Public Service Commission of Wisconsin
Investigation into Ameritech's Operational Support Systems
Docket 6720-TI-160

Second Report
of
Temporary Administrative Law Judge

October 2, 2000

I. Summary of Recommendations

As discussed in further detail in this report, the temporary ALJ's recommendations for this proceeding follow:

1. As documented in this Second Report, several issues were resolved through the prehearing conferences held since the Commission issued its July 19, 2000, order in this proceeding. The temporary ALJ recommends that the Commission issue, as soon as practical, a further order regarding these resolved issues. Specifically, the further order should include the following issues:

- Resolved OSS enhancements and process improvements (Issues A-AA) as set forth in Attachment D, and resolved portions of unresolved issues set forth in Attachment E.
- Resolved Performance Measures, (including business rules, change management process, and 6-month review), as set forth in Attachments F and G.
- The Wisconsin Master Test Plan, Version 2.0, Attachment I, except for the open issue discussed further in section VII below.
- Delegation of Wisconsin Master Test Plan execution decisions to the Commission's designee.
- The dispute resolution procedure as set forth in section IX below.
- Continuing John Kern's appointment for Master Test Plan implementation and execution.

The temporary ALJ recommends that the Commission direct staff of the Telecommunications Division to prepare a draft proposed order for the Commission's consideration covering these resolved issues.

2. The following unresolved issues should be included in the November 2000 hearing:

- The unresolved OSS enhancements and improvements (Issues A-AA) as set forth in Attachment E.
- The unresolved performance measures, as discussed above and set forth in Attachment I.
- Performance assurance plans.

3. The temporary ALJ also recommends that a process be established by the regular ALJ at the October prehearing conference whereby issues that are resolved after the filing of this Second Report and before the close of the November hearing are placed on the record by the parties through testimony or stipulations.

II. Background

On July 19, 2000, the Commission issued an order (Order) (Attachment A) in this docket directing the parties to participate in further prehearing conferences pursuant to WIS. STAT. § 227.44(4)(a)5 under the direction of the undersigned temporary Administrative Law Judge (ALJ) and Facilitator John Kern. (Order, pp. 2-3.) The Order incorporates by reference the "Report of the Temporary Administrative Law Judge", dated June 1, 2000, (June 1 Report) (Attachment B). This "Second Report of Temporary Administrative Law Judge" (Second Report) is filed pursuant to the Order, pp. 2-3:

> 3. Report. At such time as the temporary ALJ concludes that the parties have exhausted their abilities to identify issues and reach agreements during the further prehearing conferences, the temporary ALJ shall prepare a final report containing at least the following information: (1) a listing of all Phase I test design and implementation parameters (performance measures, benchmarks, pre-testing system upgrades or improvements, testing sequences, business processes, etc.) upon which the parties have reached agreement and seek Commission acceptance of the parameters in the order concluding Phase I and (2) a statement of disputed issues which the temporary ALJ recommends be made subject to the hearing scheduled to commence no later than November 2000. The final report shall be presented to the Commission for review with sufficient time to permit Commission action, as appropriate, but no later than October 1, 2000. To the extent the parties reach agreement on certain issues, including a proposed Master Test Plan, prior to October 1, 2000, the temporary ALJ shall provide interim report(s) to the Commission on those items. The Commission may take action on the items contained in such interim or final report(s) when it deems appropriate and may accept or modify those items in whole or in part.

This Second Report sets forth the resolved and unresolved or open issues on: (1) OSS enhancements and improvements (Issues A-AA); (2) performance measures (PM); (3) performance assurance plans; (4) Wisconsin Master Test Plan; (5) provision for additional resolved issues; (6) dispute resolution procedures; (7) Wisconsin Master Test Plan implementation and execution; and (8) recommendations. The temporary ALJ recommends the Commission issue an order on resolved issues and refer to hearing in November 2000 the unresolved or open issues.

III. Further Prehearing Conferences

Pursuant to the Order, the parties participated in 17 further prehearing conferences under the direction of the temporary ALJ and Facilitator John Kern. Attachment C summarizes the prehearing conference activity. In addition to these prehearing conferences, several telephone conferences were held on a variety of issues. These prehearing and telephone conferences produced several agreements, thus significantly reducing the number of open issues for the November hearing. Parties will continue to "work" open issues between now and the November hearing. This report attempts to document what has been resolved and what remains open as of October 2, 2000.

IV. OSS Enhancements/Process Improvements Made as a Result of the Prehearing Conferences (Issues A-AA)

The Order states at pages 4-5:

> 7. <u>OSS Enhancements/Process Improvements Made as a Result of the Prehearing Conferences</u>. The parties have reached tentative agreement on enhancements and process improvements to Ameritech's OSS that are designed

> to resolve various issues. While tentative agreement exists, implementation of a number of the enhancements and process improvements by Ameritech will occur during June through September 2000. In addition, CLECs must validate in writing that the solutions to OSS problems included in the OSS enhancements and process improvements, in fact resolve the problems. To the extent that the parties reach impasse during the further prehearing conferences as to whether the proposed solutions resolve the problems, those matters shall become issues in the hearing to be scheduled in November 2000. Ameritech shall provide to the parties and implement the following OSS enhancements, processes and procedures on or before the following dates…(footnote omitted)

Several issues related to OSS enhancements and improvements (issues A-AA) were resolved through the prehearing conferences held since the Commission issued its Order. These resolved issues are set forth in Attachment D. The temporary ALJ recommends the Commission issue an order in the month of October to close these issues.

According to the Order, unresolved or open A-AA issues will be submitted to hearing in November 2000. Those issues are set forth in Attachment E. To the extent portions of the issues described in Attachment E are already resolved, as acknowledged in that attachment, the resolved portions of such issues should be included in the further Commission order recommended above.

To the extent parties disagree with this Second Report as to the classification and characterization of closed and open issues, those parties can state their respective positions at the prehearing conference to be held before ALJ Patzke on October 5, 2000.

V. Performance Measures

The Order states at pages 12-13:

> 13. Temporary ALJ Report. The parties agree that the recommendations contained in the June 1 Report should be adopted by the Commission as an Order of the Commission, except as amended in this proposed order. As amended by this order, the June 1 Report is accepted by the Commission and the recommendations of the temporary ALJ addressing A–AA issues, master test plan, performance measures, penalty plan and further issue development in Phase I are adopted and ordered by the Commission.

The parties agreed to the performance measures as set forth in "Performance Measures, version 1.6"[1] (Attachment F) and the "Change Management Process for Performance Measurements," dated September 28, 2000, (Attachment G) except for the following issues: (1) the creation of additional identified performance measures for certain A to AA issues (see Attachment H, a ruling by the temporary ALJ dated September 25, 2000, regarding the need for absolute benchmarks for certain service quality measures); (2) the time period between reviews in the review process for revising performance measures, specifically whether such reviews should occur on a 3- month basis rather than a 6 month basis for the first year; (3) the degree of detail to be provided when results are restated; and, (4) a list of ten specific measures for which proposed modifications have not been agreed upon as listed in Attachment I. In all other respects, the temporary ALJ recommends that the Commission approve the Performance

[1] This document does not include pages 190 to 197 which are Appendix Three and Appendix Four. Appendix Three includes assessment methodology that is a disputed issue in regard to performance assurance. Appendix Four includes a list of flow-through eligible orders that is a disputed issue in regard to issue "S," flow through.

Measures[2] and the Change Management Process for Performance Measurements. The temporary ALJ recommends that the four issues discussed above be addressed in the November hearing.[3]

VI. Performance Assurance Plan

At the September 14, 2000, prehearing conference, Ameritech, Competitive Local Exchange Carriers (CLECs) and Sprint presented their respective preferred performance assurance plans (also known as remedy plans.) No agreement was reached as the result of these discussions. A performance assurance plan is a schedule of payments to be made by Ameritech in the event it does not meet its performances measure standards. Disputed issues associated with performance assurance plans include to whom payments are made, (i.e. CLECs, federal or state treasuries), the level of those payments, and how statistical measurements (e.g. z-scores) are applied when making parity comparisons and evaluating compliance with established benchmarks. The temporary ALJ recommends that all aspects of performance assurance plans should be submitted to hearing in November 2000.

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[2] These performance measures were developed using the performance measures, including all the definitions, exclusions and associated business rules as adopted by the Public Utility Commission of Texas in July 1999 as a base per paragraph 4 of the "Statement of Principles" included as Appendix B to this Commission's March 29, 2000, order. Further modifications to these performance measures reflect the results of Performance Measure Collaboratives in Illinois, Michigan and Ohio.

[3] Some additional measures have been added related to A-AA issues and are included as Wisconsin specific measures. While it is reasonable to implement these measures at this time, these measures may need further modifications. In addition, as listed above, it is not yet agreed whether any further measures will be needed. The CLECs-proposed measures that were not agreed to by Ameritech. These unresolved performance measures issues should be considered in issue (1) above, i.e. additional performance measures for certain A to AA issues.

VII. Master Test Plan (MTP)

Approval of MTP

As a result of the prehearing conferences, the parties, along with KPMG Consulting, agreed to the Wisconsin Master Test Plan, Version 2.0, (Attachment J), except for the issue concerning the sufficiency of the capacity testing included in the MTP for manual order processing as described below. In all other respects, the temporary ALJ recommends that the Commission approve the MTP[4].

Capacity testing issue

Under the master test plan, volume testing to stress Ameritech's systems will be performed only for certain items which flow through Ameritech's processes without manual intervention. As presently designed, the master test plan will not provide a volume or stress test for manual items such as loop ordering and provisioning, except for an inspection and document review of Ameritech capacity management process. CLECs contend that loop ordering and provisioning are among a number of Ameritech processes which require manual intervention, and which are most frequently used by CLECs. CLECs contend that they require some manner to gauge the ability and willingness of Ameritech to increase its workforce to sufficient levels to properly provision CLEC orders on a manual basis at increased volumes as expected in the future. CLECs have requested that Ameritech, in some fashion such as retaining an independent third party expert, provide a workforce review that would identify workforce additions necessary to accomplish manual provisioning requirements at certain increased order levels. CLECs

[4] Note: The MTP as written provides further opportunities for the Commission to modify the MTP during the testing process as may be found necessary.

argue that the failure of the master test plan to address this issue will result in significant uncertainty regarding wholesale service levels and will adversely impact retail customers. The temporary ALJ recommends that this open issue be addressed in the November 2000 hearing.

Pretest Activities

Prehearing conference discussions were also held regarding whether KPMG should be allowed to conduct pre-test activities before the start of actual testing. Parties agreed that it would be reasonable for pre-test activities to begin. KPMG described pre-test activities to include, but not be limited to, designing test beds, reviewing publicly available Ameritech documentation, consulting with CLECs about test participation, conducting background interviews and site visits with CLECs, participating as observers in various relevant regulatory and pre-hearing conferences, purchasing and configuring servers and workstations, conducting project planning and scheduling, and analyzing and addressing test entrance criteria. Activities that would not be considered pre-test activities include sending electronic transactions to Ameritech and conducting "on the record" interviews and site visits with Ameritech personnel for evaluation purposes. The temporary ALJ recommends that the Commission authorize KPMG to begin pretest activities.

Delegation

At such time the Commission determines that OSS testing should proceed under an approved MTP, the Commission will be required to make daily or weekly decisions

during the execution of the test. In the interest of time and administrative ease, the temporary ALJ recommends that the Commission delegate to its designee, such as the Administrator of the Telecommunications Division, the authority to make routine or non-controversial types of MTP execution decisions. Significant policy issues arising during the testing should be forwarded to the Commission for resolution.

VIII. Additional Resolved Issues

To the extent the parties resolve issues after the filing of this Second Report and before the close of the November 2000 hearing, the parties should jointly present testimony or stipulations to that effect in the November hearing. Accordingly, it is recommended that a process be established by the ALJ at the October prehearing conference in this docket to address this contingency.

IX. Dispute Resolution Procedure

Ameritech will not have implemented several agreed-upon products or process improvements in sufficient time for CLECs to evaluate compliance before the November hearing. To address this issue, the following informal dispute resolution process was developed by the parties. The temporary ALJ recommends the Commission approve this process.

1. INFORMAL DISPUTE RESOLUTION

1.1. This informal dispute resolution process and expedited formal dispute resolution process shall apply to any dispute arising from or relating to the issues identified in Docket No. 6720-TI-160 and which dispute has not otherwise been resolved through the commission decision issued from the November 2000 hearings in Docket No. 6720-TI-160.

1.2. For disputes under the informal dispute resolution process, a party shall provide electronically a "Notice of Dispute" to Ameritech, which shall be served electronically on all parties to Docket No. 6720-TI-160 and the Administrator of the Telecommunications Division of the Commission.

1.3. The Notice of Dispute shall describe the basis of the dispute, including any problems arising from or relating to the implementation of an enhancement or any delay in the implementation of an enhancement or any other failure of Ameritech to comply with its obligations concerning the issues in Docket No. 6720-TI-160, including the A-AA issues.

1.4. Ameritech and other parties to Docket No. 6720-TI-160 shall provide electronically a written response to the Notice of Dispute within 5 business days after service of the Notice of Dispute. Such response shall be served on the parties to Docket No. 6720-TI-160 and the Administrator of the Telecommunications Division of the Commission.

1.5. Within 10 business days after service of the Notice of Dispute, or at such later date as may be mutually agreed upon by the parties, Ameritech shall convene a meeting of all participants in Docket No. 6720-TI-160 to consider the Notice of Dispute. This meeting shall be used to attempt to resolve the dispute in good faith and to record the positions of all parties. Commission staff, at its discretion, may participate.

1.5.1. If the dispute described in the Notice of Dispute is not resolved, then Section 2 below shall apply.

1.5.2. In the event the dispute described in the Notice of Dispute is resolved, the parties shall notify the Commission of the resolution. In any instance where the terms of resolution involve a modification to Commission order, the parties shall take the appropriate steps to obtain necessary Commission approvals.

2. EXPEDITED FORMAL DISPUTE RESOLUTION

2.1. Except as specifically set forth in this expedited formal dispute resolution process, the procedures used to address disputes that are not resolved under

Section 1 above, shall be those procedures set forth in the Commission's rules for formal complaints and hearings. Nothing shall prevent a party from electing to pursue remedies under the rules of the Commission without reference to this expedited procedure, provided that Ameritech may not avoid this expedited procedure by filing a complaint under Wis. Admin. Code § PSC 2.11 et. seq.

2.2. If the parties are unable to resolve the dispute at the meeting required under Subsection 1.5, a party may file a complaint concerning a dispute subject to Subsection 1.1 with the Commission under this expedited procedure.

> 2.2.1. The complaint shall be filed by hard copy with the Commission and shall be served either personally, by mail, by fax or by email upon Ameritech and all other parties to Docket 6720-TI-160.
>
> 2.2.2. A complaint filed under this subsection shall include a statement that the requirements of Subsection 1.5 have been fulfilled and that Ameritech did not correct the situation as requested.
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> 2.2.3 For purposes of computing due dates under this procedure, the date of service shall be the date the complaint is received at Ameritech's Legal Department at 722 North Broadway, Milwaukee, Wisconsin, by hard copy, facsimile or e-mail.

2.3. Reasonable discovery specific to the issue of the complaint may commence upon service of the complaint. Any disputes related to discovery shall be resolved by a person designated by the Commission to handle complaints under this procedure (referred to hereafter as the "Commission's designee"). The Commission's designee shall be a person with prior telecommunications experience.

2.4. An answer and any other responsive pleading to the complaint shall be filed with the Commission in hard copy and served on all other parties in Docket 6720-TI-160. Service on the complainant and all other parties in Docket 6720-TI-160 shall be made through any method provided for in 2.2.1. Service and filing of the answer and any other responsive pleading shall be made within 5 business days after the date on which the complaint is filed.

2.5. A pre-hearing conference shall be scheduled by the Commission's designee as soon as practicable to identify issues and establish a schedule and procedures for resolving the complaint. The parties and the Commission's designee may work to coordinate the resolution of disputes such that multiple disputes may be the subject of a single hearing.

2.6. The Commission's designee may conduct such fact-finding as deemed necessary or appropriate under the circumstances. An evidentiary hearing shall be

held when there is a dispute of material fact, unless the parties waive a hearing and agree to a resolution of the dispute on written submittals.

2.7. Absent extraordinary circumstances, the decision of the Commission's designee will be issued (a) within 85 days of the service of the complaint where a hearing is held, (b) as soon as practicable, but in any event, within 70 days of the service of the complaint where no hearing is held. The decision shall include reasons for the disposition of the complaint and, if a violation of obligations by Ameritech is found, directions and a deadline for correction of the violation.

2.8. Exceptions to the decision and/or rulings of the Commission's designee may be taken to the Commission pursuant to Wis. Adm. Code § PSC 2.66.

VIII. Master Test Plan Implementation and Execution

The Commission's Order at page 3 continued John Kern's appointment to coordinate further prehearing conferences. According to the Order, Mr. Kern's appointment ends as of the submission of this Second Report:

> 4. Prehearing Conference Management Function. The appointment of John Kern as coordinator, pursuant to the Commission order dated May 3, 2000, shall continue through the further prehearing conferences identified in this order. Ameritech Wisconsin, at its sole expense, shall continue to retain Mr. Kern under contract, which shall provide for Commission (including staff) direction and control of Mr. Kern's activities. Mr. Kern's function shall involve the discretion to plan, schedule, and implement activities to achieve performance, cost, and scheduling objectives of the further prehearing conferences. Mr. Kern shall do all things necessary to schedule and conduct prehearing conference meetings to the end of producing the reports described in paragraph 3, subject to the temporary ALJ's direction and final approval for submission.

Although further prehearing conferences are not recommended in this Second Report, there will be frequent telephone conferences and other activities with KPMG Consulting and the parties regarding implementation and execution of the Master Test Plan. The temporary ALJ recommends that the Commission continue Mr. Kern's appointment under the same terms and conditions as set forth in the Order to advise and

assist Commission staff during the implementation and execution of the Master Test Plan. If the Commission decides to continue Mr. Kern's appointment, the Commission should issue another order to that effect.

Respectfully submitted _____

_____
Scot Cullen
Temporary Administrative Law Judge

Attachments:

A. PSCW Order of July 19, 2000, in Docket 6720-TI-160
B. Report of the Temporary Administrative Law Judge, June 1, 2000
C. Summary of Further Prehearing Conferences
D. Resolved OSS Enhancements and Process Improvements
E. Unresolved OSS Enhancements and Process Improvements
F. Performance Measures, Version 1.6
G. Change Management Process for Performance Measurements
H. Temporary ALJ Ruling on Service Quality Benchmarks
I. Open Performance Measure Issues
J. Master Test Plan, Version 2.0
K. Interim GUI Agreement
L. Account Management Handbook
M. Hot Cut Process Flow
N. Facilities Modification Process

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Date Mailed
July 19, 2000

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation Into Ameritech Wisconsin Operational Support Systems	6720-TI-160

ORDER

This is a class 1 contested case proceeding to investigate and resolve problems associated with the Operational Support Systems (OSS) of Ameritech.[1] The proceeding is divided into phases. Phase I deals with the "development of [Ameritech's] OSS performance measures and benchmarks, and how OSS performance testing should proceed." The OSS testing is actually conducted in Phase II.

Pursuant to paragraph 3 of the Commission's order dated March 29, 2000, the Temporary Administrative Law Judge submitted his Report dated June 1, 2000 (the "June 1 Report"), concerning the results of the series of prehearing conferences held to consider the issues related to Phase I of this proceeding. At the prehearing conference on June 8, 2000, the parties reached agreement on a process for identifying, discussing and attempting to resolve the remaining issues in Phase I and postponing the hearing scheduled for July 18, 2000, until November 2000. The parties have moved the Commission to adopt this proposed order. Appendix A is the current service list of parties in the docket.

[1] The Notice of Proceeding named Wisconsin Bell, Inc., the telecommunications utility doing business in Wisconsin as "Ameritech" (Ameritech Wisconsin) as the party nominally responsible for the OSS utilized in this state. It is understood that this OSS is neither owned nor controlled by Ameritech Wisconsin. Rather, Ameritech Wisconsin contracts with Ameritech Services, Inc., for operational support. It is further understood that Ameritech Wisconsin has the necessary legal and practical ability to act for and bind Ameritech Services, Inc., to comply with this Commission's orders.

Construing the proposed order as a stipulation among the parties for the entry of an order adopting the parties' suggestions, the Commission, therefore, hereby orders[2] as follows:

1. Further Prehearing Conferences. The parties shall participate in a further series of prehearing conferences pursuant to WIS. STAT. § 227.44(4)(a)5. Through these conferences the parties will attempt to identify the issues remaining in Phase I of this proceeding and will continue to attempt to reach agreement on as many substantive issues as possible. These prehearing conferences shall be scheduled throughout the months of June through September 2000, as often as possible, to permit the parties to reach agreement on the remaining issues in Phase I. These prehearing conferences shall be completed by September 30, 2000, unless leave for further procedures is granted by the Commission for good cause shown.

2. Assignment of Temporary Administrative Law Judge. Pursuant to WIS. STAT. §§ 196.24 and 227.46(1), and Wis. Admin. Code ch. PSC 1, a temporary administrative law judge (ALJ) is appointed to supervise the further prehearing conferences contemplated in order paragraph 1. The appointment of such temporary ALJ shall end with the submission to the Commission of the additional report described in order paragraph 3. In all other respects, the Administrative Law Judge continues as the primary ALJ assigned to this docketed proceeding.

