parity of access.

ILECs may be providing parity of access to CLECs to the OSS, but under performance benchmarks which are less than reasonable. In such instances, state public utility commissions are the appropriate bodies to establish reasonable performance benchmarks.

(b) ***Categories of Performance Standards.*** The following sets forth the performance standards for each measurement category as required by the FCC.

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(1) ***Pre-order.*** The pre-order standard measures the incumbent LEC's timeliness in responding to a query for pre-ordering information. The incumbent LEC shall measure the timeliness in responding to queries for the following pre-ordering information: 1) Due Date Reservation; 2) Feature Function Availability; 3) Facility Availability; 4) Street Address Validation; 5) Service Availability Information; 6) Appointment Scheduling; 7) Customer Service Records; and 8) Telephone Number Assignments.

(i) ***Default performance benchmarks.*** If an incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. For items 1-7 above, the incumbent LEC shall provide responses to any query within 2 seconds or less and within 5 seconds or less 100% of the time. The response time of 2 and 5 seconds shall be measured from the time the query is launched until the data is received by the requesting entity. For requests of 30 telephone number assignments or less the incumbent LEC shall provide such telephone numbers within 2 seconds or less 98% of the time and within 5 seconds or less 100% of the time. For requests of 30 telephone number assignments or more the incumbent LEC shall provide such telephone numbers within 2 hours 100% of the time.

(ii) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LECs and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance benchmarks for pre-ordering and/or compliance with the default performance intervals set forth above.

$$\left[\frac{\text{Number of Responses Received on Time}}{\text{Total Number of Queries Sent}}\right] \times 100$$

Mean Cycle Time

(2) ***Ordering and provisioning.*** The ordering and provisioning standard is made up of the following four sub-categories: 1) Orders completed within specified intervals; [2] 2) Order Accuracy; 3) Order Status; and 4) Number of Orders Held.

(i) ***Orders completed within specified intervals.*** This standard measures the incumbent LEC's ability to complete orders for installation, feature changes and service disconnects within a requested due date. The incumbent LEC shall measure the amount of time it takes to work and installation order relative to the following: 1) Unbundled Network Element

[2] Reported for the following types of service or facility: Resold POTS, Resold ISDN, Resold Centrex/Centrex-like, Resold PBX trunks, Resold Channelized T1.5 Service, Other Resold Services, UNE Platform (at least DS0 loop + local switch + transport elements), UNE Channelized DS1 (DS1 loop + multiplexing), Unbundled DS0 loop, Unbundled DS1 loop, Other Unbundled loops, Unbundled Switch, Other UNEs.

Platform (at least DSO loop, local switch and all common elements); 2) Unbundled Network Element Platform channelized DS1 (DS1 loop and multiplexing); 3) Unbundled DS0 loop; 4) Unbundled DS1 loop; 5) Other Unbundled loops; 6) Unbundled Switch; 7) Dedicated Transport (DS0/DS1); 8) Dedicated transport (DS3). The incumbent LEC shall measure the interval to complete a request for a feature change. Each Incumbent LEC shall measure the following relative to the completion of disconnection orders: 1) Resale products and/or service; 2) Unbundled Network Element switching; and 3) Unbundled Network Elements (other).

(A) ***Default performance benchmarks.*** If an incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. For items 1, 3,4,5 relative to installation orders, such items shall be completed within 24 hours. Items 2 and 6 shall be completed within 48 hours and items 7 and 8 shall be completed within 3 and 5 business days respectively. All feature changes shall be completed within 5 business hours and items 1-3 pertaining to the disconnection of service shall be completed within 24 hours. Unless specifically identified above, orders that require no premises visit or no physical work shall be completed within 1 day of service order receipt. Orders that require a premises visit or physical work shall be completed within 3 days of service order receipt. 99% of all orders shall be completed on the specified due date.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LECs own performance benchmarks for ordering and provisioning relative to orders completed within specified intervals and/or compliance with the applicable state agencies or the default performance benchmarks set forth above.

$$\left[\frac{\text{Number of Orders Completed on Time}}{\text{Total Number of Orders Completed}}\right] \times 100$$

Mean Completion Time

(ii) ***Order accuracy.*** This standard measures the incumbent LEC's accuracy and completeness relative to the provisioning or disconnection of service. The incumbent LEC shall measure the percentage of orders that are completed without error.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance **benchmarks** at the following default levels. The incumbent LEC shall complete no less than 99% of all orders without error.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LECs compliance with the incumbent LEC's own performance benchmarks for ordering and provisioning relative to the accuracy of orders and/or compliance with the default performance benchmarks set forth above.