3. Report. At such time as the temporary ALJ concludes that the parties have exhausted their abilities to identify issues and reach agreements during the further prehearing conferences, the temporary ALJ shall prepare a final report containing at least the following information: (1) a listing of all Phase I test design and implementation parameters (performance measures,

[2] The Commission has authority to issue this order under WIS. STAT. §§ 196.02, 196.03, 196.26, 196.28, 196.37, 196.199(2), 196.219, 196.39, 196.395, other provisions of WIS. STAT. chs. 196 and 227, as may be relevant hereto, and 47 U.S.C. §§ 251 and 252 as the Commission may in its discretion apply pursuant to its jurisdiction under WIS. STAT. ch 196.

benchmarks, pre-testing system upgrades or improvements, testing sequences, business processes, etc.) upon which the parties have reached agreement and seek Commission acceptance of the parameters in the order concluding Phase I and (2) a statement of disputed issues which the temporary ALJ recommends be made subject to the hearing scheduled to commence no later than November 2000. The final report shall be presented to the Commission for review with sufficient time to permit Commission action, as appropriate, but no later than October 1, 2000. To the extent the parties reach agreement on certain issues, including a proposed Master Test Plan, prior to October 1, 2000, the temporary ALJ shall provide interim report(s) to the Commission on those items. The Commission may take action on the items contained in such interim or final report(s) when it deems appropriate and may accept or modify those items in whole or in part.

4. Prehearing Conference Management Function. The appointment of John Kern as coordinator, pursuant to the Commission order dated May 3, 2000, shall continue through the further prehearing conferences identified in this order. Ameritech Wisconsin, at its sole expense, shall continue to retain Mr. Kern under contract, which shall provide for Commission (including staff) direction and control of Mr. Kern's activities. Mr. Kern's function shall involve the discretion to plan, schedule, and implement activities to achieve performance, cost, and scheduling objectives of the further prehearing conferences. Mr. Kern shall do all things necessary to schedule and conduct prehearing conference meetings to the end of producing the reports described in paragraph 3, subject to the temporary ALJ's direction and final approval for submission.

5. Prehearing Conference Dispute Resolution Function. The temporary ALJ shall render a proposed decision on any disputed matter raised by a party during the further prehearing conferences. The temporary ALJ may conduct such fact-finding as he deems necessary or appropriate under the circumstances. Formal hearing process shall not be required for fact-finding. Exceptions to the findings and/or rulings of the temporary ALJ may be taken to the Commission pursuant to Wis. Admin. Code § PSC 2.66, and the Commission may choose to address the matter immediately or defer action until all matters from the further prehearing conferences are ready for review.

6. Staff Participation in Prehearing Conferences. Commission staff assigned to this docket shall participate in the further prehearing conferences and the hearings to carry out its advisory functions, including such functions as informally mediating party disputes and facilitating agreements, furnishing relevant information, framing alternatives, advocating policy options, and identifying for discussion relevant stakeholder interests or concerns that might not otherwise be advanced.

7. OSS Enhancements/Process Improvements Made as a Result of the Prehearing Conferences. The parties have reached tentative agreement on enhancements and process improvements to Ameritech's OSS that are designed to resolve various issues. While tentative agreement exists, implementation of a number of the enhancements and process improvements by Ameritech will occur during June through September 2000. In addition, CLECs must validate in writing that the solutions to OSS problems included in the OSS enhancements and process improvements, in fact resolve the problems. To the extent that the parties reach impasse during the further prehearing conferences as to whether the proposed solutions resolve the problems,

those matters shall become issues in the hearing to be scheduled in November 2000. Ameritech shall provide to the parties and implement the following OSS enhancements, processes and procedures on or before the following dates:[3]

Issue	Process/Procedure	Date
A	Facilities Availability Process	June 15, 2000
A	Improved Escalation Process Concerning Facility Assignment	June 15, 2000
A	Procedures for Requesting and Receiving by Central Office DLC Loop Percentages	September 1,2000
A	Facility Problem Notification Within 24 Hours of FOC (See F below)	September 1, 2000
C	Loop Assignment for DSL	September 30, 2000
F	New Firm Order Confirmation (FOC) and Facility Modification Process – Documentation Available	June 2, 2000
F	New Facility Modification Process – Identify Facility Problems and Notify CLEC of modification or build options a. "Simple Modifications"—Ameritech will complete simple modifications within existing interval without notification to CLEC; existing jeopardy and new committed due dates processes will be used if simple modifications are not completed within existing interval	September 1, 2000

[3] The table references the identification of issues as set forth in the Matrix attached as Appendix E to the June 1 Report filed in this docket by the temporary ALJ. The June 1 Report is attached hereto and incorporated by reference into this Order. The process, procedures, and dates contained in this table are subject to change, pursuant to discussions among the parties during the prehearing conferences consistent with paragraph 1 of this Order.

	b. "Complex Modifications"—Ameritech will provide to CLEC an initial Complex Notification targeted for two business days of initial FOC; Complex Notification with revised date is targeted for three business days from initial Complex Notification. c. New Build—Ameritech will provide a New Build Notification targeted for two business days of initial FOC; CLEC and local account team will then discuss possible solutions.	
F	New Firm Order Confirmation Process – Incorporate version numbers and reason codes on revised FOCs	September 27, 2000
G	Hot Cut Procedures	July 1, 2000
G	Hot Cut Procedures – ISDN-xDSL	July 1, 2000
H	Street Address Guide (SAG) to CSR Conversion (abbreviated validation)	September 1, 2000

L	Directory Assistance/Directory Publishing	
	a. Provide current SBC documentation on its " Retain Current Listing" process	a. June 30, 2000
	b. Provide current AAS documentation on its Order and Query Process via website	b. June 30, 2000.
	c. Second pre-BOC (Draft Directory) Review (dates are directory specific)	c. Milwaukee July 28, 2000, Green Bay and Waukesha August 4, 2000
	d. Implement a process to allow CLECs the option to retain current listings, except on partials	d. March 2001
	e. Provide interface (or work-around) for integrated directory listings ordering ability	e. Date to be determined
M	E911 Database Management (confirm parity between Ameritech and CLECs regarding use of SAG)	September 1, 2000
N	Customer Premise Access -- Provide Copies of Policy	June 30, 2000
O	Replacement of Internal Network Interface Devices (NIDs)	September 30, 2000
P	TC/Net Change Process	September 30, 2000
Q	LEC Protection	Under Review
Q	LEC Protection -- LOA Policy	August 1, 2000
S	Flow Through	September 30, 2000
W	Branded Operator Services	August 1, 2000

X	Partial Migrations	Ameritech policy retained.
Y	Account Management Process – Edited Ameritech Handbook	August 1, 2000
Y	Account Management Process – Coordination Between Account Team and Directory Listing and Directory Assistance	August 1, 2000
Z	Collocation Ordering, Rates, Auditing and Record Keeping Processes	June 30, 2000.
AA	LNP 10-Digit Trigger Ordering	June 30, 2000.

8. New Product Introductions. Ameritech has agreed to deploy certain new products and services. The parties have been unable to determine if problems exist regarding these products and services because they had not yet been deployed or have just been deployed. To the extent that the parties are unable to resolve any problems arising from or relating to the deployment of these products and services during the further prehearing conferences, the matters shall be resolved at the hearing to be scheduled in November 2000. Ameritech shall provide to the parties the following products and services on or before the following dates:

Issue	Product/Service	Date
B	UNE-P – Proposed Tariff provided to parties	June 28, 2000
B	UNE-P – Implementation of Resolved Issues	September 30, 2000
C	Line Sharing – Documentation available	June 15, 2000
C	Resolution of unresolved Issues (e.g., UNE-P line splitting)	September 30, 2000

C	Digital Subscriber Line (DSL) Provisioning Contract Amendment – Available	June 15, 2000
C	Digital Subscriber Line (DSL) Provisioning Contract Amendment – Implementation of Resolved Issues	September 30, 2000
D	Sub-Loops -- Documentation available	May 18, 2000
D	Sub-Loops – Process to identify "Points of Access"	August 25, 2000
D	Sub-Loops -- Implementation of Resolved Issues	September 27, 2000
E	Dark Fiber -- Documentation available -- Tariff Filing	May 18, 2000
E	Dark Fiber – Implementation of Resolved Issues	September 30, 2000
V	Enhanced Extended Links (EELS) – Proposed Tariff provided to parties	June 28, 2000
V	Enhanced Extended Links (EELS) – Implementation of Resolved Issues	September 30, 2000

9. UNE-P and EELS Tariff. As agreed by Ameritech at the June 8, 2000, prehearing conference, Ameritech shall provide to the parties and the temporary ALJ a proposed combinations tariff for UNE-P and Enhance Extended Link on or before June 28, 2000. Such tariff(s) shall be similar to the tariff(s) to be provided by Ameritech in the Michigan tariff collaborative regarding UNE-P and EELS.

10. LSOG4 and GUI Deployment. As detailed in the June 1 Report, the parties were at an impasse with respect to the timing and nature of the deployment of certain OSS

functionalities, including functionalities that will be included in the deployment of Ameritech's application to application interface (Issues I, R, J, K T, U, and portions of F and L) and its graphical user interface (GUI) providing such functionality (as set forth in portions of Issues A, B, C, and D). To the extent these OSS functionalities are defined and resolved on or before September 15, 2000, in the FCC collaborative proceedings under the SBC/Ameritech Uniform and Enhanced OSS Plan of Record, those OSS functionalities will be documented and implemented as defined in those FCC proceedings. If the FCC does make a ruling in those proceedings on or before September 15, 2000, and any party to the instant proceeding believes that the FCC's decision does not serve their or their customers' interests, the party so affected may address that issue in the hearing in this proceeding to be scheduled in November 2000. In any event, these OSS functionality upgrades will be announced and implemented in a manner consistent with SBC's 13 State Change Management process. If the SBC 13 State Change Management process is not agreed to and implemented by July 28, 2000, the change management process set forth in Attachment A to the SBC/Ameritech Uniform and Enhanced OSS Plan of Record will be used; provided that if the SBC 13 State Change Management process has not been agreed to by July 28, 2000, the parties agree to discuss modifications to the intervals and dates provided in the Attachment A Change Management Process needed to achieve timely upgrades in these OSS functionalities consistent with the dates for implementation of these OSS functionalities developed in this proceeding.

Since the issuance of the June 1 Report, Ameritech Wisconsin has investigated the possibility of deploying these OSS functionalities prior to March 2001. While Ameritech Wisconsin continues to believe it is not feasible to deploy these OSS functionalities prior to the

current deployment date of March 2001, Ameritech Wisconsin has escalated this issue to the senior management of SBC, its parent company, to determine whether the deployment date can be accelerated. Ameritech shall continue to pursue escalation to the highest levels of SBC, regarding the acceleration of this LSOG4 functionality and GUI deployment providing such functionality to a date earlier than March 2001. Ameritech Wisconsin shall report to the parties, the temporary ALJ, and the Commission the status of such escalation efforts within 30 days of this order and every 30 days thereafter.

11. Interim GUI Offer. If within 30 days of the effective date of this Order, Ameritech Wisconsin reports that it is unable to accelerate to October 1, 2000, the deployment of its graphical user interface (GUI), as described in paragraph 10 of this Order, Ameritech shall work with CLECs to provide GUI service arrangement(s) for unbundled loops (with or without LNP), resale and UNE-P, through a third-party provider, during the interim period beginning on October 1, 2000. Ameritech Wisconsin shall pay all, or some portion of, the charges applicable to the GUI service arrangement(s). The amount and nature of Ameritech's funding commitment will be determined between the parties based upon the projected charges applicable to the GUI service arrangement(s). Such payments shall apply to electronic orders submitted to Ameritech Wisconsin on or after October 1, 2000, and shall end when Ameritech Wisconsin deploys its permanent GUI, on or before March 2001.

Within one week of the effective date of this Order, any CLEC party interested in pursuing this proposed GUI service arrangement shall notify Ameritech of its interest, including the identity of potential GUI providers. With respect to a third party GUI service arrangement to support the ordering of UNE-P, Ameritech Wisconsin shall also provide appropriate

documentation and technical assistance to facilitate the development of GUI service arrangement(s) that allow the electronic ordering of UNE–P no later than October 1, 2000. Within 30 days of the effective date of this Order, Ameritech Wisconsin shall report to the parties and the temporary ALJ on the status of such GUI service arrangement(s). At such time, if there are unresolved issues that are at an impasse, the parties may request the following dispute resolution procedure: The Commission delegates to the temporary ALJ the authority to make binding rulings concerning those unresolved terms and conditions of the interim GUI offering(s) and concerning acceleration of the deployment of Ameritech's GUI, consistent with the provisions of paragraph 5 of this Order. The rulings are subject to appeal to the Commission.

12. Third-Party Testing. (1) The third-party OSS testing approved by this Commission on March 29, 2000, will include testing of the OSS pre-ordering, ordering and provisioning functionalities referred to in paragraphs 7, 8, 9, and 10 and provided by the application to application and GUI interfaces referred to in paragraph 10 (hereinafter in this paragraph referred to as "Paragraph 12 functionalities"); and (2) such third-party testing will not conclude until the Paragraph 12 functionalities are deployed (consistent with the paragraph 10) and tested. Accordingly, the OSS testing approved by this Commission shall include these Paragraph 12 functionalities. Moreover, the third-party testing shall not conclude until these Paragraph 12 functionalities are tested.

13. Temporary ALJ Report. The parties agree that the recommendations contained in the June 1 Report should be adopted by the Commission as an Order of the Commission, except as amended in this proposed order. As amended by this order, the June 1 Report is accepted by the Commission and the recommendations of the temporary ALJ addressing A–AA issues, master

test plan, performance measures, penalty plan and further issue development in Phase I are adopted and ordered by the Commission.

14. Final Prehearing Conference. The administrative law judge shall schedule a prehearing conference on or about October 2, 2000, to consider further matters in this proceeding, including the scheduling of a hearing date in November 2000.

15. Hearing. The hearing in this matter scheduled to commence on July 18, 2000, shall be postponed to a date to be scheduled in November 2000.

16. This order shall be effective upon mailing. The provisions of the Order of March 29, 2000, shall continue in force and effect except as otherwise superseded or modified herein.

Dated at Madison, Wisconsin, _____

By the Commission:

_____

Lynda L. Dorr
Secretary to the Commission

LLD:DA:MSV:lep:g:\order\pending\6720-TI-160order0700

See attached Notice of Appeal Rights

Notice of Appeal Rights

Notice is hereby given that a person aggrieved by the foregoing decision has the right to file a petition for judicial review as provided in Wis. Stat. § 227.53. The petition must be filed within 30 days after the date of mailing of this decision. That date is shown on the first page. If there is no date on the first page, the date of mailing is shown immediately above the signature line. The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

Notice is further given that, if the foregoing decision is an order following a proceeding which is a contested case as defined in Wis. Stat. § 227.01(3), a person aggrieved by the order has the further right to file one petition for rehearing as provided in Wis. Stat. § 227.49. The petition must be filed within 20 days of the date of mailing of this decision.

If this decision is an order after rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not an option.

This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

Revised 9/28/98

APPENDIX A

To comply with WIS. STAT. § 227.47, the following parties who appeared before the agency are considered parties for purposes of review under WIS. STAT. § 227.53.

SERVICE LIST
(June 13, 2000)

AMERITECH WISCONSIN
by
Mr. Michael I. Paulson
722 North Broadway, 14th Floor
Milwaukee, WI 53202-4396
(PH: 414-270-4557 / FAX: 414-270-4553)

AT&T COMMUNICATIONS OF WISCONSIN, INC.
by
Mr. Phillip Uekert
44 East Mifflin Street, Suite 600
Madison, WI 53703-2877
(PH: 608-259-2223 / FAX: 608-259-2203)

SPRINT COMMUNICATIONS COMPANY L.P.
by
Mr. Ken Schifman
8140 Ward Parkway
Kansas City, MO 64114
(PH: 913-624-6839 / FAX: 913-624-5504)

GTE NORTH INCORPORATED
by
Mr. Paul R. Verhoeven
State Manager – Regulatory Affairs
100 Communications Drive
P.O. Box 49
Sun Prairie, WI 53590-0049
(PH: 608-837-1771 / FAX: 608-837-1733)

KIESLING CONSULTING, LLC
by
Mr. Scott Girard
6401 Odana Road
Madison, WI 53719
(PH: 608-273-2315 / FAX: 608-273-2383)

WISCONSIN STATE TELECOMMUNICATIONS ASSOCIATION
by
Ms. Maureen St. Germain
6602 Normandy Lane
Madison, WI 53719
(PH: 608-833-8866 / FAX: 608-833-2676)

WISCONSIN DEPARTMENT OF JUSTICE
by
Mr. Edwin J. Hughes
Assistant Attorney General
123 West Washington Avenue
P.O. Box 7857
Madison, WI 53707-7857
(PH: 608-264-9487 / FAX: 608-267-2778)

MCI WORLDCOM, INC.
by
Ms. Joan Campion
205 North Michigan Avenue, Suite 3700
Chicago, IL 60601
(PH: 312-470-4784 / FAX: 312-470-4929)

MCLEODUSA TELECOMMUNICATIONS SERVICES, INC.
by
Mr. William A. Haas
Associate General Counsel
6400 C Street, S.W.
P.O. Box 3177
Cedar Rapids, IA 52406-3177
(PH: 319-790-7295 / FAX: 319-790-7901)

RHYTHMS LINKS, INC.
by
Mr. Craig Brown
Rhythms Links, Inc.
6933 South Revere Parkway
Englewood, CO 80112
(PH: 303-876-5335 / FAX: 303-476-2272)

CHARTER COMMUNICATIONS
by
Mr. James C. Rice
440 Science Drive, Suite 302
Madison, WI 53711
(PH: 608-238-9690, ext. 224 / FAX: 608-238-9881)

TIME WARNER TELECOM
by
Ms. Marsha Rockey Schermer
250 West Old Wilson Bridge Road, Suite 130
Worthington, OH 43085
(PH: 614-255-2124 / FAX: 614-358-4400)

KMC TELECOM, INC.
by
Mr. John R. Evans
KMC Telecom, Inc.
3025 Breckinridge Boulevard, Suite 170
Duluth, GA 30096
(PH: 770-931-5276 / FAX: 770-638-6796)

TDS METROCOM
by
Mr. Nicholas D. Jackson
1212 Deming Way, Suite 350
Madison, WI 53717-1965
(PH: 608-663-3350 / FAX: 608-663-3340)

CHORUS NETWORKS, INC.
by
Ms. Angela Keelan
8501 Excelsior Drive
Madison, WI 53717
(PH: 608-826-4710 / FAX: 608-826-4300)

TDS METROCOM, TIME WARNER TELECOM,
RHYTHMS NET CONNECTIONS, KMC TELECOM
by
Mr. Peter L. Gardon
Reinhart, Boerner, Van Deuren, Norris & Rieselbach, S.C.
22 East Mifflin Street, Suite 600
Madison, WI 53701-2020
(PH: 608-229-2200 / FAX: 608-229-2100)

CITIZENS' UTILITY BOARD
by
Ms. Mary Wright, Attorney
Cullen, Weston, Pines and Bach
122 West Washington Avenue, Suite 900
Madison, WI 53703
(PH: 608-251-0101 / FAX: 608-251-2883)

COVAD COMMUNICATIONS COMPANY
by
Ms. Felicia Franco-Feinberg, Attorney
8700 West Bryn Mawr, Suite 800 South
Chicago, IL 60631
(PH: 773-714-2397 / FAX: 773-714-2841)

PUBLIC SERVICE COMMISSION OF WISCONSIN
(Not a party, but must be served)
610 North Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

Courtesy List:

Ms. Nancy Weber Atkinson
Illinois Commerce Commission
160 North LaSalle, Suite C-800
Chicago, IL 60601
(PH: 312-814-4078 / FAX: 312-814-1818)

Mr. Clark Stalker
AT&T Corporate Center
222 West Adams Street, Suite 1500
Chicago, IL 60606
(PH: 312-230-2653 / FAX: 312-230-8211)

Docket 6720-TI-160

Mr. David J. Hanson
Michael, Best & Friedrich
One South Pinckney Street, #700
P.O. Box 1806
Madison, WI 53701-1806
(PH: 608-257-3501 / FAX: 608-283-2275)

Mr. Niles Berman
Wheeler, Van Sickle & Anderson, S.C.
25 West Main Street, Suite 801
Madison, WI 53703-3398
(PH: 608-441-3824 / FAX: 608-255-6006)

Ms. Joan L. Volz
13525 – 265 Street
Welch, MN 55089
(PH: 651-490-1649 / FAX: 651-490-7579)

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation Into Ameritech Wisconsin Operational Support Systems	6720-TI-160

Report of the Temporary Administrative Law Judge

Summary of Recommendations

As discussed in further detail in this report, the temporary ALJ's recommendations for this proceeding follow:

1. The issues scheduled for hearing on July 18, 2000, in this proceeding (referred to in this report as Catetory 1 issues) should be limited to the timing of the deployment of certain functionalities associated with Ameritech's Local Service Ordering Guide, Version 4 (LSOG4), and the graphical user interfaces (GUI). Specifically, parties should provide evidence as to advancing the deployment of these functionalities and GUI interfaces to December 1, 2000.
2. Two issues referred to in this report as Category 2 issues, Unbundled Network Element-Platform (UNE-P) and Enhanced Extended Links (EELs) should be included in the July 18, 2000, hearing to the extent parties are unable to resolve outstanding issues in a Michigan Tariff Collaborative by early June.
3. With the possible exception of UNE-P and EELs as noted in recommendation no. 2 above, issues contained in Category 2 and 3 should not be included in the July 18, 2000,

hearing. At this time parties are continuing to implement various solutions and need additional time to determine if the new processes and procedures resolve the issue.

4. Issues associated with the master test plan (MTP), performance measures, and a penalty plan should not be included in the July 18, 2000, hearing. These issues are being addressed in other Ameritech states and parties agree to use those results as a baseline for developing a Wisconsin-specific MTP, performance measures, and penalty plan.

5. The Commission should order further prehearing conferences in Phase 1 of this proceeding for parties to continue to resolve the issues identified in items 3 and 4 above. Any of these issues unresolved by the end of September 2000 should be set for further hearing, and a prehearing conference should be tentatively set for the week of October 2, 2000.