$$\left[\frac{\text{Number of Orders Completed without Error}}{\text{Total Number of Orders Sent}}\right] \times 100$$

(iii) ***Order status.*** This standard measures the incumbent LEC's response time. Each incumbent LEC shall measure their response time relative to Firm Order Confirmations (C-FOCs and D-FOCs*). Jeopardies/revised due date, Rejects, and Order Completions.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. The incumbent LEC shall provide Firm Order Confirmations and Jeopardies/revised due dates within 4 hours or less 100% of the time. The incumbent LEC shall provide a response to rejects within 15 seconds or less 97% of the time and responses to order completions shall be provide within 30 minutes or less 97% of the time. The order status interval shall be measured from the time the order is sent to the incumbent LEC until a status is received.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LECs and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC own performance benchmarks for ordering and provisioning relative to the accuracy of orders and/or compliance with the default performance benchmarks set forth above.

$$\left[\frac{\text{Number of C-FOCs Returned in} \leq 4 \text{ Hours}}{\text{(Total Number of Orders Sent - Syntax Rejects Returned)}}\right] \times 100$$

Mean Time to Return FOC

$$\left[\frac{\text{Number of D-FOCs Returned in} \leq 4 \text{ Hours}}{\text{(Total Number of Orders - Rejects Returned)}}\right] \times 100$$

Mean Time to Return D-FOCS

$$\left[\frac{\text{Number of Syntax Rejects Returned in} \leq 15 \text{ Seconds}}{\text{(Total Number of Syntax Rejects Returned)}}\right] \times 100$$

Mean Time to Return Rejects

$$\left[\frac{\text{Jeopardies Returned Within 70\% of Allotted Order Time}}{\text{Total Number Jeopardies Returned}}\right]$$

$$\left[\frac{\text{(Number of Completions in} \leq \text{30 Minutes)}}{\text{(Total Number Completed Orders)}}\right] \times 100$$

Mean Time to Return Completion

Jeopardies = Total C-FOCS - Total Rejects

(iv) ***Number of held orders.*** This standard measures the percentage and number of orders held in a given period. The incumbent LEC shall report two distinct measurements relative to the number of orders held. First, the incumbent LEC shall report the number of orders held between 15 and 89 days. Second, the incumbent LEC shall report the number of orders held for 90 days or longer.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. The number of orders held by the incumbent LEC that fall between 15 and 89 days shall not be more than 0.1% of total orders. The incumbent LEC shall not hold any order for a period of 90 days or more.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance benchmarks for ordering and provisioning relative to the number of held orders and/or compliance with the default performance benchmarks set forth above.

$$\left[\frac{\text{(Number of Orders Held for} \geq \text{"x" Days)}}{\text{(Total Number of Orders Sent to Incumbent LEC in Past x Days)}}\right] \times 100$$

Mean time of orders held prior to completion

(3) ***Maintenance and repair.*** The maintenance and repair category is made up of four sub-categories: 1) Time to Restore*; 2) Repeat Troubles*; 3) Troubles Per 100 Lines*; and 4) Estimated Time to Restore*. [3]

(i) ***Time to restore.*** This measures the percentage of services and products restored by the incumbent LEC within 24 hours or less. The incumbent LEC shall measure: 1) The number of "Out of Services" that require no dispatch; 2) All other troubles requiring dispatch.

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[3] *Ibid.*

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. The incumbent LEC shall restore 85% or more of all out of services that require no dispatch within 2 hours, 95% or more within 3 hours and 99% or more within 4 hours. The incumbent LEC shall restore 95% or more of all other troubles within 24 hours, 90% or more within 4 hours, 95% or more within 8 hours and 99% or more within 16 hours.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance benchmarks for maintenance/ repair relative to Time to Restore and/or compliance with the default performance benchmarks set forth above.

$$\left[\frac{\text{(Number of Troubles Restored Within "x" hours}}{\text{Total Number Troubles}}\right] \times 100$$

where "x" = 2, 3, 4, 8, 16, or 24 "running clock" hours

$$\left[\frac{\text{Total Number of Trouble Minutes}}{\text{Total Number of Trouble Reports}}\right]$$

(ii) ***Repeat troubles.*** This standard measures the frequency of recurring customer trouble on the same line, circuit or service. The incumbent LEC shall measure the percentage of customer troubles recurring within 30 days of initial problem reported.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. The incumbent LEC shall have 1% or less of troubles recur within 30 days of the initial reported problem.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance benchmarks for maintenance/ repair relative to repeat troubles and/or compliance with the default performance benchmarks set forth above.

$$\left[\frac{\text{Number of Telephone Lines Reporting} \geq 2 \text{ Troubles in the Current Report Months}}{\text{Total Number of Troubles in Current Report Months}}\right]$$

(iii) ***Trouble per 100 lines.*** This standard measures the frequency of troubles reported within the incumbent LEC's network. The incumbent LEC shall measure the number of troubles per 100 lines per month.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. The incumbent LEC shall have 1.5 or less troubles per 100 lines per month.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance benchmarks for maintenance/ repair relative to troubles per 100 lines and/or compliance with the applicable state agencies or the default performance benchmarks set forth above.

$$\left[\frac{\text{Number of Initial \& Repeated Trouble Reports Per Exchange Per Month}}{\text{Total Number of Lines Per Exchange}}\right] \times 100$$

(iv) ***Estimated time to restore (appointments met).*** This standard measures the incumbent LEC's ability to restore services to the requesting telecommunications carrier within the time estimated for premises visits required and premises visits not required.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, they shall provide such performance benchmarks at the following default levels. The incumbent LEC shall have to meet its estimated time to restore service no less than 99% of the time.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance benchmarks for maintenance/repair relative to estimated time to restore and/or compliance with the default performance benchmarks set forth above.

$$\left[\frac{\text{(Number of Customer Trouble Appointments Met}}{\text{Total Number Customer Trouble Appointments}}\right] \times 100$$

(4) ***General.*** The general standard is made up of two sub-categories: 1) Systems Availability; and 2) Center Responsiveness.

(i) ***Systems availability.*** This standard measures the availability of operations support systems and associated interfaces for pre-ordering, ordering, provisioning and maintenance. The incumbent LEC shall measure the amount of unplanned downtime associated with each of these support systems and associated interfaces.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. The incumbent LEC shall report the unplanned downtime per month for the following interfaces: 1) Pre-ordering inquiry interface; 2) Ordering interface; and 3) Maintenance interface. The incumbent LEC shall have 0.1% or less of unplanned downtime per month for each interface.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance benchmarks for general performance standards and/or compliance with the default performance benchmarks set forth above.

$$\left[\frac{\text{Number Hours Interface and/or System Not Available as Scheduled}}{\text{Total Number Hours Scheduled Availability}}\right] \times 100$$

Mean Number of Hours Available

(ii) ***Center responsiveness.*** This standard measures the time for the incumbent LEC representative to answer business office calls in provisioning and trouble report centers. Each incumbent LEC shall measure the percentage of calls answered with 20 seconds or less and the number of calls answered within 30 seconds.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. Incumbent LECs shall answer 95% or more of all calls within 20 seconds. Incumbent LECs shall answer 100% of all calls within 30 seconds.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance benchmarks for general performance standards and/or compliance with the default performance benchmarks set forth above.

$$\left[\frac{\text{Number of Calls Answered Within Specific Time Frame}}{\text{Total Number of Calls from Requesting Carrier to Center}}\right] \times 100$$

Mean Time to Answer Calls without IVR
If IVR is used - Mean Time to Answer Calls after the end of IVR

(5) ***Billing.*** The billing standard is made up of two sub-categories: 1) Timeliness of Billing Records Delivered; and 2) Accuracy.

(i) ***Timeliness of billing records.*** This standard measures the timeliness of billing records and wholesale bills. Each incumbent LEC shall measure the following relative to the timeliness of billing records sent to requesting carriers: 1) Percentage of billing records received in 24 hours or less; 2) Percentage of billing records received in 48 hours or less; and 3) Percentage of wholesale bills received within 10 calendar days of bill date.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. The incumbent LEC shall provide requesting carriers with billing records within 24 hours 99.9% of the time or greater. 100% of billing records shall be received by requesting carriers within 48 hours. Wholesale bills shall be received within in 10 calendar days of bill date 99.95% of the time or greater.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance benchmarks for billing performance standards and/or compliance with the default performance benchmarks set forth above.

$$\left[\frac{\text{Number of Billing Records Delivered On Time}}{\text{Total Number of Billing Records Received}}\right] \times 100$$

Mean Time to Provide Billing Records

Mean Time to Deliver Wholesale Bills

(ii) ***Accuracy.*** This standard measures the percentage and mean time of billing records delivered to the requesting carrier in the agreed-upon format and with the agreed-upon content. The incumbent LEC shall measure the following relative to the accuracy of billing records: 1) Percentage of wholesale bills that are financially accurate; 2) Percentage of all billing records that are accurate.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide performance benchmarks at the following default levels. 98% or greater of the incumbent LEC's wholesale bills to the requesting carrier shall be financially accurate. 99.99% or greater of all billing records shall be accurate.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance benchmarks for billing performance standards and/or compliance with the default performance benchmarks set forth above.