Background

On March 29, 2000, the Commission issued an order (hereinafter "Order") in docket 6720-TI-160 (Attachment A), wherein it assigned a temporary administrative law judge (ALJ) and established the following reporting requirements and dispute resolution function:

> 2. Assignment of Temporary Administrative Law Judge. Pursuant to Wis. Stat. §§ 196.24 and 227.46(1), and Wis. Admin. Code ch. PSC 1, Telecommunications Division Administrator Scot Cullen is temporarily assigned as an additional, temporary administrative law judge (ALJ) to supervise the further prehearing conferences contemplated in order paragraph 1. The appointment of Mr. Cullen as a temporary ALJ shall end with the submission to the Commission of the report described in order paragraph 3. In all other respects, Administrative Law Judge Jeffry Patzke continues as the primary ALJ assigned to this docketed proceeding.
>
> 3. Report. At such time as the temporary ALJ concludes that the parties have exhausted their abilities to identify issues and reach agreements during the further prehearing conferences, the temporary ALJ shall prepare a report containing at least the following information: (1) a listing of all Phase I test design and implementation parameters (performance measures, benchmarks, pre-testing system upgrades or improvements, testing sequences, business processes, etc.)

> upon which the parties have reached agreement and seek Commission acceptance of the parameters in the order concluding Phase I, and (2) a statement of disputed issues which the temporary ALJ recommends be made subject to the hearing scheduled to commence July 18, 2000. The report shall be presented to the Commission for review with sufficient time to permit Commission action, as appropriate, no later than June 1, 2000. The Commission may accept or modify the report's findings in whole or in part.
>
> * * *
>
> 5. Prehearing Conference Dispute Resolution Function. The temporary ALJ shall render a proposed decision on any disputed matter raised by a party during the further prehearing conferences. The temporary ALJ may conduct such fact-finding as he deems necessary or appropriate under the circumstances. Formal hearing process shall not be required for fact-finding. Exceptions to the findings and/or rulings of the temporary ALJ may be taken to the Commission pursuant to Wis. Admin. Code § PSC 2.66, and the Commission may choose to address the matter immediately or defer action until all matters from the prehearing conferences are ready for review.

This report is hereby submitted to the Commission pursuant to this Order.

Prehearing Conferences

The Order also directed parties to participate in a series of prehearing conferences. Through these conferences, the parties have attempted to identify the issues for Phase I of this proceeding and to reach agreement on as many substantive issues as possible. (Order, paragraph 1, page 2.)

The table below summarizes the prehearing conferences that were held, the topics discussed, the parties represented and the vendors present (Commission staff also participated at each of the prehearing conferences):

Prehearing Conference Date	**Topics Discussed**	**Parties Represented**	**Vendors Present**
March 30, 2000	Scheduling, A-K+	Ameritech, AT&T, COVAD, McLeodUSA, MCI WorldCom, Sprint, TDS Metrocom, Time-Warner Telecom, Rhythms, GTE North, WI DOJ	None

Prehearing Conference Date	**Topics Discussed**	**Parties Represented**	**Vendors Present**
April 6, 2000	Presentations by 3rd party tester (KPMG) and pseudo-CLEC (HP) vendors	Ameritech, AT&T, MCI WorldCom, Sprint, TDS Metrocom, Time-Warner Telecom, Rhythms, Chorus Networks	KPMG Consulting, Hewlett-Packard (HP), John Kern
April 13, 2000	Follow-up discussion with KPMG Consulting; vendor selection; Issues 3a-k+ (a/k/a A-AA)	Ameritech, AT&T, MCI WorldCom, Sprint, TDS Metrocom, Time-Warner Telecom, Rhythms, CUB	KPMG (by phone)
April 26, 2000	Issues 3a-k+ (a/k/a A-AA)	Ameritech, AT&T, MCI WorldCom, Sprint, TDS Metrocom, Time-Warner Telecom, Rhythms, McLeodUSA	John Kern
April 27, 2000	Issues 3a-k+ (a/k/a A-AA)	Ameritech, AT&T, MCI WorldCom, Sprint, TDS Metrocom, Time-Warner Telecom, Rhythms	John Kern
May 3, 2000	Issues 3a-k+ (a/k/a A-AA)	Ameritech, AT&T, MCI WorldCom, Sprint, TDS Metrocom, Time-Warner Telecom, Rhythms, McLeodUSA	John Kern
May 4, 2000	Issues 3a-k+ (a/k/a A-AA)	Ameritech, AT&T, MCI WorldCom, Sprint, TDS Metrocom, Time-Warner Telecom, Rhythms, McLeodUSA	John Kern

Prehearing Conference Date	Topics Discussed	Parties Represented	Vendors Present
May 11, 2000	Issues 3a-k+ (a/k/a A-AA)	Ameritech, Ameritech Publishing, AT&T, MCI WorldCom, Sprint, TDS Metrocom, Time-Warner Telecom, Rhythms, McLeodUSA	John Kern
May 22, 2000	Issues 3a-k+ (a/k/a A-AA)	Ameritech, AT&T, MCI WorldCom, Sprint, TDS Metrocom, Time-Warner Telecom, Rhythms, McLeodUSA	John Kern
May 23, 2000	Issues 3a-k+ (a/k/a A-AA)	Ameritech, AT&T, MCI WorldCom, Sprint, TDS Metrocom, Time-Warner Telecom, Rhythms, McLeodUSA	John Kern
May 24, 2000	Issues 3a-k+ (a/k/a A-AA)	Ameritech, AT&T, MCI WorldCom, Sprint, TDS Metrocom, Time-Warner Telecom, Rhythms, McLeodUSA	John Kern

Vendor Selection

Independent Coordinator Selection: The Order authorized the hiring of "an independent coordinator, who will do all things necessary to schedule and conduct prehearing conference meetings to the end of producing the report described above, subject to the temporary ALJ's direction and final approval for submission." (Order, paragraph 4, p. 3.) At the March 30, 2000, prehearing conference, parties and staff reviewed alternative coordinator candidates. Based on that discussion, the Commission issued an "Order Approving Retention of Coordinator" on

May 2, 2000 (Attachment B). The Commission approved a contract between Kern and Associates (John Kern) and Ameritech. The Commission also authorized the temporary ALJ, if he deems necessary, to recommend that the Commission also hire Charlotte F. Terkeurst of Competitive Strategies Group, Ltd.

Third-Party Tester and Pseudo-CLEC Vendors: The Order required OSS testing be conducted by a third-party tester approved by the Commission. The Order sets forth the process by which the third-party tester should be recruited and selected. (Order, paragraph 9, page 5.) Likewise, the Order required the use of a pseudo-CLEC during testing, whose retention shall be subject to Commission approval. The process for recruitment and selection are the same as for the third-party tester. (Order, paragraph 10, pages 5-6.)

Parties and staff interviewed KPMG Consulting and Hewlett-Packard (HP) at the April 6 and 13 prehearing conferences. Based on those interviews and subsequent discussions, the parties reached consensus to hire KPMG Consulting as the third-party tester and HP as the pseudo-CLEC. The Commission issued an "Order Approving Retention of Third-Party Tester and Pseudo CLEC" on May 2, 2000, reflecting that consensus (Attachment C).

Issues 3a through 3k+ (a/k/a A-AA)

The Order references and attaches as Appendix B the parties' "Statement of Principles" (Statement) dated February 24, 2000. The Statement includes a provision wherein the parties agreed to discuss and resolve certain product and system enhancements. A non-inclusive list of such enhancements can be found in the Statement, paragraph 3, at pages 2-3. This list was initially referred to as "A-K+." As issues were further identified and discussed in the prehearing conferences, the list grew to "A-AA." Attachment D contains a description of each A-AA issue.

Virtually all activity in the prehearing conferences was devoted to the A-AA issues.[1] These issues address Ameritech operations that "need to be fixed" and that need incorporation into the master test plan, performance measures, and penalty plan. Resolution of the A-AA issues is necessary to fully complete the master test plan, performance measures and penalty plan. Accordingly, resolving A-AA issues was the highest priority in the prehearing conferences.

Attachment E summarizes in table form the resolved and unresolved A-AA issues. At the conclusion of the prehearing conferences, the list of A-AA issues was separated into three main categories. Category 1 issues are those issues not likely to be resolved through further prehearing conferences. Category 2 issues involve new product introductions. Category 3 issues are OSS enhancements/process improvements made as a result of prehearing conferences. Each category is discussed below.

Category 1: Issues not likely to be resolved through further prehearing conferences.

Issues in Category 1 are those issues that will not be resolved using the prehearing conference process. Parties are at an impasse on these issues and therefore Commission action is required.

The issues that fall into Category 1 are listed below (as noted above, see Attachment D for a description of these issues):

1. Issues I, R, J, K, T, U, and a portion of L: When should LSOG4 functionalities for both pre-ordering (Issue K) and ordering (Issue J) be deployed? These functionalities include the following: parsed Customer Service Record (CSR) (Issue I), complex completion (Issue R), single ordering interfaces for UNEs requiring directory listings and advertising

[1] In both Michigan and Ohio, the parties agreed to use agreements reached in Wisconsin on A-AA issues. Unresolved A-AA issues will be resolved by each state commission.

(Issue L), full refresh on existing orders (Issue T), synchronized ("synced") pre-order and order (Issue U), and jeopardy notices (Issue J).

2. Portions of Issues A, B, C, D: When should GUI interfaces be deployed?

The area of dispute between the parties is the timing of Ameritech's deployment of LSOG4 functionalities and the GUI interfaces, rather than the functionalities and interfaces themselves.

Positions of the Parties

CLECs -- CLECs originally requested that Ameritech advance its planned March 2001 deployment of LSOG4 and the GUI interfaces. CLECs subsequently modified their proposal to request that Ameritech advance its deployment of the necessary functionalities associated with LSOG4 (as distinguished from the deployment of LSOG4 format itself). There are seven specific functionalities that CLECs would like to be deployed as soon as possible. These functionalities include: complex completion, parsed CSRs, single interface for directory listing, synced pre-order and order, jeopardy notices, and full refresh on existing orders. CLECs argue that Ameritech's parent company, Southwestern Bell Corporation (SBC) has already deployed LSOG4 in Texas and it should be deployed in Wisconsin earlier than March 2001. Like the LSOG4 functionalities, CLECs would like the GUI deployed sooner as well.

Ameritech – Ameritech's deployment of both the GUI interfaces and LSOG4 is currently scheduled for March 2001. Ameritech stated that of the 19 functionalities included with LSOG4, 12 are already provided by Ameritech today but not in the LSOG4 format. In addition, Ameritech stated that full LSOG4 deployment was not possible before March 2001 but had not investigated the possibility of deploying the requested functionalities, apart from LSOG4, before the end of the year.

Category 2: Issues associated with new product introductions.

These issues involve Ameritech's deployment of new products and services. Parties were unable to determine if problems exist for these services because they had not yet been deployed or have just been deployed. In any event, parties agreed that it was premature to include these issues for the July 18 hearing.

Listed below are those new products and the anticipated dates for providing product documentation and for implementation:

1. Issue B: UNE-P – Documentation available date: to be determined; Implementation of Resolved Issues: date to be determined

2. Issue C: Line Sharing – Documentation available date: Early June 2000; Implementation of Resolved Issues: 9/30/00

3. Issue V: EELS Contract Amendment -- Available: 6/15/00; Implementation of Resolved Issues: 9/30/00

4. Issue C: Digital Subscriber Line (DSL) Provisioning Contract Amendment -- Available: 6/15/00; Implementation of Resolved Issues: 9/30/00.

5. Issue D: Sub-Loops -- Documentation available date: 5/18/00; Implementation of Resolved Issues: 9/27/00.

6. Issue E: Dark Fiber -- Documentation available date: 5/18/00; Implementation of Resolved Issues: 9/30/00.

There are two exceptions that must be noted. Issue B (UNE-P) and Issue V (Enhanced Extended Link) are currently being discussed in a Michigan Tariff Collaborative. The next meeting of the Michigan Tariff Collaborative is scheduled for June 5. Parties agreed that to the extent the Michigan Tariff Collaborative continues to make progress in resolving open issues associated with these products, these issues would be kept open in the Wisconsin proceeding and listed under Category 2. If the parties are at an impasse in Michigan at the conclusion of the June 5 meeting, these two issues should be moved to Category 1 and should be included in the July 18 hearing.

Category 3: OSS enhancements/process improvements made as a result of the collaborative process in Wisconsin.

The bulk of the A-AA issues fall into Category 3. Parties have tentative agreement on enhancements and process improvements to Ameritech's OSS which are designed to resolve various issues. While there is tentative agreement, implementation by Ameritech will occur during the next few months. In addition, CLECs must validate that the solution in fact resolves the issue. As a result, parties have agreed that these issues should not be addressed at the July 18 hearing. To the extent that parties reach impasse as to whether a proposed solution resolves the issue, parties have agreed to a second hearing to be scheduled in October 2000. Listed below are the issues along with the proposed implementation for the solution:

1. Issue A: Facilities Availability Process -- Available 6/15/00.

2. Issue A: Improved Escalation Process Concerning Facility Assignment -- Available 6/15/00.

3. Issue C: Loop Assignment for DSL -- Available 9/1/00.

4. Issue F: New Firm Order Confirmation (FOC) Process -- Available 9/1/00.

5. Issue G: Hot Cut Procedures -- Available 7/1/00.

6. Issue H: Street Address Guide (SAG) to CSR conversion -- Available 9/1/00.

7. Issue L: Directory Assistance
    a. Retain Current Listing -- Available 6/1/00.
    b. Follow-up Issues – Date to be determined.

8. Issue N: Customer Premise Access -- Tentatively Resolved.

9. Issue O: Replacement of Internal Network Interface Devices (NIDs) -- Available 9/30/00.

10. Issue P: TC/Net Change Process -- Available 9/30/00.

11. Issue Q: LEC Protection -- Available 8/1/00.

12. Issue S: Flow Through -- Available 9/30/00.

13. Issue W: Branded Operator Services -- Available 8/1/00.

14. Issue X: Partial Migrations -- Tentatively resolved.

15. Issue Y: Account Management Process -- Available 8/1/00.

16. Issue M
    a. E911 Database Management -- Available 9/1/00 17.
    b. Collocation Ordering, Rates, Auditing and Record Keeping Processes -- Availability to be determined.

17. LNP 10-Digit Trigger Ordering -- Availability to be determined.

ALJ's Recommendation

Remaining A-AA Isssues

The temporary ALJ recommends that the issues outlined in Category 1 be included in the July 18 hearing. The specific issue for hearing should be the date by which LSOG4 functionalities and the GUI interfaces are deployed. As mentioned earlier, CLECs would like this functionality by the end of the year. Ameritech states that while it is not able to advance the deployment of LSOG4, it has not investigated advancing the requested functionalities by the end of the year. Therefore, the temporary ALJ recommends that Ameritech present evidence to the Commission regarding its ability to provide certain functionalities apart from LSOG4 by December 1, 2000. CLECs should present evidence as to why these functionalities promote local competition. Ameritech and CLECs should also present evidence regarding advancing the deployment of the GUI interfaces by December 1, 2000. In doing so, Ameritech should discuss what issues prevent an earlier deployment and CLECs should discuss why advancing the deployment of the GUI is necessary to promote local competition.

For Category 2 and 3 issues, the temporary ALJ recommends that these issues not be included in the July 18 hearing. Parties have been cooperative and creative in developing

possible solutions for these issues. While issues remain open, parties are not at an impasse at this time. Generally, CLECs are waiting for Ameritech to implement various solutions that parties believe will resolve open issues. Some of these solutions are revised policies and procedures internal to Ameritech. After Ameritech implements a new process or procedure, CLECs must validate that the problem is resolved. Parties agree that most new processes and procedures will be implemented over the next four months. During this timeframe, Ameritech will be introducing new products and CLECs must review the rates, terms and conditions associated with the new products to determine if these are viable product offerings.

Master Test Plan (MTP)

As mentioned above, the prehearing conferences focused mainly on Issues 3a through 3k+ (a/k/a A-AA). Several parties in these prehearing conferences are participating in Ameritech's OSS proceeding before the Michigan Public Service Commission where the MTP has been and continues to be discussed.[2] In order to take advantage of the work completed in Michigan, the parties in Wisconsin agreed to use the results of the Michigan MTP as the baseline MTP for Wisconsin. This baseline MTP would then be modified based on the resolution of the A-AA issues, the Commission's Order on the unresolved A-AA items that are heard on July 18, performance measures, remedy plans, and any other Wisconsin specific adjustments. The final Michigan MTP is expected to be available in mid-June 2000. Because the Michigan MTP is not yet available, the parties in this proceeding have had no opportunity to develop a Wisconsin MTP. As a result, the parties recommend that the MTP issues associated with Phase 1 of this proceeding be excluded from the July 18 hearing. The temporary ALJ supports this conclusion.

[2] KPMG Consulting is the third-party tester in Michigan, Ohio, and Illinois. Version 1.1 of the MTP in Michigan was released on May 22 but a final Michigan MTP is not expected until mid-June.

Performance Measures

The parties' Statement includes the following provision on performance measures:

4. As a baseline or starting point for the Forum process, the performance measures, including all the definitions, exclusions and associated business rules, as adopted by the Public Utility Commission of Texas in July 1999 will serve as the basis for monitoring support delivered to CLECs operating in Wisconsin. The Parties agree to expeditiously work together as a part of the Forum process on what additions to these performance measurements should be implemented prior to conducting a third party test of Ameritech's OSS.
5. Prior to commencing the third-party test, Ameritech agrees, at a minimum, to expand the Texas performance measures to include xDSL loop performance measures, as well as other new performance measures focusing on new products, including UNE-P. The third party test will also include measures for jeopardy, held orders, change management, and "hot cuts," as well as new systems put into place as a result of the Forum process or Commission direction. The specifics of these new performance measurements, business rules and calculations shall be the product of the Forum process, and to the extent possible, mutual agreement between Ameritech and the CLECs, and shall be established before the third party test is commenced. The CLECs agree that establishing a penalty plan is part of the Forum process. Ameritech believes that establishing a penalty plan is part of a Section 271 process. Where agreement is not reached, the areas of disagreement shall be presented to the Commission, which shall make a final and binding decision. Ameritech also agrees that to the extent it had agreed to a parity or benchmark measure, including any subsequent modifications, in another state, it will import that benchmark or parity measure or modification to Wisconsin. To the extent both a parity standard and a benchmark standard are employed in other states where Ameritech is a local exchange carrier, the Commission shall determine which standard is applicable in Wisconsin. (Statement, p. 3)

The Order reiterated that "No third-party testing can begin without the Texas performance measures being expanded to include xDSL loop performance measures, as well as other new performance measures focusing on new products, including UNE-P, and inclusion of measures for jeopardy, held orders, change management, "hot cuts," and new systems put in place as a result of the direction of the prehearing conference parties or the Commission." (Order, paragraph 12, page 6.)

Because the A-AA issues took priority in the prehearing conferences to date, the parties have not had sufficient opportunity to address A-AA performance measures except to the extent the parties reaffirmed their agreement to use the so-called "modified Texas 122 performance measures" as a starting point and to incorporate issues A-AA and any other Wisconsin specific adjustments. Accordingly, like the MTP previously discussed, the Parties recommend that performance measures associated with Phase 1 of this proceeding be excluded from the July 18 hearing. The temporary ALJ supports this recommendation.

Penalty Plan

The Order states in relevant part:

> 7. Penalty Plan. Paragraph 5 of the Statement states a dispute between the Ameritech Wisconsin and the opposing competitive local exchange carrier (CLEC) parties over whether a penalty plan should be part of the prehearing conference process. The Commission tentatively determines that a "penalty plan" of the character contemplated by the Statement may reasonably become a part of the Phase II testing. The prehearing conference agenda should therefore provide for discussion of the issue at this time to achieve as much agreement as possible. The Commission reserves a final determination as to whether or not a "penalty plan" shall be finally ordered to be a part of Phase II testing. (Order, p. 4)

Similar to the MTP and performance measures, the parties' consideration of remedy plans was displaced by devotion of their attention to A-AA issues at the prehearing conferences to date. Although development of remedy plans may occur in other states, parties will require time to review and determine if they are appropriate for use in Wisconsin and Wisconsin-specific modifications that may need to be made. As a result, the parties in this proceeding recommend that remedy plans be excluded from the July 18 hearing. The temporary ALJ supports this recommendation.

Further Issue Development in Phase 1

As indicated above, several A-AA issues, the MTP, performance measures, and penalty plan are not at impasse between the parties and, as such, are not recommended as issues for the July 18 hearing. The parties recommend, and the temporary ALJ supports, that the Commission order further prehearing conferences for the parties to resolve the open A-AA issues, and to complete development of an MTP, performance measures, and penalty plan, incorporating resolved A-AA issues and any other Wisconsin-specific amendments as the parties deem appropriate.

Finally, the temporary ALJ recommends that the Commission continue Phase 1 of this proceeding until parties have agreed to resolution of the open A-AA issues, an MTP, performance measures, and penalty plan. If the parties do not reach agreement by the end of September 2000, unresolved issues should be set for further hearing, with prehearing conference tentatively set for the week of October 2, 2000.

Respectfully submitted June 1, 2000.

Scot Cullen
Scot Cullen
Administrative Law Judge

Attachments

A. Order, Docket 6720-TI-160, March 29, 2000

B. Order Approving Retention of Coordinator, Docket 6720-TI-160, May 2, 2000

C. Order Approving Retention of Third-Party Tester and Pseudo CLEC, Docket 6720-TI-160, May 2, 2000

D. Description of A-AA Issues

E. Issues Matrix

t:\Report\6720ti160\Temporary ALJ Report 5-00 lep.doc

Date Mailed
March 29, 2000

Attachment A

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation Into Ameritech Wisconsin Operational Support Systems 6720-TI-160

ORDER

This is a class 1 contested case proceeding to investigate and resolve problems associated with the Operational Support Systems (OSS) of Ameritech.[3] The proceeding is divided into phases. Phase I deals with the "development of [Ameritech's] OSS performance measures and benchmarks, and how OSS performance testing should proceed." The OSS testing is actually conducted in Phase II.

Several parties have reached agreement among themselves on a process for identifying and resolving a number of issues in Phase 1. This agreement is embodied in the "Statement of Principles" (Statement) dated February 24, 2000, attached as Appendix B.[4] The signatories to the Statement have moved the Commission to "adopt" the Statement[5] and to designate a project coordinator/facilitator for the "Forum" described in the Statement. The Commission finds that the Statement includes several good suggestions for the handling of Phase I of this case.