$$\left[\frac{\text{Number of Accurate and Complete Formatted Mechanized Bills}}{\text{Total Number of Mechanized Bills Received}}\right] \times 100$$

$$\left[\frac{\text{Number of Billing Records Transmitted Correctly}}{\text{Total Number of Billing Records Received}}\right] \times 100$$

(6) ***Operator services and directory assistance.*** The operator services and directory assistance function measures the percent and mean time a call is answered by an operator service or directory assistance operator. Each incumbent LEC shall measure the percentage of calls answered in 10 seconds by live agents and the percentage of calls answered within 2 seconds by a voice response unit.

(i) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. 90% or greater of all calls handled by a live agent shall be answered within 10 seconds. 100% of all calls handled by a voice response unit shall be answered within 2 seconds. The timing of a call shall be measured form the initiation of ringing until the customer's call is answered.

(ii) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance benchmarks for operator services and directory assistance performance standards and/or compliance with the default performance benchmarks set forth above.

$$\left[\frac{\text{Number of Calls Answered Within "x" Seconds}}{\text{Total Directory Assistance Calls}}\right] \times 100$$

where "x" equals 2 or 10 seconds

Directory Assistance Mean Time to Answer

$$\left[\frac{\text{Number of Calls Answered Within "x" Seconds}}{\text{Total Operator Service calls}}\right] \times 100$$

where "x" equals 2 or 10 seconds

Operator Service Mean Time to Answer

(7) ***Network performance (Network Parity).*** Network performance (network parity) compares the incumbent LEC's performance for its own customer to the incumbent LEC's performance for requesting carriers' customers. Each incumbent LEC shall measure the deviation between the level of service it provides its own customers and the service it provides for requesting carriers' customers relative to network transmission quality, speed of connection and reliability. Relative to network transmission quality the incumbent LEC shall measure the percentage of deviation between the level of service it provides its own customers and the service it provides for requesting carriers' customers for: 1) subscriber loop loss; 2) signal to noise ratio; 3) idle channel circuit noise; 4) loops-circuit balance; 5) circuit notched noise; 6) attenuation distortion. The incumbent LEC shall also measure the deviation relative to the speed of connection for: 1) Dial Tone Delay; 2) Post Dial Delay; and 3) Call Completion/Delivery Rate. Finally, the incumbent LEC shall measure reliability relative to the percentage of network incidents effecting greater than 5,000 blocked calls and network incidents affecting greater than 100,000 blocked calls.

(i) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. The deviation between the level service the incumbent LEC provide to its own customers and that the incumbent LEC provides to the requesting carrier's customer shall be equal to or less than 0.10% for the above network performance measurements. Statistical comparison based on the mean incumbent LEC customer experience and standard deviation from this mean, the mean requesting carrier customer experience and standard deviation from this mean, and the number of observations used to determine these means.

(ii) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own network performance intervals and/or compliance with the default performance intervals set forth above.

$$\left[\frac{\text{Mean Incumbent LEC Customer Experience - Mean Requesting Carrier Customer Experience}}{\text{Mean Incumbent LEC Customer Experience}}\right] \times 100$$

(8) ***Interconnection/unbundled network elements and unbundled network element combinations (the "network platform").*** This section is made up of two sub-categories: 1) Availability of Network Elements; and 2) Performance of Network Elements.

(i) ***Availability of unbundled network elements.*** This standard measures the availability of network elements such as signaling link transport, SCPs/Databases, and loop combinations. Each incumbent LEC shall measure the following: 1) Availability of loop combinations; 2) the unavailability of the signaling link transport relative to the A and D links and SCPs/Databases; and 3) SCPs/Databases correctly updated.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance **benchmarks** at the following default levels. The incumbent LEC shall ensure that loop combinations are available 100% of the time. The unavailability of the signaling link transport associated with A and D link shall be equal to or less than 1 minute per year. The unavailability of the signaling link transport associated with the SCPs/Databases shall be equal to or less than 15 minutes per year. SCPs/Databases shall be correctly updated within 24 hours 99% or more of the time.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance intervals and/or compliance with the default performance intervals set forth above.

$$\left[\frac{\text{Number of Minutes Loop Available}}{\text{Total Number of Minutes}}\right] \times 100$$

$$\left[\frac{\text{Number of Minutes A-Link Unavailable During "x" Years}}{\text{"x" Years}}\right]$$