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[3] The Notice of Proceeding named Wisconsin Bell, Inc., the telecommunications utility doing business in Wisconsin as "Ameritech" (Ameritech Wisconsin) as the party nominally responsible for the OSS utilized in this state. It is understood that this OSS is neither owned nor controlled by Ameritech Wisconsin. Rather, Ameritech Wisconsin contracts with Ameritech Services, Inc., for operational support. It is further understood that Ameritech Wisconsin has the necessary legal and practical ability to act for and bind Ameritech Services, Inc., to comply with this Commission's orders.

[4] Appendix A is the service list of parties in the docket.

[5] Administrative Law Judge Jeffry Patzke gave the non-signing parties an opportunity to object to or otherwise comment on the Statement. No party has objected.

Construing the Statement as a stipulation among the parties for the entry of an order adopting the parties' suggestions, the Commission, therefore, hereby orders[6] as follows:

1. Further Prehearing Conferences. The parties shall participate in a series of prehearing conferences pursuant to WIS. STAT. § 227.44(4)(a)5. Through these conferences the parties will attempt to identify the issues for Phase I of this proceeding and attempt to reach agreement on as many substantive issues as possible.

2. Assignment of Temporary Administrative Law Judge. Pursuant to WIS. STAT. §§ 196.24 and 227.46(1), and Wis. Admin. Code ch. PSC 1, Telecommunications Division Administrator Scot Cullen is temporarily assigned as an additional, temporary administrative law judge (ALJ) to supervise the further prehearing conferences contemplated in order paragraph 1. The appointment of Mr. Cullen as a temporary ALJ shall end with the submission to the Commission of the report described in order paragraph 3. In all other respects, Administrative Law Judge Jeffry Patzke continues as the primary ALJ assigned to this docketed proceeding.

3. Report. At such time as the temporary ALJ concludes that the parties have exhausted their abilities to identify issues and reach agreements during the further prehearing conferences, the temporary ALJ shall prepare a report containing at least the following information: (1) a listing of all Phase I test design and implementation parameters (performance measures, benchmarks, pre-testing system upgrades or improvements, testing sequences, business processes, etc.) upon which the parties have reached agreement and seek Commission acceptance of the parameters in the order concluding Phase I, and (2) a statement of disputed issues which

[6] The Commission has authority to issue this order under WIS. STAT. §§ 196.02, 196.03, 196.26, 196.28, 196.37, 196.199(2), 196.219, 196.39, 196.395, other provisions of WIS. STAT. chs. 196 and 227, as may be relevant hereto, and 47 U.S.C. §§ 251 and 252 as the Commission may in its discretion apply pursuant to its jurisdiction under WIS. STAT. ch 196.

the temporary ALJ recommends be made subject to the hearing scheduled to commence July 18, 2000. The report shall be presented to the Commission for review with sufficient time to permit Commission action, as appropriate, no later than June 1, 2000. The Commission may accept or modify the report's findings in whole or in part.

4. Prehearing Conference Management Function. This function involves the broad discretion to plan, schedule, and implement activities to achieve performance, cost, and scheduling objectives of the further prehearing conferences. This function shall be handled by an independent coordinator, who will do all things necessary to schedule and conduct prehearing conference meetings to the end of producing the report described above, subject to the temporary ALJ's direction and final approval for submission. The coordinator shall have knowledge and skills in the application of fundamental meeting facilitation techniques and shall be subject to the direction and control of the Commission directly and through the Telecommunications Division staff. Ameritech Wisconsin, at its sole expense, shall retain the coordinator under contract, which shall provide for Commission (including staff) direction and control of the coordinator's activities. A contract for retaining any coordinator shall be forwarded by the temporary ALJ to the Commission for acceptance or other appropriate action. The temporary ALJ may include a brief summary of any relevant party comments regarding the qualifications of a proposed candidate for coordinator. This provision shall be implemented as soon as practicable.

5. Prehearing Conference Dispute Resolution Function. The temporary ALJ shall render a proposed decision on any disputed matter raised by a party during the further prehearing conferences. The temporary ALJ may conduct such fact-finding as he deems necessary or appropriate under the circumstances. Formal hearing process shall not be required for fact-

finding. Exceptions to the findings and/or rulings of the temporary ALJ may be taken to the Commission pursuant to Wis. Admin. Code § PSC 2.66, and the Commission may chose to address the matter immediately or defer action until all matters from the further prehearing conferences are ready for review.

6. Staff Participation in Prehearing Conferences. Commission staff assigned to this docket may participate in the further prehearing conferences and the hearings to carry out its advisory functions, including such functions as informally mediating party disputes and facilitating agreements, furnishing relevant information, framing alternatives, advocating policy options, and identifying for discussion relevant stakeholder interests or concerns that might not otherwise be advanced.

7. Penalty Plan. Paragraph 5 of the Statement states a dispute between the Ameritech Wisconsin and the opposing competitive local exchange carrier (CLEC) parties over whether a penalty plan should be part of the prehearing conference process. The Commission tentatively determines that a "penalty plan" of the character contemplated by the Statement may reasonably become a part of the Phase II testing. The prehearing conference agenda should therefore provide for discussion of the issue at this time to achieve as much agreement as possible. The Commission reserves a final determination as to whether or not a "penalty plan" shall be finally ordered to be a part of Phase II testing.

8. Region-wide OSS Testing. The parties state views in Paragraph 13 of the Statement regarding region-wide or multi-state testing of Ameritech's OSS. This proposition is insufficiently developed at this time for the Commission to make any determination, but the Commission will retain jurisdiction to reopen this order to reconsider this issue, upon party

motion or the Commission's own motion. A party motion to seek reopening of this issue shall be stated separately of all other matters and filed with ALJ Patzke for scheduling of responses and direct transmittal of all pleadings to the Commission. However, lack of regional or multi-state plans should not delay this proceeding.

9. Third-party Tester. OSS testing shall be conducted by a third-party tester approved by the Commission. The third-party tester shall be retained by Ameritech Wisconsin at its expense, but the tester, by terms of the hiring contract, shall be subject ultimately to the direction and control of the Commission and/or its designated agents. The tester may accept direction from prehearing conference parties, subject to Commission oversight and control, during the operation of the further prehearing conferences provided herein. The terms of the contract for hire shall be subject to Commission review and approval. The first order of business for the further prehearing conferences shall be the recruitment and selection (if agreement is achieved) of a tester. Agreement upon a choice shall be forwarded by the temporary ALJ directly to the Commission for approval or other appropriate order. Any dispute as to selection of a third-party tester shall be determined promptly and the dispute, with staff recommendations as to a tester, shall be forwarded by the temporary ALJ directly to the Commission. Independent party comments will not be accepted; all positions shall be summarized by the temporary ALJ in a forwarding memorandum.

10. Pseudo-CLEC Testing. Testing shall include use of a pseudo-CLEC, whose retention shall be subject to Commission approval. The pseudo-CLEC shall be retained by Ameritech Wisconsin at its expense, either in a separate contract, or as part of an addendum or modification of the third-party tester contract. By the terms of the hiring contract, the pseudo-

CLEC shall be subject to the direction and control of the Commission and/or its designated agents or by the prehearing conference parties. Approval of the retention of a pseudo-CLEC, or any dispute with respect thereto, shall be treated in the same manner as the third-party tester approval in Paragraph 9 above.

11. Commission Control. No official third-party testing shall proceed without formal Commission order. Generally, it is anticipated that most testing will occur upon Commission order concluding Phase I. For cause shown, the Commission may approve commencement or execution of specific official tests for Phase II purposes even if Phase I activities are not fully complete.

12. Third-party Test Minimums. No third-party testing can begin without the Texas[7] performance measures being expanded to include *x*DSL loop performance measures, as well as other new performance measures focusing on new products, including unbundled network element platforms (UNE-P), and inclusion of measures for jeopardy, held orders, change management, "hot cuts," and new systems put in place as a result of the direction of the prehearing conference parties or the Commission.

13. Commission Discretion in Determinations. Notwithstanding certain terminology, e.g., "needs of the Commission" and "best aspects of the test plan" in Statement Paragraphs 6 and 9, respectively, the Commission reserves in its sole discretion the determination of the extent, nature, and quality (whether objectively or subjectively measured or evaluated) of all features or aspects of the OSS testing contemplated for Phase II of this proceeding.

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[7] Measures accepted by Texas Public Utility Commission and filed with the Federal Communications Commission. *See In the Matter of Application of SBC Communications, Inc. Pursuant to Section 271 of the Telecommunications Act of 1996 To Provide In-Region, InterLATA Services in Texas,* CC Docket No. 00-4.

14. Military-style Testing. All third-party testing shall be done in military-style testing, as described in Statement Pararaph 10, which is specifically incorporated herein by reference.

15. Access. CLEC parties to this docket shall have the right to (1) verify by documentation or direct, on-site inspection what is being tested; (2) receive a list of all documentation that Ameritech provides the third-party tester; and (3) verify by all reasonable means that the pseudo-CLEC is using the same information that Ameritech provides to the CLECs.

16. The provisions of above paragraphs 1 through 15, inclusive, shall be re-incorporated without change in the final order concluding Phase I of this docket, except as the Commission may subsequently determine otherwise.

17. Where a matter is not expressly covered in this order, the parties to the further prehearing conferences shall first resort to the Statement to determine whether a matter is an issue for the further prehearing conferences. The Commission intends a broad but reasonable reading of the Statement within the limits of this order and the Notice of Proceeding initiating this docket.

18. This order creates conditions for the scheduling of an additional series of prehearing conferences under WIS. STAT. § 227.44 as a means for further identifying issues in addition to those contemplated in the Notice of Proceeding. Any participation in the prehearing conferences scheduled pursuant to this order shall constitute a waiver of objections to any provisions herein per WIS. STAT. § 196.395.

19. This order shall be effective upon mailing, and the Commission retains jurisdiction, upon a motion by a party, or upon its own motion, to reopen, amend, rescind, or otherwise modify this order.

Dated at Madison, Wisconsin, _____

By the Commission:

_____

Lynda L. Dorr
Secretary to the Commission

LLD:MSV:lep:g:\order\pending\6720-TI-160FurtherPrehearingorder032300

See attached Notice of Appeal Rights

Docket 6720-TI-160

Notice of Appeal Rights

Notice is hereby given that a person aggrieved by the foregoing decision has the right to file a petition for judicial review as provided in Wis. Stat. § 227.53. The petition must be filed within 30 days after the date of mailing of this decision. That date is shown on the first page. If there is no date on the first page, the date of mailing is shown immediately above the signature line. The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

Notice is further given that, if the foregoing decision is an order following a proceeding which is a contested case as defined in Wis. Stat. § 227.01(3), a person aggrieved by the order has the further right to file one petition for rehearing as provided in Wis. Stat. § 227.49. The petition must be filed within 20 days of the date of mailing of this decision.

If this decision is an order after rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not an option.

This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

Revised 9/28/98

APPENDIX A

To comply with WIS. STAT. § 227.47, the following parties who appeared before the agency are considered parties for purposes of review under WIS. STAT. § 227.53.

SERVICE LIST
(February 21, 2000)

AMERITECH WISCONSIN
by
Mr. Michael I. Paulson
722 North Broadway, 14th Floor
Milwaukee, WI 53202-4396

AT&T COMMUNICATIONS OF WISCONSIN, INC.
by
Mr. Phillip Uekert
44 East Mifflin Street, Suite 600
Madison, WI 53703-2877

SPRINT COMMUNICATIONS COMPANY L.P.
by
Mr. Ken Schifman
8140 Ward Parkway
Kansas City, MO 64114

GTE NORTH INCORPORATED
by
Mr. Paul R. Verhoeven
State Manager – Regulatory Affairs
100 Communications Drive
P.O. Box 49
Sun Prairie, WI 53590-0049

KIESLING CONSULTING, LLC
by
Mr. Scott Girard
6401 Odana Road
Madison, WI 53719

Docket 6720-TI-160

WISCONSIN STATE TELECOMMUNICATIONS ASSOCIATION
by
Ms. Maureen St. Germain
6602 Normandy Lane
Madison, WI 53719

WISCONSIN DEPARTMENT OF JUSTICE
by
Mr. Edwin J. Hughes
Assistant Attorney General
123 West Washington Avenue
P.O. Box 7857
Madison, WI 53707-7857

MCI WORLDCOM, INC.
by
Mr. David W. McGann
205 North Michigan Avenue, Suite 3700
Chicago, IL 60601

MCLEODUSA TELECOMMUNICATIONS SERVICES, INC.
by
Mr. William A. Haas
Associate General Counsel
6400 C Street, S.W.
P.O. Box 3177
Cedar Rapids, IA 52406-3177

RHYTHMS LINKS, INC.
by
Mr. Craig Brown
Rhythms Links, Inc.
6933 South Revere Parkway
Englewood, CO 80112

CHARTER COMMUNICATIONS
by
Mr. James C. Rice
440 Science Drive, Suite 302
Madison, WI 53711

Docket 6720-TI-160

TIME WARNER TELECOM
by
Ms. Marsha Rockey Schermer
250 West Old Wilson Bridge Road, Suite 130
Worthington, OH 43085

KMC TELECOM, INC.
by
Mr. John R. Evans
KMC Telecom, Inc.
3025 Breckinridge Boulevard, Suite 170
Duluth, GA 30096

TDS METROCOM
by
Mr. Nicholas D. Jackson
1212 Deming Way, Suite 350
Madison, WI 53717-1965

CHORUS NETWORKS, INC.
by
Ms. Angela Keelan
8501 Excelsior Drive
Madison, WI 53717

TDS METROCOM, TIME WARNER TELECOM,
RHYTHMS NET CONNECTIONS, KMC TELECOM
by
Mr. Peter L. Gardon
Reinhart, Boerner, Van Deuren, Norris & Rieselbach, S.C.
22 East Mifflin Street, Suite 600
Madison, WI 53701-2020

CITIZENS' UTILITY BOARD
by
Ms. Mary Wright, Attorney
Cullen, Weston, Pines and Bach
122 West Washington Avenue, Suite 900
Madison, WI 53703

Docket 6720-TI-160

COVAD COMMUNICATIONS COMPANY
by
Ms. Felicia Franco-Feinberg, Attorney
8700 West Bryn Mawr, Suite 800 South
Chicago, IL 60631

PUBLIC SERVICE COMMISSION OF WISCONSIN
(Not a party, but must be served)
610 North Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

Courtesy List:

Mr. Clark Stalker
AT&T Corporate Center
222 West Adams Street, Suite 1500
Chicago, IL 60606

Mr. David J. Hanson
Michael, Best & Friedrich
One South Pinckney Street, #700
P.O. Box 1806
Madison, WI 53701-1806

Mr. Niles Berman
Wheeler, Van Sickle & Anderson, S.C.
25 West Main Street, Suite 801
Madison, WI 53703-3398

Ms. Joan L. Volz
13525 – 265 Street
Welch, MN 55089

DOCKET 6720-TI-160 **APPENDIX B**

BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation Into the Operational Support Systems :

Of Ameritech Wisconsin : Docket No. 6720-TI-160

STATEMENT OF PRINCIPLES

THIS STATEMENT OF PRINCIPLES is entered into this 24th day of February, 2000, between Ameritech Wisconsin and the Parties of Record (collectively "The Parties"), including competitive local exchange providers ("CLECs").

WHEREAS on December 15, 1999, the Public Service Commission of Wisconsin ("Commission") issued a Notice of Proceeding and Investigation initiating this docket, the purpose of which is to investigate the Operational Support Systems of Ameritech Wisconsin;

WHEREAS on January 11, 2000, a prehearing conference was held in this docket, at which time Ameritech Wisconsin offered to submit to the Parties of Record on January 28, 2000, a written proposal detailing how, in its view, the investigation of Ameritech's OSS systems should proceed, and the Parties agreed to convene a two-day technical conference to discuss the proposal;

WHEREAS Ameritech did submit the proposal to the Parties of Record, and recommended that the Commission join other Commissions in the Ameritech region to supervise an independent third party multi-state test of its region-wide Operational Support Systems ("OSS") and its performance results;

WHEREAS the parties held a two-day, Staff-led technical conference on February 3 and 4, 2000 to discuss the proposal;

WHEREAS as a result of the technical conference, The Parties reached certain agreements and understandings; and

WHEREAS the parties desire to memorialize their understandings;

NOW, THEREFORE, the parties agree as follows:

1. The purpose of this proceeding is to evaluate the quality, timeliness and completeness of Ameritech Wisconsin's OSS used to support the CLECs seeking to enter the local markets currently served by Ameritech. In addition, this proceeding will test the change management procedures and testing environment(s) utilized with and available to CLECs when Ameritech Wisconsin institutes changes to its OSS. In order to accomplish these goals, the following issues will be investigated: the systems Ameritech Wisconsin currently has in place for pre-ordering,

ordering, provisioning, maintenance and repair, and billing; the problems CLECs are experiencing with Ameritech's current systems, how they can be fixed, and what systems improvements and enhancements are needed; what enhancements to the existing systems need be made prior to 3rd party testing; the design of a third-party OSS test, including what systems should be tested and when; the performance measures necessary to accurately monitor the performance delivered to CLECs, including but not limited to the areas monitored, metric definition and associated business rules; the accuracy, completeness and timeliness of all performance related data collection, computation, reporting and data retention/integrity; and, the adequacy of and adherence to change management procedures. It is the position of some of the parties that an issue in this proceeding is whether Ameritech Wisconsin's OSS represent the best available technology, both in the SBC systems and generally among ILECs. The parties acknowledge that the outcomes of this proceeding may be used by the parties in connection with a Section 271 application by Ameritech Wisconsin.

2. Ameritech will come forward with a plan for future enhancements to its OSS, timeframes for implementation of those enhancements, as well as proposed performance measures for those enhanced systems. After presentation of the plan, CLECs will be provided a reasonable opportunity to identify and prioritize these future enhancements for discussion and resolution in the Forum process. The Forum should begin meeting as soon as possible. Ameritech will provide a proposed test plan and expected pre-test OSS changes to the Forum. All proposals will be open for discussion in the Forum.

3. Ameritech agrees that, at a minimum, certain enhancements to the existing products, processes, or OSS need to be made prior to beginning third party testing. The specific enhancements to be made prior to beginning any portion of third party testing is an issue that must be discussed and resolved in the Forum process. These product and system enhancements to be discussed and resolved in the Forum process include, but are not limited to:

A. A new loop assignment process, including voice grade loops served through integrated digital loop carrier equipment as well as xDSL loop prequalification processes. No plans currently exist to provide these functionalities to CLECs who do not use an Electronic Data Interchange system ("EDI"); however, Ameritech will work with the Forum process to discuss and develop means to make these functionalities available to non-EDI CLECs.

B. A process to order unbundled network element platform ("UNE-P") in commercial volumes for both business and residential customers. No plans currently exist to provide any functionalities to CLECs who do not use an EDI system; however, Ameritech will work with the Forum process to discuss and develop means to make these functionalities available to non-EDI CLECs.

C. An ordering process for adding ADSL functionality to a voice local loop.

D. A process to order sub-loop unbundling.

E. A process to order dark fiber.

F. A new firm order confirmation process – including a new order jeopardy notification process for both EDI and non-EDI CLECs.

G. Fail safe Hot-Cut procedures with dial tone and ANI testing completed 48hrs. prior to cut.
H. The Street Address Guide ("SAG") and Customer Service Record ("CSR") will be synced up. (In other words, CSRs will be compared to the SAG, and errors in the CSRs will be corrected).
I. Parsed CSRs will be provided.
J. Implement industry standard versions of EDI (Version 10) and LSOG (Version 4) for ordering, including all associated functionalities by August, 2000.
K. Implement an industry standard version of LSOG (Version 4) for preordering.

Ameritech has also agreed to implement a 10-digit trigger for number portability purposes on April 1, 2000.

As with all other disputes, any issues which are not resolved by agreement of the parties shall be resolved by the Commission.

4. As a baseline or starting point for the Forum process, the performance measures, including all the definitions, exclusions and associated business rules, as adopted by the Public Utility Commission of Texas in July 1999 will serve as the basis for monitoring support delivered to CLECs operating in Wisconsin. The Parties agree to expeditiously work together as a part of the Forum process on what additions to these performance measurements should be implemented prior to conducting a third party test of Ameritech's OSS.

5. Prior to commencing the third-party test, Ameritech agrees, at a minimum, to expand the Texas performance measures to include xDSL loop performance measures, as well as other new performance measures focusing on new products, including UNE-P. The third party test will also include measures for jeopardy, held orders, change management, and "hot cuts", as well as new systems put into place as a result of the Forum process or Commission direction. The specifics of these new performance measurements, business rules, and calculations shall be the product of the Forum process, and to the extent possible, mutual agreement between Ameritech and the CLECs, and shall be established before the third party test is commenced. The CLECs agree that establishing a penalty plan is an essential part of the Forum process. Ameritech believes that establishing a penalty plan is part of a Section 271 process. Where agreement is not reached, the areas of disagreement shall be presented to the Commission, which shall make a final and binding decision. Ameritech also agrees that to the extent it had agreed to a parity or benchmark measure, including any subsequent modifications, in another state, it will import that benchmark or parity measure or modification to Wisconsin. To the extent both a parity standard and a benchmark standard are employed in other states where Ameritech is a local exchange carrier, the Commission shall determine which standard is applicable in Wisconsin.

6. A Forum shall be convened to facilitate discussion and resolution of the issues set forth in this Statement of Principles. The Parties contemplate participation in the Forum by representatives from the Commission(s), the third-party testing agent or some other consulting agent, and interested representatives from Ameritech Wisconsin and the CLEC community. The

Wisconsin Commission shall in all events retain full authority to ensure that the test is designed and conducted, and the results are evaluated, in accordance with the needs of the Commission.

7. The Parties agree that the Commission should hire, at Ameritech's expense, an independent third-party to conduct a comprehensive test of the Operational Support Systems of Ameritech Wisconsin to begin once the necessary system improvements as determined by the Forum process have been implemented. The Parties also agree that a mutually agreed upon entity other than the third-party tester should be retained to act as a pseudo-CLEC. To the extent determined by the Forum, the pseudo-CLEC shall build the OSS interfaces necessary, as determined in the Forum process, to determine whether Ameritech Wisconsin's systems and documentation are sufficient to permit CLECs to develop their OSS in order to enter the market. Ameritech shall provide no greater guidance and information to the pseudo-CLEC than that currently made available to any other CLEC operating within the state.

8. The Parties agree that a suitably qualified entity, as mutually agreed to by the Parties, should be the third-party testing agent. An expedited interview process to select the third party tester shall be conducted by the Forum. Such third party testing agent shall not have an existing or pending disqualifying business conflict with SBC/Ameritech, including any subsidiaries or affiliates. Although Ameritech Wisconsin will be paying all costs for the test, including the cost of the pseudo-CLEC, the Parties agree that the third party testing agent and the pseudo-CLEC shall take their direction exclusively from the Commission or the Forum. The Parties agree that the third party testing agent and the firm to act as the pseudo-CLEC should be promptly retained.

9. The test should be modeled after and based upon the best aspects of the test plan and tests conducted in other states, including, but not limited to, the plan and tests conducted on behalf of the Pennsylvania Public Utilities Commission, the New York Public Service Commission, and the Florida Public Service Commission to test the OSS of Bell Atlantic Pennsylvania, Bell Atlantic New York, and Bell South (Florida), and will take into account the needs of providers in Wisconsin, as agreed to by the Forum or as determined by the Commission.

10. The test, using commercial volumes and capacity testing as determined by the Forum, shall be conducted military style (test until pass). Testing for a scenario is not considered completed in a satisfactory manner until such time as the performance meets or exceeds performance standards established for the relevant metrics in advance of initiation of testing. All corrective actions shall be subjected to retesting.

11. In addition to other guarantees for an open process embodied in this Statement of Principles, the CLECs shall: (1) have the opportunity to verify what is being tested; (2) receive a list of all documentation that Ameritech provides to the third party tester; and (3) be permitted to verify that the pseudo-CLEC is using the same information that Ameritech provides to the CLECs.

12. Carrier-to-carrier testing using commercial volumes, friendly testing of lines into a central location as requested by a CLEC, and capacity testing as determined by the Forum will be performed. Certain parties suggest that friendly testing involves the testing of up to 1,000 lines. The Forum will determine the exact number of lines that should be part of any friendly test.

13. Ameritech represents that it desires to have its OSS tested on a region-wide or multi-state basis. While some of the Parties of Record have indicated interest in the approach, they await assurances that such a test would ensure that the OSS will function at acceptable performance levels for commercial volumes throughout the region, given Ameritech's legacy "back-office" systems which exist throughout the region and provisioning variances by state. Some parties also assert that Wisconsin-specific testing, as well as results comparisons with SBC/Ameritech's Wisconsin retail channel and individual affiliates, will be necessary in any multi-state testing platform. CLECs desire demonstrations that all order types flow into and through the SBC/Ameritech OSS systems successfully in each participating state.

14. Any issues not resolved in the Forum process by agreement of the parties shall be resolved by the Commission. Parties to P.S.C.W. Docket No. 6720-TI-160 may bring to the Commission for resolution disputes that cannot be mutually agreed to in the Forum process. The Parties of Record reserve the right to escalate issues, wherever raised in the Forum process, to the Commission for resolution by whatever lawful process the Commission determines to be appropriate. If the Commission does not resolve the issue at an earlier date, the issues shall be presented to the Commission in an evidentiary hearing, tentatively scheduled for July 18, 2000.

15. The Parties agree that this Statement of Principles allows the parties to advocate in this proceeding, including during the Forum process, additional issues, such as more OSS system enhancements, along with associated performance measurements, and necessary modifications to any third-party tests. Not addressing any particular issue in this Statement of Principles therefore should not be taken to mean acquiescence with the position of any other party.

[Signature blocks omitted]

Date Mailed
May 3, 2000

Attachment B

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation Into Ameritech Wisconsin Operational Support Systems 6720-TI-160

ORDER APPROVING RETENTION OF COORDINATOR

On March 29, 2000, the Commission issued an order (Order) providing for a series of prehearing conferences to determine the issues in this docket. The Order provides for the selection of a coordinator for the further prehearing conferences. The parties have agreed to the retention of Kern & Assoc., Inc.

IT IS HEREBY ORDERED that:

1. Wisconsin Bell, Inc. (Ameritech) shall contract with Kern & Assoc., Inc. (Kern) in substantially the form provided in the attached appendix. The contract shall require Kern to furnish the services of its principal, John P. Kern.

2. If he deems it necessary, the temporary administrative law judge ALJ may recommend that the Commission approve of the retention of Competitive Strategies Group, Ltd. (CSG). If selected, CSG shall furnish the services of Charlotte F. Terkeurst.

3. This order shall be effective upon mailing.

Dated at Madison, Wisconsin, _____

By the Commission:

_____
Lynda L. Dorr
Secretary to the Commission

LLD:MSV:reb:lep:g:\order\pending\6720-TI-1602ndordercoordinator041100
Attachment

COORDINATOR AGREEMENT

In consideration of the terms and conditions set forth herein, Wisconsin Bell, Inc., d/b/a Ameritech Wisconsin ("Company"), and Kern & Assoc., Inc. ("Kern") hereby execute this Coordinator Agreement ("Agreement") whereby Company is retaining the services of Kern on behalf of the Public Service Commission of Wisconsin ("Commission"), as more fully described below:

1. Kern shall perform the Prehearing Conference Management functions as set forth in paragraph 4 of the March 28, 2000, Order of the Public Service Commission of Wisconsin in Docket No. 6720-TI-160, *Investigation Into Ameritech Wisconsin Operational Support Systems* ("Order"). This function involves the broad discretion to plan, schedule, and implement activities to achieve performance, cost, and scheduling objectives of the further prehearing conferences in that docket as set forth in the Commission's Order. Kern shall do all things necessary to schedule and conduct prehearing conference meetings to the end of producing the report required in the Order.\

2. The activities of Kern under this Agreement shall be subject solely to the direction and control of the Commission directly and through the Telecommunications Division Staff. Except for payment of invoices as set forth herein, the Company shall exercise no direction or control over Kern.

3. The Company shall compensate Kern at a fee of $300.00 per hour for services rendered pursuant to this Agreement. The Company shall also reimburse Kern for all reasonable and customary business expenses (e.g., travel expenses) that have been requested and authorized by the Commission. Kern shall submit all invoices for services and expenses to the Commission, or its designate, for approval. Upon approval, the invoices shall be submitted to the Company for payment within 30 days of submission. Under no circumstances will the Commission be liable for any payment to Kern under this Agreement.

4. Kern will be indemnified by the Company for any claims by any third parties asserted against Kern or John P. Kern individually arising out of the performance of any services under this Agreement. This indemnification agreement includes payment of all litigation expenses, including attorneys fees and court costs.

5. This Agreement is non-exclusive. Kern may perform services for other clients during the term of this Agreement. The Commission may retain other parties to perform some or all of the functions covered by this Agreement. Specifically, the Commission may retain, either directly or through another party, at its sole discretion the services of another person or persons to assist Kern or to supplement or replace some or all of the functions to be performed by Kern under this Agreement. In the event that the Commission retains other parties to perform functions covered by this Agreement, Kern shall cooperate with the other party to achieve the objectives of the Commission.

6. This Agreement shall continue until terminated by the Commission. The Commission retains the right to terminate this Agreement at any time for any reason, without recourse by Kern, except for payment for services rendered under the Agreement

prior to termination. Kern may terminate this Agreement with 30 days advance notice, or at such earlier date as may be approved by the Commission or its designate.

Dated this _____ day of May, 2000.

For Kern & Assoc., Inc.

John P. Kern
President

_____

For Wisconsin Bell, Inc.

Terry Appenzeller
Vice President

_____

Date Mailed
May 3, 2000

Attachment C

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation Into Ameritech Wisconsin Operational Support Systems — 6720-TI-160

ORDER APPROVING RETENTION OF THIRD-PARTY TESTER AND PSEUDO-CLEC

On March 29, 2000, the Commission issued an order (Order) providing for a series of prehearing conferences to determine the issues in this docket. The Order provided for the selection of a third-party tester and a "pseudo-CLEC." The parties have agreed to the selection of KPMG Consulting, LLC (KPMG) as the third-party tester and Hewlett-Packard (HP) as the pseudo-CLEC.

IT IS HEREBY ORDERED that:

1. KPMG shall be the third-party tester and HP shall be the pseudo-CLEC. Wisconsin Bell, Inc. (Ameritech) shall issue a letter of intent to employ the services of these companies according to the provisions of the Order. Ameritech shall submit a draft letter of intent to the temporary administrative law judge for his approval.

2. As soon as practicable, Ameritech shall submit draft contracts with KMPG and HP to the Commission for the Commission's approval. The KMPG contract shall require KMPG to warrant that it is not performing and will not for the life of the third-party tester contract perform system development work for Ameritech or its subsidiaries. The contract shall also provide that for the life of the contract KMPG shall not test any equipment or systems for Ameritech or its subsidiaries.

3. The letters of intent and the contracts will provide that KMPG and HP cooperate fully with each other in performing their responsibilities.

4. The role of HP shall be that of a test transaction generator and provider of an interconnect gateway, similar to the role HP played in the state of New York in connection with Bell-Atlantic's sec. 271 application .

5. The parties shall attempt to reach agreement on the terms of the contracts. The administrative law judge shall resolve any disagreements. The Commission may review his determinations.

Dated at Madison, Wisconsin, _____

By the Commission:

_____

Lynda L. Dorr
Secretary to the Commission

LLD:MSV:reb:g:\order\pending\6720-TI-160 3rd Order

Attachment D
Description of A-AA Issues
Docket 6720-TI-160

A1. Loop Makeup and Interface Issues

When a CLEC wishes to serve a customer using ILEC unbundled loops, it needs to be able to determine whether facilities are available during the preorder process, what capabilities the loops possess (e.g., whether the loop is capable of supporting Asymmetrical Digital Subscriber Line [ADSL]), and whether provisioning problems are present (such as the existence of integrated digital loop carrier [IDLC], which does not support unbundled loops). The parties have reached consensus on the information that should be provided via the preordering and ordering interfaces; however, disputes still remain over the dates by which the upgrades will be deployed.

A2. Loop Assignment Process

Ameritech's methods of assigning facilities to be used as unbundled loops by CLECs had often failed to identify problems, such as IDLC, early in the process. As a result, loop assignments would be made, but problems would not be detected until the CLEC was ready to activate the loop. Ameritech has agreed to improvements, but parties have not agreed on deployment dates, especially for interfaces other than electronic data interface (EDI). Ameritech has also agreed to revise its policy on handling situations where no suitable facilities are available. That process has begun, but is not yet complete.

A3. Data Transmission Problems Due to Bit Robbing

Sound waves are continuous, like waves in water. Analog telecommunications converted these continuous sound waves to comparable, continuous electric waves. Modern digital telecommunications services do not send continuous waves, rather digital systems measure the height of the sound wave thousands of times per second. These wave heights are sent digitally, and the wave is reconstructed at the far end. The human ear is incapable of hearing the difference between the real wave and the reconstruction. Likewise, the human ear cannot detect that occasional samples are changes. Voice telecommunications systems have used this fact in the past to insert signaling information in the middle of a voice stream without it being detectable to the listener.

Computer systems, on the other hand, do indeed recognize every bit of information, and every single bit is significant. When the telecommunications system changes occasional bits to use for signaling, thereby corrupting the digitized data of the communication itself, the computers recognize this change, identify it as an error, and require that segment to be re-sent. This significantly slows data throughput, and can be a problem for data users.

B. Unbundled Network Element Platform

The UNE-P, or "Platform," is a combination into a single, integrated element of all of the unbundled network elements that make up local service. These elements include the local loop, local switching and shared transport. In effect, UNE-P is resold local service, priced at UNE prices.

The FCC, in its UNE remand order, ordered that Ameritech make UNE-P available for existing combinations of lines. Ameritech and the FCC are in court over this language, but Ameritech did file a federal Platform tariff on May 17 of this year. A state tariff will follow. The CLECs have not yet fully reviewed this tariff and associated pricing, therefore the parties cannot yet predict what volumes might be ordered, nor whether the tariff does comply with the FCC order.

Ameritech has offered a method of ordering a non-FCC compliant platform via fax for some time. It began offering an EDI interface in May 2000. Other interfaces are being developed. The parties disagree over timing of the deployment of these interfaces.

C. Process for Ordering ADSL Line Sharing

Full ADSL service transmits normal voice frequencies for voice communications and a high frequency data channel over the same pair of copper wires simultaneously. Some CLECs are interested only in providing the data portion, while allowing Ameritech to provide the voice service. Such "line sharing" is not only allowed, it has been ordered by the FCC that ILECs provide line sharing.

Ameritech has stated that it will roll out some interfaces for ordering line sharing in early June 2000. Other interfaces, such as the graphical user interface (GUI), will not be available until March 1, 2001. Parties disagree on appropriate deployment dates, and the CLECs reserve judgment on the adequacy of the interfaces until they have had an opportunity to test them.

D. Process to Order Sub-loop Unbundling

CLECs that use unbundled local loops in serving customers do not always require a complete loop from the Ameritech Central Office to the customer premises. In some cases, CLECs might want to order only the last copper segment, or only a connection from the digital serving area (DSA) hut to the central office. The ability to order portions of a local loop is called sub-loop unbundling and has been ordered by both the PSCW and the FCC.

Ameritech has committed to providing a process and interface to order sub-loop unbundling. It has also promised to identify the points in its network where CLECs can connect to sub-loops. Both of these commitments are for future actions, and the CLECs will need to review Ameritech's filings before determining whether they meet the CLECs' needs.

E. Process to Order Dark Fiber

Sending voice or data over a fiber optic cable requires both the fiber and the lasers and electronics on the ends of the cable. Fiber optic cable without electronics or lasers is called dark fiber. Since the electronics are changeable, CLECs occasionally seek to lease dark fiber, and provide their own electronics and lasers. Both the PSCW and the FCC have required Ameritech to provide dark fiber for lease.

Ameritech has committed to filing a dark fiber tariff, which complies with the latest FCC order, and to providing an ordering interface for dark fiber. CLECs will need to review the tariff and interface before they can determine whether they meet the CLECs' needs.

F. The Firm Order Commitment (FOC) Process

In the past, Ameritech would issue a FOC upon receipt of a CLEC order for service. If, at a later time, Ameritech would discover problems in filling that order, it would issue a new FOC. This met Ameritech's goals of informing CLECs of the probable completion time. CLECs, who were using the FOC (committed) dates to promise service to their customers, did not find Ameritech's issuance of new FOCs acceptable. CLECs want a better process for identifying potential problems, and better methods for Ameritech to notify the CLECs of potential problems prior to receiving a FOC.

Ameritech has committed to substantially revising its FOC process, and parties have had extensive input into the revision process. The parties are generally in agreement about the new process, but the CLECs want to review the details on the new process before determining that all their needs are met.

G. Fail-Safe Hot Cuts

If a CLEC is using unbundled loops to serve a customer, this means that the wire pair (loop) from that customer is physically connected to the CLEC's switch. Converting that customer from Ameritech service to the CLEC's service means that some technician has physically disconnected the loop from Ameritech's switch and physically connected it to a pair of wires leading to the CLECs' switch.

The other half of a customer conversion requires that calls (such as long distance and EAS calls) intended for that customer are now delivered to the CLEC's switch instead of to Ameritech's switch. This involves updating various databases.

The hot cut process is designed to ensure that these events happen simultaneously (e.g., that calls for the customer are not sent to the CLECs switch before the customer is connected, nor that the calls are sent to Ameritech's switch after the customer has left). The hot cut process also describes how potential problems are handled to ensure a smooth transition. Finally, the hot cut process deals with prior testing of the elements, and the "throwback" process, in which a customer is reconnected to Ameritech service if the conversion to the CLEC service

does not work and cannot be fixed without having the customer out of service for a prolonged period.

H. Consistency between the Customer Service Record and Street Address Guide

Ameritech has two databases that contain information on the customer's address. These are the Customer Service Record (CSR) and Street Address Guide (SAG). Some orders submitted via the OSS interfaces are divided and portions checked against both databases. When these two databases have inconsistent information or formatting, the order will be rejected by one database or the other. Ameritech's policy is to verify everything put into the CSR against the SAG, but this is not always done, and some differences do exist.

CLECs would like Ameritech to create software that would automatically make these two databases consistent, a process called syncing or synchronozing. Ameritech states that various technical reasons make this impossible. As a partial alternative, CLECs would like a "one time scrub," meaning that each of the several million Ameritech addresses in the CSRs would be verified against the SAG to eliminate discrepancies.

I. Parsed CSRs

When a CLEC contacts a customer, it uses Ameritech's preordering system to get the customer service record (CSR), which shows what services the customer has, the customer's address, etc. The CLECs would like to automate the entry of this data into the ordering interface. The problem is that some of the information is provided in concatenated (paragraph) form, instead of being parsed (broken) into discrete elements. For example, the concatenated address "6740 W 69th Place Wauwatosa WI," if parsed, would be "6740" "W 69th Place" "Wauwatosa" "WI." Addresses such as "W2345 S3456 New Prairie Trail Fort Atkinson WI" can be difficult to divide accurately, if the system cannot discern which parts are house numbers or where the city name starts.

Parties agree that parsing the CSR would improve the accuracy of transferring the data between the preordering and ordering databases. Ameritech has agreed to provide parsed CSRs. The main disagreement is over timing, and, to some extent, over formatting issues.

J & K. LSOG 4 issues:

The Local Service Ordering Guide (LSOG) is a Telecommunications Industry tandard for computer systems dealing with local service. The standard has been developed nationally. The current version of the standard is version 4, referred to as LSOG4. Ameritech's current OSS processes are not completely compliant with LSOG4. Ameritech has committed to implementing LSOG4, but remaining issues include timing of the deployment and whether certain features will be included.

L. Directory Assistance and Directory Listing Issues

Ameritech has separate electronic interfaces to place orders for services (from Ameritech Wisconsin) and for directory listings (from Ameritech Publishing). This requires CLECs to write and maintain software for each interface and created some consistency problems. Ameritech has committed to using a single interface. Ameritech has also agreed to allow "retain as is" orders--orders for which the directory listings do not change. These changes will require extensive changes to Ameritech's methods and procedures, which have not yet been issued.

M. E911 Database Management

The E911 system uses a database separate from the CSR and SAG. This database is maintained by the municipalities and does not use postal standards, therefore addresses which pass Ameritech's SAG may not pass validation for the E911 database. This problem also affects Ameritech and no simple solution seems available. Ameritech and the CLECs will work around the problem.

N. Scheduled Access to Customer Premises

In the past, Ameritech's service technicians were not adequately using information provided by CLECs regarding customer availability or when premises would be accessible. This resulted in delays on service installations. Ameritech has revised its policies and training, and this issue appears to have been resolved.

O. Replacement of Internal NIDs

The Network Interface Device (NID) is a small piece of hardware that connects the customer's inside wiring to the telephone company provided outside plant. In the past, these interfaces were installed inside, which meant the customer had to be home to allow access. They are being relocated outside, to allow access for testing and other purposes without requiring the customer's presence. As a result of discussions with the CLECs, Ameritech has modified its procedures for moving internal NIDs outdoors.

P. Notification of Changes to TC/Net

TC/Net is Ameritech's web site. TC/Net provides CLECs with information about services, policies and procedures regarding their interactions with Ameritech. The CLECs raised some issues about how they would be notified about changes to TC/Net, and how historic information on the dates and extent of past changes would be retained. Ameritech has made some changes to its procedures in response, and these issues are being further discussed in other forums.

Q. LEC Protection

LEC Protection is a service that Ameritech is offering in Michigan. If a customer has LEC Protection, Ameritech will not change that customer's local service to another CLEC unless the CLEC presents a verified LOA to Ameritech. When this service was to be rolled out, Ameritech still had not released information on how LOAs could be presented for certain types of customers. This greatly concerned CLECs. Ameritech has indefinitely postponed roll-out of LEC Potection in Wisconsin, and has committed to using the full change management procedures for any future offering of LEC Protection in Wisconsin. This partially resolves the CLECs' issues on procedure for operating under LEC Protection, however the CLECs also consider LEC Protection an unreasonable limitation on their ability to process orders for service.

R. Service Order Completion

The current Ameritech completion notice provides only notice of completion and the date on which the total order is completed. CLECs would like a detailed confirmation notice, including information on the services ordered (to allow verification) and time of completion (for billing purposes). Such features are generally part of LSOG4, but it is not clear whether Ameritech will implement that part of LSOG4. The parties also disagree about when Ameritech will offer this functionality.

S. Order Flow-through

In this context, "flow-through" refers to orders that are automatically processed by Ameritech's OSS processes without manual intervention. Ameritech has provided some information on flow-through processes, including a list of which services could flow through. CLECs want more complete details on what occurrences (errors, large orders, etc.) can result in orders dropping to manual; this will help to avoid manual intervention and the delays it causes. Parties are also disputing the type, and need for, performance measures associated with flow-through.

T. Supplemental Orders

When CLECs provide updated information to an order, they would like to re-submit the entire order, a process known as "full refresh." Historically, Ameritech did not permit "full refresh." Ameritech has agreed to provide this capability, but the issue of timing remains.

U. Pre-ordering Synchronization

As noted in the discussion following Item I (parsed CSRs), the FCC requires that a Bell Operating Company's (BOC's) pre-ordering and ordering systems must enable competing carriers to transfer pre-ordering information electronically to the BOC's ordering interface or to the carriers' own back office systems, which may require 'parsing' pre-ordering information into identifiable fields. This is known as "integratability of the pre-order and order systems." The provision of parsed CSRs is a major step in assuring integration of pre-

ordering and ordering systems. Since CLECs use information beyond the CSR (e.g., telephone number requests, available services and features) to populate orders sent to Ameritech, it is necessary that all pre-ordering information be integrated with Ameritech's ordering systems (i.e., consistent in form, format, valid values and definitions). Ameritech's retail systems allow its service representatives to integrate information from sources other than the CSR into its retail orders. CLECs require this same ability. Where Ameritech's pre-ordering systems produce information that is incompatible in form, format, or content to that which its ordering system requires from CLECs, CLECs are unable to automate the pre-order to order process, thereby decreasing the level of efficiency with which CLECs can process customer orders.