Where X < or > year. After year, monthly reporting should be for a rolling year

$$\left[\frac{\text{Number of Seconds D-Link Unavailable During "x" Years}}{\text{"x" Years}}\right]$$

$$\left[\frac{\text{Number of Database Records Correctly Updated}}{\text{Total Number of Update Requests Received by ILEC}}\right] \times 100$$

$$\left[\frac{\text{Number of Database Records Updated Within 24 Hours of Updated Request Received}}{\text{Total Number of Database Update Requests Received}}\right]$$

(ii) ***Performance of network elements.*** This standard measures the performance of network elements. Examples of what each incumbent LEC shall measure is as follows: 1) Line Information Data Base (LIDB) reply rate to all query attempts; 2) LIDB query time-out; 3) Unexpected data values in replies for all LIDB queries; 4) Percentage of LIDB queries return a missing customer record availability of loop combinations; 5) Group troubles in all LIDB queries. In addition, the incumbent LEC must report: 1) Mean Post Dial Delay for "0" calls from local service operator (LSO) to requesting carrier operator service platform; 2) Post Dial Delay for "0+" calls with 6 digit analysis from LSO to requesting carrier operator service platform; and 3) Percent of call attempts to requesting carrier operator service platform that were blocked.

(A) ***Default performance benchmarks.*** If the incumbent LEC does not have historical data relative to the above measurement category, it shall provide such performance benchmarks at the following default levels. Line information database (LIDB) reply rate to all query attempts shall be equal to or greater than 99.95%; LIDB query time-out shall be equal to or less than 0.05%; Unexpected data values in replies for all LIDB queries shall be equal to or less than 1%; Percentage of LIDB queries that return a missing customer record shall be 0%; Group troubles in all LIDB queries shall be equal to or less than 0.5%.

The Mean Post Dial Delay for "0" calls from LSO to requesting carrier operator service platform shall be no greater than 2 seconds 95% of the time; and the mean shall be equal to or less than 1.75 seconds.

The percentage of call attempts to a requesting carrier operator services platform that are blocked shall be equal to or less than 0.1%.

(B) ***Measurement methodologies.*** The following methodologies shall be used by the incumbent LEC and requesting carriers to determine the incumbent LEC's compliance with the incumbent LEC's own performance intervals for interconnect/unbundled elements and combos and/or compliance with the default performance intervals set forth above.

$$\left[\frac{\text{(Number of LIDB [or 800 or AIN or n] Query Replies Received By Requesting Carrier}}{\text{(Total Number LIDB [or 800 or AIN or n] Queries Received by ILEC}}\right] \times 100$$

$$\left[\frac{\text{(Number of LIDB [or 800 or AIN or n] Time Out Responses Received By Requesting Carrier}}{\text{(Total Number LIDB [or 800 or AIN or n] Queries Received by Incumbent LEC}}\right] \times 100$$

$$\left[\frac{\text{(Number of LIDB [or 800 or AIN or n] Query Replies with Unexpected Data Values by Requesting Carrier)}}{\text{(Total Number LIDB [or 800 or AIN or n] Queries Received by Incumbent LEC)}}\right] \times 100$$

$$\left[\frac{\text{(Number of LIDB [or 800 or AIN or n] Query Replies Missing Customer Record Received by Requesting Carrier)}}{\text{Total Number LIDB [or 800 or AIN or n] Queries Received by Incumbent LEC}}\right] \times 100$$

$$\left[\frac{\text{(Cumulative Total Number of Post Dial Delay Seconds Experienced on "0" Calls From LSO to Requesting Carrier Operator Service Platform)}}{\text{(Total Number of "0" Calls from LSO to Requesting Carrier Operator Service Platform)}}\right] \times 100$$

$$\left[\frac{\text{(Cumulative Total Number of Post Dial Delay Seconds Experienced on "0+" Calls with 6-Digit Analysis from LSO to Requesting Carrier Operator Service Platform)}}{\text{(Total Number of "0+" Calls with 6-Digit Analysis from LSO to Requesting Carrier Operator Service Platform)}}\right]$$

$$\left[\frac{\text{(Number of "0+" Calls with 6-Digit Analysis from LSO to Requesting Carrier Operator Service Platform that have Post Dial Delay} \leq \text{2 Seconds)}}{\text{(Total Number of "0+" Calls with 6-Digit Analysis from LSO to Requesting Carrier Operator Service Platform)}}\right]$$

$$\left[\frac{\text{Number of Blocked Call Attempts to Requesting Carrier Operator Service Platform}}{\text{Total Number of Call Attempts to Requesting Carrier Operator Service Platform}}\right] \times 100$$