V. Enhanced Extended Links

Enhanced Extended Links (EELs) are combinations of unbundled network elements combined to create high-speed connections such as T-1s and DS-3s. Some of these products are functionally identical to various special access services. However, EELs, as UNEs, are priced at total element long run incremental cost--which is generally less expensive than special access. Under its interpretation of the FCC UNE remand order, Ameritech will allow CLECs to convert only existing special access arrangements to EELs. Ameritech does not allow CLECs to order new special access connections as EELs, nor to order other types of EELs. Parties disagree on whether this should be allowed, but do agree that the EEL ordering interface should be tested.

W. Branded Operator Services

Ameritech offers operator services to CLECs that do not provide their own operators. CLECs want to have calls to that service identified with a prerecorded introduction (e.g., "Thank you for calling MCI"). Some technical issues arose in how that service was being provided; however, it appears that the parties have worked out a satisfactory compromise.

X. Partial Migrations

A partial migration occurs when a multi-line customer chooses to give some of its lines to a CLEC, but keep the remainder with Ameritech. Both Ameritech and SBC have methods and procedures for partial migrations. CLECs strongly prefer the Ameritech procedures, and Ameritech has committed to maintaining these procedures rather than changing to the SBC procedures. The only potential issue remaining is whether, if a partial migration required rearrangement of Ameritech facilities, the CLECs would be charged for that rearrangement.

Y. Account Management

The Account Management team is a group of Ameritech employees assigned to a particular CLEC as its main point of contact and resource. CLECs had a number of complaints about the functioning of the account management teams and the methods for escalating problems to higher levels. Ameritech reviewed its account management teams and functions. It has committed to hiring more people for the teams, and to revising some procedures. It is also

working on an extensive handbook which details account management team responsibilities, and is soliciting CLEC input on that handbook. The CLECs will need to review the handbook before agreeing that their concerns are met.

Z. Collocation Charge Issues

Collocation means having the CLEC locate its equipment inside the ILEC central office, in order to facilitate interconnection. The Telecommunications Act of 1996 mandates collocation. The CLECs have raised issues regarding ordering collocation space and determining the charges that will apply. They have also identified issues with regard to monitoring ownership of equipment used with collocation. Ameritech is currently researching this issue.

AA. LNP 10-digit Trigger Ordering Issues

The term "10-digit trigger" refers to a process by which the ILEC switch will continuously check to determine when a customer's loops are disconnected from the Ameritech switch and reconnected to the CLEC's switch. At that time, the system will automatically port the customer's number to the CLEC's switch, and change routing information as necessary. CLECs have raised issues with regard to the methods of ordering 10-digit triggers, technical issues of such triggers, and the Ameritech process which incorrectly assigns ported numbers to its own customers even though those numbers are being used by the CLECs. Ameritech is currently researching this issue.

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Attachment E
Issues Matrix
Docket 6720-TI-160

Issue[8]	Resolved	Unresolved	Category[9]
A1. Loop Make-Up Information and Interfaces Issues **Provision of IDLC information** **Returned loop makeup information** • **Availability by central office of percentage of loops where constraints in provisioning of xDSL exist**	1. Wisconsin Bell Inc, (Ameritech) will provide CLECs with *preorder* access to actual loop makeup information. 2. The loop makeup information is being provided via EDI and via email as of 5/17/00. 3. The loop makeup information will be provided via GUI by 9/27/00 and will go through the five-state Ameritech state Change Management process 4. The loop makeup information will comply with the requirements of the UNE Remand Order and the results of Advanced Services Plan of Record (POR), including the results of the CLEC collaborative. 5. The EDI, Fax and GUI loop information interfaces will be tested.	1. AT&T and other CLECs request that some of these interfaces, especially GUI, be implemented more rapidly. *NOTE: Issue of GUI and § 271 is now referenced in footnote 3.* *NOTE: The issue of phased testing has* been *deferred to the MTP portion of this proceeding and will not be included in this matrix.*	1

[8] For a description of each issue, see the document entitled "Description of A-AA Issues."
[9] This column provides a general cross-reference to the discussion on categories of issues found on pages 7-11 in the Report.
[10] Ameritech believes that the GUI interface does not need to be tested prior to qualifying to offer interLATA services under section 271. CLECs disagree with this position. Notwithstanding Ameritech's position regarding 271 approval, Ameritech agrees that the GUI interface must be tested.

	6. Central office loop percentages will be made available by 12/2/00 under the Advance Services POR, including information on the percentages of lines in each central office by zip code that are DSL compatible. 8. Ameritech will make improvements to the account management process. (See item Y) 9. Loop selection / assignment and loop build-out will both be tested, and will be compared against retail.		
A2. A new loop assignment process, including voice grade loops served through integrated digital loop carrier equipment as well as xDSL loop prequalification processes. No plans currently exist to provide these functionalities to CLECs who do not use an Electronic Data Interchange system ("EDI"); however, Ameritech will work with the Forum process to discuss and develop means to make these functionalities available to non-EDI CLECs. • **Loop selection** • **EDI message when no facilities available**	1. Ameritech will provide methods and procedures for all aspects of loop provisioning flow by 6/2/00. 2. The loop selection process will be tested. 3. Ameritech will provide information regarding the facilities availability process improvements due by 6/ 2/00. These improvements will be implemented by June 15, 2000, except for the commitment to notify CLECs of facilities problems within 24 hours of the initial FOC. This aspect of the plan will be implemented not later than September 1, 2000. (See item F for more information.) 4. An accelerated Change Management process will be used based on the five-state Ameritech Change Management process.	1. CLECs have issues with the adequacy of process improvements. 2. CLECs believe improvements must be made to the processes for escalation of problems with loop assignment. The improvements must include Ameritech assuming responsibility for getting lost or missed orders back on schedule. 3. Since Ameritech has not yet issued its "new" methods and procedures, it is impossible for any party to identify specific "unresolved issues;" therefore, all CLEC issues concerning loop selection / assignment process are unresolved. At the very least, CLECs expect the following from a loop selection/assignment process: • a process which gives CLECs timely notice in the ordering process on whether the facility is available, and if not: (a) provides a detailed explanation of why the particular	3 3

• **Loop assignment engineering**		facilities are not available; (b) provides a detailed explanation of the costs and work necessary for provisioning the "unavailable" facilities and the timing for such work to be completed • a detailed escalation account management process • a mechanism to track whether and how Ameritech later provides service on loops previously deemed unavailable to CLECs • the process should mirror as closely as possible the process Ameritech uses to provision its own retail work orders 4. Although loop selection / assignment and loop build-out will both be tested, and will be compared against retail, the meaning of "no facilities available" and whether Ameritech retail has an advantage is not resolved. CLECs believe if Ameritech will build, condition or create facilities for its retail customer when no facilities exist, then it should make facilities available to competitors in a similar manner. CLECs want more information on the basis for a no facilities available designation. 5. CLECs are concerned regarding the price associated with loop assignment when Ameritech uses manual processes to determine costs. 6. CLECs want the policy that they will be notified of facilities issues within 24 hours to be implemented shortly after Ameritech implements its improved processes to	3

		identify these issues, currently scheduled for June 15, 2000.	
A3. CLECs are experiencing high bit error rate problems if Ameritech is using HDSL(2) technology to deliver T-1 service. **(1) The use of this technology has interfered with CLECs' ability to provision local services.** **(2) The problem is that the HDSL(2) equipment is continuously robbing bits from the 6th, 12th, 18th and 24th frames in order to communicate with the card at the end user location and monitor the circuit. Although such bit robbing does not degrade voice service, it does have an impact on any data services using that channel.**		Ameritech is reviewing these issues.	3
B. CLECs require a process to order unbundled network element platform ("UNE-P") in commercial volumes for both business and residential customers. No plans currently exist to provide any functionalities to CLECs who do not use an EDI system; however, Ameritech will work with the Forum process to discuss and	1. Ameritech will provide a process to order UNE-P in commercial volumes for both business and residential customers. 2. Ameritech agrees to tariff UNE-P in Wisconsin. (UNE-P is currently available by interconnection agreement.) 3. The UNE-P order process is currently available via EDI 4. The UNE-P ordering process will be	1. The parties have not seen the UNE-P tariff, including pricing and other terms and conditions to determine if this is a viable product offering. 2. CLECs oppose any UNE-P restrictions such as prohibitions on new installs and second lines. 3. CLECs require the GUI interface to be deployed by September 2000, instead of March 2001, as proposed by Ameritech.	2 1

develop means to make these functionalities available to non-EDI CLECs. **UNE-P ordering using ASR or Telis/Connect:Direct ™**	available via GUI by 3/1/01. 5. The EDI interface will be tested. 6. The GUI interface will be tested, 7. Ameritech will not offer UNE-P via ASR, Telis/Connect:Direct™. 8. The FAX interface will be tested, although parties agree that a FAX ordering interface is not sufficient for commercial volumes.	4. CLECs believe that the Wisconsin PSC has the authority to order UNE-P and other combinations under existing state law. Ameritech disagrees. 5. AT&T believes that a separate, manual process for ordering UNE-P is necessary as a fail-safe.	
C. An ordering process for adding ADSL functionality to a local loop already being used for voice grade service (i.e., line sharing)	1. Ameritech will provide an ordering process for adding ADSL functionality to loops that are already in use by Ameritech for voice service. 2. The line sharing ordering process will be provided via Fax orders by 6/5/00; EDI and Telis will be available by May 27, 2000; and the GUI will be provided not later than March 1, 2001. 3. The GUI interface will provide the same functionality and process as the EDI interface. 4. The Fax, EDI, and GUI interfaces will be tested, although parties agree that the FAX interface is not sufficient for new products at commercial volumes.	1. CLECs require the GUI interface to be deployed by September 2000, instead of March 2001, as proposed by Ameritech. 2. The parties do not agree on whether line sharing can be used with UNE-P. 3. AT&T states that the line sharing offering--and its terms, conditions and pricing--is necessary and would impact OSS and third-party test. AT&T believes that a product offering and an interface to order Line Sharing with UNE-P must be completed and approved by the Commission prior to third-party testing beginning. Ameritech does not agree with this position. However, Ameritech has agreed to discuss the processes and procedures associated with obtaining an xDSL-capable loop, and if desired, unbundled switching and transport, and then disconnecting the UNE-P arrangement. This would enable the CLEC to provide both voice and data on a single xDSL-capable unbundled loop.	1 2 2

		4. A statement that ordering line sharing is possible via EDI by 5/27 is not completely accurate. Ameritech does not offer release testing prior to actual release, so the May 27th date is the date that most CLECs will start testing this functionality via EDI. Also, the fax functionality for EDI CLECs is void, since Ameritech has historically refused to send responses to CLECs utilizing EDI by any other method than EDI. In other words, if a CLEC is still testing EDI functionality and is having issues receiving responses, Ameritech will only send faxed order responses via EDI. Ameritech agreed to look into a faxed response solution for faxed orders.	3
D. A process to order sub-loop unbundling. • **Sub-loop ordering using EDI, ASR and Telis/Connect:Direct ™**	1. Ameritech will provide a process to order sub-loop unbundling. 2. The process for ordering sub-loops via Fax and ASR/Telis is available. 3. The process will be available by EDI, ASR and Telis/Connect:Direct ™ by September 27, 2000 utilizing the five-state Ameritech Change Management process. 4. The process will be available via GUI not later than March 1, 2001. 5. The Fax, EDI, ASR , Telis and GUI interfaces will be tested, although parties agree that the FAX interface is not sufficient for new products at commercial volumes.	1. Ameritech will describe the process to identify the locations of "point of access" to obtain a sub-loop. This will be shared with CLECs by (date to be determined).	2 1

E. A process to order dark fiber.	1. Ameritech will provide a process to order dark fiber. 2. Ameritech Wisconsin filed a tariff to include dark fiber in response to the UNE Remand Order on 5/18 /00. 3. The CLECs were notified of the tariff via TCNet. 4. The ordering process for dark fiber will be ASR/Telis. There will not be a GUI ordering process.	1. The CLECs have not yet seen the revised dark fiber tariff, so they cannot determine whether it complies with the UNE Remand order. Changes in the dark fiber product definition could affect the ordering process.	2
F. A new firm order confirmation process – including a new order jeopardy notification process for both EDI and non-EDI CLECs. • **FOC: confirmation or commitment date** • **Escalation process when problems occur**	1. Ameritech will incorporate version numbers and reason codes in all revised FOCs beginning September 27, 2000. 2. Ameritech will identify facilities problems within 24 hours of initial FOC beginning on September 1, 2000. Ameritech will do a jeopardy notice with a new committed due date when assignment / facilities problems are identified, except in the case where no suitable facilities exist, and the CLEC would have to give affirmative authority to construct or condition facilities. . 3. Ameritech will investigate whether CLECs can prefile a Letter of Authorization (LOA) authorizing conditioning and new construction charges up to a CLEC selected limit, thus avoiding the delay entailed in getting CLEC approval of such charges.	1. Since this process has not yet been worked out between the parties, the CLECs reserve judgment on whether the process will meet the stated objectives 2. CLECs believe escalation issues remain unresolved but will review hot-cut procedures and facilities availability procedures from Ameritech over the next month to determine if these new process and procedures address this issue and meet the stated objectives. 3. CLECs believe if the NECC-LOC finds a problem in the field when processing an order the problems should be fixed and the order should be expedited so service is delivered on or near the FOC date. In such a situation Ameritech should waive its nonrecurring costs and provide the competitor compensation. 4. CLECs believe if Ameritech splits an order that Ameritech should assure that all parts are completed at the same time.	3 3

	4. Ameritech will share documents with the participating CLECs and Commission staff on the new firm order process by June 2, 2000. 5. The new FOC process will be tested. 6. The internal LOC process to expedite resolution of missed cuts will be tested. 7. Ameritech has stated that the first FOC received via either FAX or EDI contains the committed due date	5. The revision to Ameritech's no-facilities policy may require Ameritech to implement additional reason codes to track the different types of responses. Ameritech will investigate this.	
G. Fail safe Hot-Cut procedures with dial tone and ANI testing completed 48hrs. prior to cut. • **Selection of scheduling time** • **Real time notice of completion of facilities service order**	1. Ameritech will provide fail-safe Hot-Cut procedures with dial tone and ANI testing completed 48hrs. prior to cut. 2. Ameritech will suggest a hot cut process after meeting with CLECs 3. The hot cut process will be provided not later than July 1, 2000. 4. Ameritech agrees to post their hot cut procedures on TCNet as a draft and circulate it at the next users forum on June 15, 2000. Ameritech will issue an accessible letter when procedures are final.	1. CLECs are determining if their switches and systems can accommodate fail-safe Hot-Cut procedures with dial tone and ANI testing completed 48hrs. prior to cut. 2. Operational issues to support frame due time on the LSR are being evaluated. 3. Parties are working on notification to CLECs for completion of facilities within 60 minutes. 4. Parties are developing a process whereby trouble reports which occur within 24 hours after the cut are handled by the provisioning center. 5. CLECs want trouble report updates every hour. Ameritech has committed to status reports every 4 hours or when status changes.	3

		6. Ameritech is developing an expedited process to restore service back to Ameritech within 24 hours of a problem associated with a scheduled coordinated cut. 7. Ameritech is developing hot-cut procedures for *x*DSL.	
H. The Street Address Guide ("SAG") and Customer Service Record ("CSR") will be synced up. (In other words, CSRs will be compared to the SAG, and errors in the CSRs will be corrected).	1. Ameritech will do an abbreviated validation on all orders which include a telephone number of an existing Ameritech service. The abbreviated validation will only validate the first field in the address. This change will be implemented by September 2000. 2. Parties agree that the Uniform and Enhanced OSS Collaborative may modify this proposal.	1. The parties do not agree on whether Ameritech is able to sync CSR to SAG. AT&T wants, at a minimum, a one-time scrub of the database to eliminate existing problems. 2. Ameritech will investigate whether abbreviated validation will work for a customer with existing service but requesting a new line. 3. Parties require additional information before they can evaluate whether abbreviated validation meets their needs.	3
I. Parsed CSRs will be provided.	1. Ameritech will provide parsed CSRs. Parsed CSRs will be provided as part of LSOG 4 pre-ordering/ordering implementation by March 2001. 2. Parsed CSRs will be tested.	1. CLECs want parsed CSRs prior to March 2001. 2. AT&T believes testing cannot start until full functionality, including parsed CSRs, is implemented. 3. Ameritech states that full LSOG 4 deployment, including Parsed CSR, is not possible before March 2001 but has not investigated the possibility of deploying the parsed CSR functionality, apart from LSOG 4, before the end of the year. 4. Ameritech states that the format of the parsed CSR will be consistent with SBC's	1

		current ELMS 4 compliant interface and include the parsed address. AT&T requests that the parsed CSR use the ELMS4 standards for all parts of the CSR. Parties will investigate whether SBC meets ELMS4, or whether other agreed-upon standards will be used.	
J. Implement industry standard versions of EDI (Version 10) and LSOG (Version 4) for ordering, including all associated functionalities by August 2000.	1. LSOG 4 ordering including jeopardy notification shall be implemented no later than March 2001 2. Most of the exceptions to the LSOG4 standard will be discussed and agreed to in the FCC's Uniform and Enhanced OSS Interface Collaborative. 3. LSOG 4 will be tested.	1. Parties disagree about whether certain functionalities should be included in LSOG4, and whether these should even be discussed by the FCC's Uniform and Enhanced OSS Collaborative for LSOG4. These include parsed CSR, complex completions, single order for DL, preorder/order synchronization, full refresh of supplemental orders and jeopardy notification. 2. The CLECs believe that parsed CSR, complex completion and jeopardy notification functionality must be available via the ordering interface by the end of 2000. Ameritech states that full LSOG 4 deployment is not possible before March 2001 but has not investigated the possibility of deploying these functionalities, apart from LSOG 4, before the end of the year. 4. AT&T believes that implementation of industry-compliant LSOG 4 with full functionality must be completed before testing begins.	1
K. Implement an industry standard version of LSOG (Version 4) for preordering.	1. Ameritech has committed to implementing an industry standard LSOG 4 for pre-ordering by March 2001, including parsed CSR. 2. This functionality will be tested.	1. Parties disagree about whether certain functionalities should be included in LSOG4, and whether these should even be discussed by the FCC's Uniform and Enhanced OSS Collaborative for LSOG4. These include parsed CSR, complex completions, single	1

		order for DL, preorder/order synchronization, full refresh of supplemental orders and jeopardy notification. 2. The CLECs require parsed CSR functionality in the ordering interface by December 2000. Ameritech has not determined whether this functionality can be delivered outside of LSOG4 to meet that deadline. 3. AT&T believes that implementation of industry-compliant LSOG 4 with full functionality must be completed before testing begins.	
L. Directory assistance and publishing (listing) • **Ability to use a single interface** • **Simplification of "retain current listing" orders** • **Listing verification** • **Consistency of DP with DA listings** • **Trouble resolution procedures** • **Improved customer notification via TCList Link;** • **Caption listings submission process** • **Website updating and change processes; password**	1. All aspects of the directory assistance and directory publishing interfaces will be tested, except for those involving yellow pages display ads. 2. Ameritech agrees to eliminate the need for two interfaces by September, 2001. A single interface that is integrated into the current loop ordering processes, including ASR/Telis, will be provided not later than September 1, 2001. 3. Ameritech will implement a process to allow CLECs the option to retain current listings on all orders, except partials, by March 2001. Ameritech is reviewing its ability to advance the implementation of this process. 4. Ameritech will provide the current SBC "retain current listings" specification	1. CLECs believe that a single interface should be implemented by January, 2001. 2. Ameritech believes that testing will identify and resolve DA/DP problems. CLECs require DA/DP problems to be fixed prior to testing. 3. The CLECs cannot evaluate Ameritech position prior to obtaining detailed proposals and policy papers. 4. Ameritech still has follow-up issues.	1

access issue	by June 1, 2000. This policy will be that currently used by SBC. 5. Ameritech will provide copies of the existing Ameritech Publishing order and query processes. 6. Ameritech will improve coordination between account team and directory publishing and directory assistance personnel.		
M. E911 database management • **Identification of differences between master street address (MSAG) as needed by municipalities for 911-entry and SAG info.**	1. The MSAG database is developed by the municipalities and maintained by a contractor. The format of the MSAG is set by the county which runs the 911 service. 2. CLECs are having 911 updates rejected because of differences in the format the CLECs must use to submit orders to Ameritech and to the 911 administrators. 3. Ameritech states that it has similar problems in submitting 911-address information.	1. Ameritech contends that it cannot conform SAG to MSAG. Other parties contend that it could do so. This issue may be resolved to the satisfaction of CLECs through the information to be provided in Issue H.	
N. Scheduled access to customer's premises • **Ability to convey end user information** • **Ability to escalate problems without resubmission of order**	1. Ameritech will ensure that its service technicians will use the access information provided by CLECs, and will ensure that the LOC will expedite any orders missed if technicians do not use the provided access information. 2. Ameritech will provide copies of this policy to the CLECs.	1. TDS Metrocom and other CLECs are reviewing complaint logs to determine if this problem is still occurring.	3

	3. Ameritech completed additional training of service technicians in the LOC to ensure compliance in February 2000. 4. Ameritech's process regarding access to customer premises will be tested. 5. Ameritech agrees that CLECs should not have to resubmit orders that have not been completed because Ameritech technicians did not obtain access during the scheduled period when valid access instruction was provided and not followed.		
O. Replacement of internal NIDs for residential customers	1. Ameritech's existing policy is that whenever an internal NID is found, it will be moved outside, time permitting. 2. Ameritech's revised policy will ensure movement of internal NIDs to external on all CLEC dispatches . Ameritech's revised policy will recall technicians to any premises that does not have an external NID. This policy will be implemented by September 30, 2000. 3. This policy will be part of the test.	1. CLECs believe that a suitable performance measure is required. Ameritech does not believe that a performance measure is warranted because any measure would be highly subjective.	3
P. Notification of Change/TCNet • **Input from CLECs in change management process**	1. Ameritech will implement the SBC policy on accessible letters for all changes. The new policy will be implemented by September 30, 2000. 2. Ameritech will provide both before and after images of accessible letters, and a Change Log of TCNet.	1. CLECs have a concern over the treatment of items removed from TC Net, and will review the new policy before agreeing that this, and other, issues are resolved. 2. CLECs have concerns about the change management process for non-OSS issues. This issue will be addressed in the Users Forum.	3

	3. The CLEC Forum will work to resolve any open issues regarding TCNet change management.		
Q. LEC Protection • **Method to communicate LOA for facilities based customers**	1. Ameritech has suspended its LEC Protect program for states other than Michigan. It is reviewing whether or not to implement this program in Wisconsin. 2. Ameritech has not developed policies for submitting LOAs for LEC protected customers. Ameritech will not implement this program before all procedures for handling LEC Protection and submitting required LOAs have gone through the change management process.	1. The CLECs have concerns about the policies for LOAs and LEC Protect customers. 2. The CLECs believe that this policy directly affects their ability to place and process orders, and is therefore at issue in this docket. Ameritech contends that this issue is not appropriate for this docket. 3. The CLECs feel the LEC Protection program, if implemented, would harm competition. Ameritech feels that might benefit customers: this is part of Ameritech's review process. 4. The CLECs seek assurance that, if the issue of the anti-competitive effects of LEC Protection are not included in this docket, the CLECs will have an opportunity to present those arguments to the Commission prior to LEC Protection going into effect. 5. Ameritech is reviewing whether it will agree to defer completion of the LEC Protect program for a certain period of time (e.g., until December 31, 2000).	3
R. Service Order Completion • **Identification of actual changes entered**	1. Ameritech will implement a process to allow review of all (pending/submitted/ completed) service orders for all products through the online provisioning interface by March 1, 2001. 2. Ameritech will not provide an image	1. CLECs have concerns about the extent of information available through this process. 2. CLECs have concerns about service orders being divided and some parts being completed before others. This could lead to some loops being switched to a CLEC before the CLEC	

	of the service orders with completion notices, unless it is agreed to in the Uniform and Enhanced OSS collaborative on LSOG4.	learns of the change. CLECs wish to receive confirmation notices that indicate when each party of a divided order is completed. 3. CLECs still require complex completions.	1
S. Flow Through • **Identification of business rules in order to improve flow through.** (flowthrough means processing the entire order electronically.)	1. Ameritech will provide detail on what products and types of service orders flowthrough. 2. Ameritech, as part of the 12 month review, will identify flowthrough initiatives and update the flowthrough information in the change management system and online by September 30, 2000. Ameritech has made a draft document available 3. Appropriate flowthrough measures will be developed.	1. CLECs require a performance measure that is based on total orders versus orders that are "flow-through eligible." 2. Parties have differing definitions of what flowthrough means, for the purposes of measurement. Separate measures may be necessary for flowthrough in the service center and in other systems. 3. CLECs want online information concerning why orders do not flow through. (Information is being provided in the Ohio collaborative, and should be provided on TCNet.) The adequacy of this information must be determined.	3
T. Supplemental Orders **Resubmit whole order, just changes, or whole order with changes added.**	1. Ameritech systems will be supplemented to allow for full refresh by September 2001.	1. CLECs require this functionality earlier.	1
U. Preorder/Order Synchronization • **Identification of elements that won't synchronize after LSOG4 implementation**	(See comments on Parsed CSR, Issue I, for more information.)	(See comments on Parsed CSR, Issue I, for more information.) 1. Ameritech believes that its existing systems provide for pre-order/order integration. Several CLECs have either integrated information from Ameritech's pre-order and order interfaces themselves, or are using a 3rd party software package to do so. For this	1

		reason, Ameritech believes that Parsed CSR provides the CLECs additional assistance in integrating pre-ordering and ordering.. 2. CLECs do not believe that Ameritech's preordering and ordering systems are integrated in the manner required by the FCC and believe that synchronization of data elements (in addition to the Parsed CSR) is required. 3. Parties disagree on an appropriate implementation date.	
V. Enhanced extended links • **Definition of product to be tested**	1. This issue overlaps with UNE-P. 2. Parties agree that Ameritech must convert Special Access circuits to EELs as defined by the FCC in its UNE Remand Supplemental Order.	1. This issue is being worked in Michigan. 2. CLECs believe that Ameritech must allow ordering of these circuits as EELs, instead of requiring them to be ordered as special access and then converted to EELs. Ameritech believes that it is only required to convert existing circuits to EELs, not to provision new circuits as EELs. This issue is in the 8th circuit court at present. 3. CLECs disagree with Ameritech that no new combinations are required until the 8th Circuit issues an Order on FCC Rule 3.15(c). 4. Since the product is not defined, CLECs still have concerns about the product definition and price. 5. Ameritech has a process for converting Special Access circuits to EELs posted on TC Net. CLECs believe that this process is inadequate.	2

W. Branded operator services	1. Ameritech currently provides this capability with dedicated trunk access now. 2. Ameritech will announce the availability of OS/DA Branding via the Service Provider Id (SPID) by August 1, 2000. This eliminates the need for dedicated trunking.	1. MCI will review whether this is sufficient.	3
X. Partial Migrations • **Methods and procedures**	1. Ameritech's partial migration intervals are the same as for other changes. 2. Ameritech will keep its operational process regarding Partial Migrations, and not adopt the SBC policy.	1. CLECs oppose any rearrangements fee that may be imposed by Ameritech.	3
Y. Account Management	1. Ameritech reviewed the account management process during May and agreed to augment the Account Management and Service Management functions by developing a handbook which details account and service management responsibilities, and by hiring additional personnel.	1. CLECs will provide Ameritech with a list of functions that should be included in the handbook. 2. Ameritech will provide an edited version of the handbook to CLECs to ensure that CLEC concerns have been included. This will be available by August 1, 2000. 3. CLECs will need to review the handbook and policies before agreeing that their concerns have been addressed. 4. CLECs feel this process should result in the creation of an engineering czar to handle escalation of facilities issues. The Ameritech plan does not call for creation of such a position. However, the Service Management augmentation process may resolve this issue.	3

Z. Collocation Ordering, Rates, Auditing and Record keeping Processes • **Collocation ordering is uncertain due to the lack of tariffed rates and clear processes for ordering.** • **Difficulty exists regarding the proper payment for the COBO.** **(1) COBO charge is not available as a non-recurring charge and is required at the RECURRING TELRIC rate.** **(2) The charge would at least treble the prior COBO charges.** • **CLECs need a clear path to determine the cost of a new collocation and terms for payment. CLECs require audits on request of equipment availability and status.** • **Notice of ownership change of equipment must be properly processed**.		1. Ameritech is reviewing these issues.	

AA. LNP 10-Digit Trigger (TDT) Ordering • **Full implementation of LNP 10-digit trigger should include appropriate order forms in support of the functionality.** • **Time Warner (TWTC) has requested, but has not received, improved intervals associated with TDT.** • **TWTC has a concern about the reassignment of ported numbers by Ameritech to Ameritech customers after the numbers were ported to TWTC customers.** **(1) Ameritech has provided a description of a "process" that seems to have been employed in SBC territory and committed to its application in the Ameritech region.** **(2) TWTC has not received any validation that the process is in place.** **(3) Number reassignment corrupts the caller-ID database and Ameritech is**		1. Ameritech is reviewing these issues.	

unwilling/unable to remove the corruption when it returns the improperly reassigned numbers. The removal of the caller-ID corruption is a process that should be automatically linked to the correction of the improper reassignment.			

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Attachment C:
Summary of Further Prehearing Conferences[1]

Date	Issues Discussed
July 24, 2000	Scheduling, identification and initial discussion of critical issues (A, F, G, C, L, Y)
August 1, 2000	Master Test Plan Primer with KPMG Consulting
August 7, 2000	Performance Measure ("PM") Overview
August 10, 2000	Issues A & F Facilities Modification Process
August 29, 2000	Linking performance measures to issues A-AA; issues A & F Facilities Modification Process
August 30, 2000	Development of the WI Master Test Plan with KPMG Consulting; Issues Y (Account Management), B/V (UNE-P & EELs), G (Hot Cuts); L (Directory Assistance)
August 31, 2000	Continued discussion of open issues from 8/29 & 8/30.
September 7, 2000	Issues A & F (Facilities Modification Process); B (UNE-P); V (EELs)
September 8, 2000	Issues G (Hot Cuts), C (loop assignment for DSL), L (directory assistance/directory publishing); interim GUI.
September 12, 2000	Issues M, Q, S, W, B/V, C, F, H, D
September 13, 2000	Issues A (DSL Tracking Inquiry and DLC Distribution Area Reports); Sub-loop unbundling; L (Directory single interface); Y (Account Management Handbook)
September 14, 2000	Performance Assurance Plans
September 18, 2000	Issues O, P, C, E, LSOG4, F, H, D, L (e), L (d), M, Combinations Amendment, Line Splitting, A (DLS Tracking Inquiry and Distribution Area Report availability).
September 19, 2000	Review of the WI Master Test Plan with KPMG Consulting
September 21, 2000	Performance Measures (except Plan), specifically determining disputed Phase II PM, change management for PM, mapping A-AA issues to PMs. Issue Y (Revised Account Management Handbook)
September 26, 2000	Flow-through (Issue S), Hot Cut process
September 27, 2000	Facilities Modification Process (Issues A/F), Interim GUI, Network Interface Devise Policy (Issue O), Ameritech's Engineering Controlled Splice (ECS) product amendment (Issue D). Final review of the Wisconsin Master Test Plan with KPMG Consulting.

[1] Representatives from Ameritech/SBC, AT&T, Worldcom, TDS Metrocom, Time-Warner, McLeodUSA, Rhythms and Sprint regularly participated in these further prehearing conferences. Other parties attended less frequently.

Attachment D

Resolved OSS Enhancements and Process Improvements Made as a Result of the Prehearing Conferences (Issues A-AA)

Below is a table listing the resolved OSS enhancements and process improvements negotiated by the parties during the prehearing conferences in this proceeding followed with brief descriptions of these issues. This section is designed to give the Commission a general overview of the resolved issues and is not intended to provide a detailed explanation of the issues.

Issue	Title
A1	Loop Make-up Information
C	Line Sharing
E	Dark Fiber
GUI	Interim GUI Agreement
I	LSOG 4 Functionalities for Testing
M	E911 Database Management
P	TC/Net Change Policy
Q	LEC Protection
W	Branded Operator Services
Y	Account Management

1. Issue A1: Loop Make-Up Information and Interfaces Issues (Availability by central office of percentage of loops where constraints in provisioning of xDSL exist).

As referenced in the Commission's July 19, 2000, order, Ameritech had proposed a simple procedure for requesting and receiving Digital Loop Carrier (DLC) loop percentages by central office to be available by September 1, 2000. In the further prehearing conferences, parties agreed that simply providing an overall percentage of loops served by DLC for each central office did not provide meaningful information about potential facility issues for orders of unbundled loops. According to Ameritech, there are multiple distribution areas and

routes served out of a central office. From a mathematical standpoint, the overall percentage of DLC loops would only be meaningful if the CLEC expects to requests loops in a random fashion equally throughout the entire wire center. Even if used for a marketing planning tool, the information could be misleading since the information is not available by distribution area. Ameritech agreed to provide this information upon request within 10 business days and will provide a form for CLECs to use to make such requests.

As an alternative, which CLECs agreed would provide more useful information, Ameritech will provide access to its new DSL Tracking Inquiry Tool (DTI) and Distribution Area (DA) information from its internal network systems. The combination of these two tools provide the CLECs with the ability to identify, within a smaller geographic area in a wire center, where loops are served by integrated loop carrier or universal loop carrier. This information is more specific than an overall percentage of loops served by DLC in a central office.

The following issues are resolved or closed for purposes of the November 2000 hearing in this proceeding. To the extent that disputes arise on these issues subsequent to this report or subsequent to the November 2000 hearing, parties have agreed to use the recommended Dispute Resolution Process as described in section IX of this report.

2. Issue C: Line Sharing

In response to the FCC's order, Ameritech began offering line sharing to CLECs through a contract amendment in May, 2000. This amendment contains the rates, terms and conditions whereby CLECs may use the high frequency portion of Ameritech's UNE-Loops for digital subscriber line (xDSL) services. According to Ameritech, some CLECs have

signed this amendment while others have chosen to arbitrate under Sec. 252 of the federal Telecommunications Act of 1996. Line sharing is included in the Master Test Plan (MTP) using Ameritech's contract amendment to define the product offering. To the extent any arbitration decision changes the product offering, the MTP will be modified accordingly.

CLECs also requested that Ameritech implement a Graphical User Interface (GUI) to order line-sharing services. As discussed in Section 4, below, the Interim GUI agreed to by the parties does not currently support ordering for line sharing. However, to the extent this ordering functionality becomes available at a later date in another state, it will be made available to CLECs in Wisconsin.

3. Issue E: Dark Fiber

In response to the FCC's UNE Remand Order, Ameritech filed a tariff with this Commission on May 18, 2000, making dark fiber available to CLECs in Wisconsin. CLECs have indicated that they have no issues with the tariff.

4. Interim GUI

As referenced in paragraph 11 of the Commission's July 19, 2000, order, Ameritech agreed to provide a graphical user interface (GUI) on an interim basis for CLEC use in ordering unbundled loops until a permanent GUI is implemented.

Attachment K contains the terms and conditions by which the interim GUI will be provided as agreed to by the parties. CLEC training sessions for using the Interim GUI began in September 2000. The interim GUI will be available until the permanent GUI is

deployed, scheduled for March 2001. The parties agreed that since the permanent GUI will be tested, the interim GUI will not.

5. Issue I: Local Service Ordering Guide, Version 4 (LSOG4) and related issues

LSOG is a telecommunications industry standard for computer systems dealing with local service ordering and provisioning. Paragraph 10 of the Commission's July 19, 2000, order, entitled "LSOG4 and GUI Deployment," specifies the "interfaces" and "OSS functionalities" to be deployed and tested in Wisconsin. Paragraph 10 of the July 19, 2000, order, provides: "To the extent these OSS functionalities are defined and resolved on or before September 15, 2000, in the FCC collaborative proceedings under the SBC/Ameritech Uniform and Enhanced OSS Plan of Record, those functionalities will be documented and implemented as defined in those proceedings." Additionally, Paragraph 10 specifies that the change management process to be applied to the deployment of these functions is the Change Management Process used in the FCC Uniform and Enhance Plan of Record (POR).

Two types of OSS changes will be made to Ameritech's application-to-application electronic interfaces consistent with the terms of Paragraph 10 of the July 19, 2000, order and consistent with the POR. First, Ameritech has agreed to update its existing electronic data interfaces (EDI) used for ordering and pre-ordering to be consistent with LSOG 4 (issues J and K). In addition to updating the existing EDI interface, Ameritech agreed to modify or add OSS functionalities. These OSS enhancements include parsed customer service records (CSRs) (Issue I), abbreviated address validation (Issue H), service order completions (Issue R), supplemental orders (Issue T), pre-ordering and ordering process synchronization (Issue

U), firm order confirmations (included in Issue F) and a single ordering interface including directory assistance and directory publishing (included in Issue L).

As noted above, Issues J and K require the deployment and testing of pre-ordering and ordering EDI interfaces consistent with LSOG 4. The parties agree that the OSS enhancements, as provided in the SBC/Ameritech Uniform and Enhanced Plan of Record that was filed at the Federal Communications Commission on `August 8, 2000, are included within the meaning and scope of Issues J and K. The commitments made by Ameritech to the FCC in the POR related to the Ameritech region apply to all five Ameritech states. It is the understanding of the parties that the commitments in the POR scheduled for implementation prior to and including the March 2001 release for the Ameritech region are included within the scope of third party testing in Wisconsin. If a POR commitment intended for implementation prior to and or as part of the March 2001 release is implemented by Ameritech after March 2001, the parties agree that testing in this proceeding cannot conclude until such commitments are fully implemented and tested. The POR commitments in the March 2001 release include, but are not limited, to the following:

- Synchronized pre-ordering and ordering data elements and documentation of the business rules for any non-synchronized pre-ordering and ordering data elements (Issue U) (POR p. 40)

- Modifications, as described in the POR at pages 40 – 47, to the following inquiry/response transactions for pre-ordering:

  CLLI (Common Language Location Information)

  CFA (Connecting Facility Assignment)

  CSR (Customer Service Record)

  Digital Subscriber Loop Qualification

  Directory Listing Inquiry

  Dispatch Inquiry

  FSA (Feature/Service Availability)

  NC/NCI (Network Channel/Network Channel Interface)

  PIC/LPIC (Primary Interexchange Carrier/IntraLATA Primary Interexchange Carrier)

  TN (Telephone Number) Availability

- Application-to-application and GUI ordering for the following products, as described in the POR at pages 49 – 51, and consistent with the LSOG and ELMS 4 specifications:

Resale Basic Exchange	Basic Port
Resale Centrex	Centrex Line Port
Resale Private Line	Analog Trunk Port
Resale ISDN PRI	DID Trunk Port
Resale ISDN BRI	BRI Line Port
Resale Advance Digital Trunking Services (DS1 Trunk)	PRI Trunk Port
Resale Base Rate Service (56kb)	DS1 Trunk Port
Resale DS1, DS3 (Line Side)	DS1 Network Port
Resale DID	Loop with port combinations
Resale PBX	Basic Loop, includes ISDN, xDSL, PBX, and DS1
Resale Foreign Exchange	Loop transport combination
Resale Off Premise Extension	Stand-alone number portability
Resale Coin	Number portability with loop Listing

- Provision of appropriate information in “Unsolicited 865” ordering transactions that will allow the CLEC to associate the “865” notice with the appropriate Local Service Request (LSR). (POR p. 49)
- Modifications to the following Ordering/Provisioning notices, as described in the POR at pages 51 – 54, and consistent with LSOG 4 and ELMS 4 specifications:

  Jeopardy Notification
  Service Order Completion
  Loss Notification
  Pending order Status
  Provisioning Order Status

Other OSS functionality that will be deployed and tested in Wisconsin includes: the relevant interfaces used to access loop make-up information (Issue A) or to order UNE-P (Issue B), "line sharing" (Issue C), and sub-loop unbundling (Issue D). These additional functions will also be deployed consistent with LSOG 4. It is intended that these OSS functions will be documented and implemented as defined in the SBC/Ameritech Uniform and Enhanced OSS Plan of Record, which means that they will be implemented and tested prior to completion of the Wisconsin Test.

Ameritech has agreed to provide the application-to-application functions, as described above, no later than its March 2001 release. Ameritech has also agreed that successful testing of these enhancements and the other components of the March 2001 release will be considered an exit criteria of the Wisconsin OSS third party test.

6. Issue M: E911 Database Management (confirm parity between Ameritech and CLECs)

Ameritech stated that the database used for E911, called the Master Street Address Guide (MSAG), is built, and maintained by the Public Service Answering Point (PSAP) in each applicable county. Although Ameritech administers the MSAG database, any updates are subject to PSAP authorization. In contrast, the Street Address Guide (SAG), which Ameritech uses to validate end user addresses when service orders are submitted, is built and maintained by Ameritech.

Conflicts exist between the two databases (SAG and MSAG) because a customer's mailing address for postal service delivery purposes as needed for the SAG may list one community, but the customer's physical location, as needed for the MSAG for purposes of emergency service dispatch by the PSAP, may list another community. Therefore, when CLECs attempt to validate a customer address for submitting a service order to Ameritech, the order may pass the SAG edit check but be rejected by the MSAG E911 database edit check. No effort has been made to synchronize these two databases because the addresses may always need to be different. As a result, CLEC service orders may be delayed because of the need for the CLEC to resubmit the orders to satisfy the MSAG E911 database edit.

During the prehearing, it was clear that Ameritech and CLECs have the same problem with respect to address validation between the SAG and MSAG. This issue could be resolved if only one database could be used to determine a valid address for both service order and E911 purposes but such objective is beyond the scope of this proceeding. In lieu of a single database for address verification, Ameritech has agreed to notify CLECs through the CLEC User Forum of any new processes or updates to the E911 database.

7. Issue P: TC/Net Change Policy

"Accessible Letters" are used by Ameritech to inform CLECs of changes regarding OSS and electronic data interface (EDI) related issues only. Ameritech places this information on a web page called TC/Net for access by all CLECs. On the other hand, SBC uses Accessible Letters to inform CLECs about all changes that affect CLECs (not just OSS and EDI) including: tariffs, products and services, and methods and procedures. On September 30, 2000, Ameritech began implementing SBC's policy on Accessible Letters and is migrating its TC/Net information to SBC's company-wide website for CLECs. Ameritech also agreed to provide "before and after" images of Accessible Letters as well as a Change Log reflecting changes posted on the web page so that CLECs can follow and track the changes that have been made.

Ameritech and the CLECs have also reached tentative agreement on a Change Management process for non-OSS issues. The parties have agreed that Ameritech will communicate changes to its processes, procedures and manual forms to CLECs via Accessible Letter and will follow the change process outlined in the CLEC Users Forum. The CLEC Users Forum allows CLECs and Ameritech to identify, submit, discuss and resolve issues that impact Ameritech and CLECs in daily business practices. Examples of issues addressed in the CLEC Users Forum include network operations, business practices, maintenance and repair, and billing. The parties intend for the Change Management process to be dynamic in nature, and to be managed through regular meetings of the CLEC Users Forum. Parties agreed to review the effectiveness of this process every six months. There are three categories of changes that will be addressed using the CMP:

Category 1: Changes Impacting CLEC Methods and Procedures

For these issues, Ameritech will provide notification via an Accessible Letter and include the planned implementation date, the type of change, exceptions to certain standards for manual orders, description of the change, and any other relevant information. Category 1 changes will be implemented no less than 30 calendar days from the date of the initial notification. During this period, CLECs will have an opportunity to seek clarification, ask questions, and provide comments regarding Category 1 issues.

Category 2: Informational Changes

Category 2 changes are informational in nature and would not require extensive modifications on the part of the CLEC. Ameritech will notify CLECs in the same manner as Category 1 changes and include the same types of information. Implementation will be no less than 15 calendar days from the date of the notification during which the CLECs will have an opportunity to provide comments.

Category 3: Exception Changes:

Category 3 changes involve changing the timeframes for Category 1 or 2 changes. Any request for an exception will be forwarded to a CLEC Users Forum Committee for consideration.

8. Issue Q: LEC Protection

LEC Protection is a service that Ameritech has considered offering to its retail customers under which Ameritech would not change that customer's local service to another CLEC unless the CLEC presents a verified letter of authorization (LOA) from that customer.

During the prehearing conferences, Ameritech committed that LEC Protection would not be implemented in Wisconsin prior to April 2001. However, Ameritech stated that if and when it proposes to deploy LEC Protection after April 2001, the Change Management process would apply, which requires 120-day advanced notice if an interface is affected and 30-day advanced notice if an interface is not affected. To the extent that Ameritech proposes to deploy this service after April 2001, Ameritech agreed to provide CLECs with notice and the opportunity to invoke the Dispute Resolution Process referenced in Section VII of this report. In addition, Ameritech agreed that LEC Protection would not be implemented until the Dispute Resolution process was completed. Further, if LEC Protection is ever implemented in Wisconsin, parties agree to develop a process by which the LEC Protect could be removed from a CLEC order.

9. Issue W: Branded Operator Services

Ameritech implemented a new capability for branding Operator Services (OS) and Directory Assistance (DA) based on the CLECs Service Provider Identification (SPID, also known as the operating company number.) The SPID allows CLECs using Ameritech's OS/DA products in the UNE and Resale environment to brand OS/DA with their own company brand. The CLECs branding phrase recording will be played to the originating end

user at the beginning of the call prior to the call being connected to Ameritech's OS/DA systems. CLECs are satisfied with Ameritech's implementation of this issue.

10. Issue Y: Account Management

Ameritech presented a revised Account Manager Handbook that details the account management responsibilities and operating guidelines for conducting business with CLECs. In response to this draft, CLECs recommended numerous changes including:

a. Providing a broader definition of account team functions;

b. Adding organization charts, job descriptions and other information organizations that support the account team.

c. Providing a specific definition that the account team is the internal advocate for CLEC issues within Ameritech.

d. Strengthening the role of account management by expanding the authority of account team members to resolve CLEC issues.

e. Reducing time frames for responding to critical CLEC communications including telephone calls, pages and emails.

Ameritech agreed to these revisions. A revised version of the Handbook is included as Attachment L.

T:\report\6720-TI-160\Attachment D Resolved A-AA Issues

Attachment E

Unresolved OSS Enhancements and Process Improvements

Below is a table listing the unresolved issues designated for the November 2000 hearing in this proceeding followed with brief descriptions of these issues. This section is designed to give the Commission a general overview of the issues in dispute, not to provide a detailed explanation of the issues or to create a complete record. Parties will fully develop their positions in testimony and briefs for the hearing.

Issue	Title
A/F	Facilities Modification Process
B/V	Unbundled Network Element Platform (UNE-P) and Enhanced Extended Links (EELs)
F(2) D H	"865" Versioning (Deferred from September 27 to December 2, 2000 Sub-Loop Ordering (Deferred from September 27 to December 2, 2000 Abbreviated Address Validation (Deferred from September 1, 2000 to March 2001)
--	Parity with a Floor
J/K	Change Management Process (Voting)
G	Hot Cuts
O	Network Interface Devices (NIDs)
S	Flow-Through
L	Directory Listing Ordering and Inquiry
C	Line Splitting

1. Issue A/F: Facility Modification Process

Ameritech's recent facilities modification process resulted in frequent cancellation of CLEC loop orders because, according to Ameritech, "no facilities were available". For example, CLEC loop orders would be cancelled if the requested UNE-Loop involved existing loops served with integrated digital loop carrier (IDLC.) Ameritech usually gave little or no explanation as to why facilities were not available when it cancelled the order.

Also, frequently Ameritech did not notify the CLECs of these cancellations until on or near the provisioning due date.

In response to these concerns, Ameritech developed a new policy designed to reduce the number of cancellations and improve communications with CLECs as to reasons for any delay. This new policy is called the Facilities Modification Process. The goal of the new policy is to determine if facilities problems exist and, if so, to provide earlier notification to CLECs. If facility problems are discovered, Ameritech agrees to provide an explanation as to what modifications are required to provide the UNE-loop to the CLEC, along with a new due date, if applicable.

The Facilities Modification Process is divided into three components:

A. Simple Modifications: When UNE-Loop orders require simple modifications, Ameritech will provision and deliver the loop on the original due date with no additional charges. Examples of simple modifications include: line and station transfer; clear defective pair; install plugs/cards; wire out of limit and; break connect through.

B. Complex Facilities Modifications: For these types of UNE-Loop orders, modification of existing facilities is required. Ameritech will determine what modifications are required, and inform the CLEC of the modification and a new due date within 48 hours of the original firm order confirmation (FOC.) Examples of complex modifications include: conditioning for xDSL; rerouting of facilities; and

equipment ordering, delivery and installation. Unlike simple modifications, charges may apply to CLECs for complex modifications (e.g., loop conditioning).

C. New Build: For these types of UNE-loop orders, new construction is required because no existing facilities are available. In these circumstances, Ameritech will reject the CLEC order negotiate with the CLEC to determine applicable charges and a completion due date, if the CLEC wishes to continue with the order on that basis.

Attachment N contains the most current version of detailed process flows on how the Facility Modification Process will operate. Although the policy is still under development, parties acknowledge that much progress has been made. However, discussions on improving the policy continued on the last scheduled day of the prehearing conferences. At present there are four open issues:

1. Review of Ameritech's most recent version of the facilities modification policy and anticipated modifications to the policy language and notifications to ensure that the policy addresses the problems identified by CLECs;

2. 48-hour vs. 24-hour Notice: As originally developed, CLECs would receive a Delay Notice within 24 hours of receiving the original firm order confirmation notice (FOC.) Ameritech later modified this interval to 48 hours. Ameritech has indicated that it will pursue various process improvements such that it commits to achieving the 24-hour interval within six months.

3. IDLC: Ameritech's initial proposal required CLECs to use the Bona Fide Request (BFR) process when IDLC was present on the loop. CLECs generally oppose using the BFR process, especially the 30-day interval provided for Ameritech to respond with a price quote for provisioning the UNE-loop. In response, Ameritech eliminated the BFR process for IDLC loops but retained the 30-day interval. After much discussion by the parties, Ameritech and the CLECs agreed to negotiate a shorter target time frame by which Ameritech would attempt to respond, while leaving the required response time at no later than 30 days.

4. Finally, because this new policy is still under development, final performance measures have yet to be developed. Parties agree that once the policy is final, performance measures for each step of the Facilities Modification Process will be required.

Parties have agreed to continue to work to improve the Facilities Modification Process. Because open issues remain, Issues A/F should be considered for the November 2000 hearing. However, parties are not yet at an impasse and are optimistic that these open issues will be resolved prior to the hearing.

2. Issues B and V: UNE-P and EELs

The unbundled network element – platform (UNE-P or "Platform") is a combination into a single, integrated element of all of the unbundled network elements that make up local service. These elements include the local loop, local switching, and shared transport.

Enhanced Extended Links (EELs) are combinations of unbundled network elements; typically, loops, ports and interoffice trunks. EELs are used to allow a CLEC to collocate in a single central office in an exchange and still serve customers in all other central offices in the exchange. Some of these products are functionally identical to various special access services. However, EELs, as are UNEs, are priced at total element long run incremental cost.

Participants in the Wisconsin prehearing conferences deferred to Michigan on the UNE-P and EELs issues since the Michigan Tariff Collaborative had been negotiating a tariff for new combinations. During those negotiations, the Federal 8th Circuit Court of Appeals issued a ruling on July 18, 2000, regarding the remand from the United States Supreme Court. Based on the 8th Circuit's decision, Ameritech withdrew the tariff and offered instead a contract amendment.

CLECs position:

CLECs argue that Ameritech is relying on the 8th Circuit's decision in *Iowa Utilities Board v. FCC*, 219 F3d 744 (8th Cir. July 18, 2000) (motions to partial stay granted, September 22, 2000 pending) (*Iowa Utilities II*), to argue that Ameritech is "prohibited" by federal law from providing "new combinations" and, accordingly, is therefore prohibited from provisioning "new combinations" under state law.

CLECs state that Ameritech's position has been rejected by the 5th Circuit. Specifically, the 5th Circuit determined that *Iowa Utilities II*, "…does not hold that such arrangements [(new combinations)] are prohibited; rather, it only holds that they are not required by [(federal)] law. *Southwestern Bell Telephone Company v. Walker Creek Communications, Inc.*, 2000 WL 1091660, _ F.3d__, (5th Cir. August 21, 2000) at *7. The

CLECs argue that another court has most recently determined that, even after *Iowa Utilities II*, the Colorado Public Utilities Commission, consistent with federal law, could order that the ILEC provide combinations. (*U.S. West Communications, Inc. v. Hix, et al*, United States District Court, District of Colorado, Judge Wiley Y. Daniel, Civil Action No. 97-D-152, consolidated with 97-D-387, 97-D-2047, 97-D-2096, and 97-D-1667, August 28, 2000.

Furthermore, the CLECs point out that the 9th Circuit has twice in the last year also ruled that combinations ordered by state commissions are not inconsistent with the federal act. CLECs argue that, in *U.S. West Communications v. MFS Intelenet, et al*., 193 F.3d 112, 1121 (9th Cir. October 8, 1999), the 9th Circuit ruled that a Washington Utilities and Transportation Commission order "… requiring US West to combine unbundled network elements is not inconsistent with the Act … the combination provision does not conflict with the Act because the Act does not say or imply that network elements may only be leased in discrete parts." In *MCI Telecommunications Corporation v. US West Communications*, 204 F.3d 1262 (9th Cir., March 2, 2000) (*petition for cert. Filed* August 7, 2000), the CLECs state that the 9th Circuit ruled that "… the Act does not currently mandate a provision requiring combination. Our task is to determine whether such a provision [(mandating combinations)] 'meets the requirements' of the Act, i.e., to decide whether a provision requiring combination violated the Act. The Supreme Court's interpretation of the Act makes absolutely clear that it does not, and we have already so held. *See, MFS Intelenet*, 193 F.3d at 1121." *MCI Telecommunications Corporation*, 204 F.3d 1262 at 1268.

Thus, the CLECs maintain that the Commission can and should exercise its authority to order Ameritech to offer, under tariff and at TELRIC-based prices, EELs and unrestricted

UNE-P combinations that Ameritech ordinarily provides for its own retail end-users' new and additional lines.

Ameritech's position:

Ameritech argues that in *Iowa Utilities Board, et. al., v. F.C.C.*, Case No. 96-3321, decided by the Eighth Circuit Court of Appeals on July 18, 2000, the Court reaffirmed its prior ruling vacating rules 51.315 (c)-(f), (which required incumbent LECs to perform the functions necessary to combine unbundled network elements in any manner), see 120 F.3d 753 (8th Cir. 1997). Ameritech maintains that, on remand from the Supreme Court, the Court found that the Supreme Court's reinstatement of rule 51.315(b) (which prohibits incumbent LECs from separating preexisting combinations of network elements), also previously vacated by the Eighth Circuit, did not affect their order vacating rule 51.315(c)-(f) because it was based on a different rationale. Slip Op. At pp.22 – 25. The Court found that subsections (c)-(f) pertain to the combination of network elements by the incumbent, and again held that it is not the duty of the incumbent LEC to "perform the functions necessary to combine unbundled network elements in any manner." The Court concluded: "…subsections (c)-(f) violate the plain language of the statute." Slip op. At pp. 24-25. Accordingly, Ameritech argues that the Court maintained its vacatur of rules 51.315(c)-(f).

Thus, because the Eighth Circuit Court of Appeals found that requiring the incumbent LEC "to do the combining" violates the Federal Act, Ameritech argues that any PSCW requirement to tariff new combinations would violate federal law. As a result, Ameritech states it will only tariff existing UNE-P combinations, and other required network elements.

Ameritech will offer any new UNE-P combinations and enhanced extended loops (EELs) only pursuant to a Section 271 contract amendment, not under a tariff.

Issues For Hearing:

The parties will present evidence on the following issues related to UNE-P and EELs. This issues list, as developed initially in the Michigan 271 proceeding, has been modified to reflect that this Wisconsin proceeding is not a "271" proceeding.

1. Do the terms and conditions of the proposed amendment meet the requirements for providing combinations of network elements assuming satisfactory OSS test and performance measurement results?

   a. In light of the July 18, 2000, 8th Circuit Court decision, is Ameritech obligated to provide new combinations?

   b. Can new combinations be obligated under state statutes? Should these combinations be tariffed? How should the tariff read?

   c. If Ameritech is not required to provide new combinations, are the market prices proposed by Ameritech in compliance with state and federal requirements?

2. Is the distinction between new and existing UNE-Ps and EELs appropriate as designated in the proposed amendment?

3. Can operator service (OS) and directory assistance (DA) be priced at market rates? What terms and conditions are appropriate for this offering? Should Ameritech be required to detail its voice mail and OS/DA offerings prior to requiring signing of the agreement? If so, what should be included in these offerings?

4. To what extent must combinations offered under the terms of the proposed amendment (including both existing and new) and OS/DA offerings also be tariffed? Even where the rates of an offering may not be regulated, is a tariff required under state law?

5. Does the non-collocation alternative proposed by Ameritech for CLEC combination of network elements satisfy the federal requirements? Is a dedicated area rather than a secure frame room the preferred requirement? Must the proposed secured frame room alternative be available pursuant to tariff?

6. May Ameritech condition the availability of these offerings on agreement by the CLECs that they not purchase the same services under available tariffs? May Ameritech limit a signing CLEC from picking and choosing parts of other interconnection agreements for the CLEC's use?

7. May Ameritech limit the portability of this amendment to other states?

8. Should the conversion of special access circuits to EELs be tariffed and if so under what conditions should this be offered?

9. Is the length of the term of the proposed amendment acceptable? Is it appropriate to link availability of an amendment to agreement that it meets the requirements of Section 271?

10. Should Ameritech have the option to withdraw its UNE-P offering for business customers when 4 or more collocutors are present in a particular office?

11. Should the CLEC waiver language be modified? Is the limitation on a signing CLEC's ability to bring UNE issues and complaints concerning this amendment to the Commission or the FCC for resolution, if any, appropriate?

12. Should Ameritech be required to offer resale at a price no higher than the lower of the current resale price or the prices offered for UNE-P until Ameritech tariffs and offers and unrestricted UNE-P? Should damage issues or collateral complaints for damages be permitted?

13. Should Ameritech be required to issue all telco bills for UNE-P in the CABS BOS format?

14. Should Ameritech install UNE-P at a level of parity with their retail operations, but at a minimum service level adhering to PSC regulation standards?

15. Should CLECs be required to complete a Bona Fide Request to request additional capacity to meet their network unbundling needs?

<u>Further issues for hearing related to additional product definition:</u>

In relation to product definitions, there exists some overlap with the Commission's proceeding in docket 6720-TI-161, the "UNE-P Pricing Docket." As established in a prehearing conference in the UNE pricing docket, held January 27, 2000, the identified issues included the matter of the Commission's legal authority to: (1) set prices outside the scope

of arbitration proceedings; (2) require UNEs not required by the FCC; (3) require combinations not required by the FCC; and, (4) require the filing of tariffs for such products.

By letter dated September 18, 2000, to Mr. Patzke, ALJ in the UNE Pricing Docket, WorldCom requested clarification as to the proper delineation of the UNE-P issues between the UNE Pricing docket (6720-TI-161) and this OSS docket (6720-TI-160). The following issues currently in the UNE Pricing docket do not appear in the above list but were included in WorldCom's request with the recommendation that they be addressed in this docket.

1. May the Commission determine Ameritech obligations as to offerings and pricing outside a specific arbitration under s. 252 of the Act based on authority in state or federal laws?

2. For the following additional products, long term shared transport, sub-loop unbundling and dark fiber:[1]

What is Ameritech required to offer under the Act?

What is Ameritech required to offer under state law?

What should the Commission in its discretion direct Ameritech to offer?

Should the product be tariffed?

Should the product be offered at TELRIC-based prices?

When should the product be made available?

3. Issues F(2), H and D (Deferral of implementation dates)

According to Ameritech, the following issues will not be deployed as originally scheduled and as listed in the Commission's July 19, 2000, order in this proceeding:

Issue F(2): "865" Versioning (Deferred from September 27 to December 2, 2000)

[1] Parties agreed to address issues relating to UNE-P line splitting in the current Ameritech and AT&T arbitration proceeding.

Issue D: Sub-Loop Ordering (Deferred from September 27 to December 2, 2000)

Issue H: Abbreviated Address Validation (Deferral from September 1, 2000 to March 2001)

CLECs position:

The CLECs believe that Ameritech should be required to comply with the mutually agreed upon dates, as set forth in Order Point 7 of the Commission's Order dated July 19, 2000 ("Commission Order"), for the deployment of OSS enhancements and process improvements in Issues D, F, and H. CLECs argue that the acceleration of these enhancements and system improvements will assist in the expansion of competition in Wisconsin.

CLECs maintain that Ameritech's conclusory description of its reasons for not meeting the Order dates for system enhancements fails to justify the competitive disadvantage that will be incurred by the Competitive Providers, and is in direct conflict with the Commission Order which requires Ameritech to "provide to the parties and implement the following OSS enhancements, processes and procedures *on or before* the following dates" (Order, p. 5). CLECs contend that Ameritech should be required to explain in detail why the Competitive Providers should be disadvantaged because of Ameritech's: 1) failure to have adequate system requirement and development resources; 2) lack of understanding regarding the scope of the changes until a business analysis was completed; and, 3) underestimation of the scope of changes required for 865 Versioning and Abbreviated Address Validation.

In the event that it is not technically feasible to meet the Order dates for the system deliverables, CLECs maintain that Ameritech must be required to accelerate the implementation of the system deliverables to the earliest possible dates and in advance of the proposed alternative dates.

Finally, CLECs contend that Ameritech's correspondence does not provide a detailed description of the efforts undertaken by Ameritech to insure compliance with the Commission Order. Instead the correspondence consists of conclusory statements offered to justify the decision to delay the implementation dates.

Ameritech's position:

Ameritech notes that on September 11, 2000, Ameritech provided the parties a written summary of the reasons that have caused a delay in implementing the three items it had planned to implement in September 2000. On September 18, 2000, Glen Sirles, Vice President –OSS, and Sandra Baker, Director of Information Technology, attended the pre-hearing conference to provide more detail to the staff and the parties.

Ameritech also notes that during the September 18, 2000, prehearing conference, Ameritech expressed its regret with the delay in delivering these OSS enhancements. At that time, Ameritech responded to specific CLEC questions that CLECs submitted by earlier letter. Ameritech assured the parties that it has adequate system development resources to implement all of its OSS-related commitments, including the revised dates for these three items. In particular, Ameritech indicated that it is committed to delivering the March 2001, LSOG 4 release on time. Ameritech also will work with the parties to determine whether alternative approaches are feasible. For example, Ameritech is exploring AT&T's

suggestion about using purchase order numbers (PONs) as a partial solution to the “865” versioning issue.

Ameritech stated that the complexity of the systems involved and the comprehensive nature of the OSS changes being made to Ameritech’s systems at this time sometimes result in schedule changes. Ameritech confirmed that it will not be able to meet the implementation dates for Issues D, F and H that are specified in the Commission’s July 19, 2000, order. Ameritech believes that footnote 3 in that Order provides the parties flexibility to change implementation dates pursuant to subsequent discussions during prehearing conferences.

4. Parity with a Floor:

CLECs position:

According to CLECs, periodically Ameritech provides inferior service to both its wholesale and retail customers. CLECs note that most states have employed minimum standards of performance for service to retail customers, but unfortunately these standards have not incented Ameritech to improve its performance in a consistent and timely fashion. In addition, CLECs maintain that the state commissions have a limited number of retail measures with standards as compared to the new proposed wholesale performance measures being developed jointly by CLECs and Ameritech for the Ameritech five-state region.

CLECs have expressed concern that where Ameritech meets the parity requirements of performance measure standards, *i.e.*, "parity" to retail service, it still may be providing service to the CLEC at less than the retail standard, thus causing the CLEC to be in violation of the service quality rules for its end users. CLECs therefore propose that where parity

governs the existing performance measures, the retail service quality standards must be maintained at a minimum ("the floor").

Ameritech's position:

Ameritech maintains that this "parity with a floor" approach is not appropriate because it improperly attempts to mix the concept of wholesale performance measurements and their related remedies with the retail service quality requirements ordered by the Commission. According to Ameritech, wholesale performance measures and retail service quality obligations are separate and distinct: retail service quality obligations are obligations owed by a carrier to its end user customers, whereas performance measures and remedies are carrier-to-carrier obligations. Thus, the two obligations should be dealt with in separate ways. Ameritech contends that, with respect to performance measures, parity (under which Ameritech must provide as good a quality of service to CLECs as it provides to itself) is the appropriate standard because any other standard inappropriately would require Ameritech to provide CLECs better service than it would provide itself.

- Ameritech also states that on July 18, 2000, the Eighth Circuit Court of Appeals in Iowa Utilities Board v. FCC, Case No. 96-3321, reaffirmed that the FCC's "superior quality rules" (51.305(a)(4) and 51.311(c)) must be vacated. The Court stated that "nothing in the statute [251(c)(2)(C)] requires the ILECs to provide superior quality interconnection to its competitors." (Opinion at 22.) The motivation to improve retail quality service should reside in the retail service quality rules, not in additional penalties levied on an ILEC for wholesale performance that meets or exceeds the parity standard.

- Ameritech also argues that the CLEC proposal in effect requires Ameritech to provide wholesale service of higher quality and at a higher standard than retail service. Not only is such a requirement unlawful, but it is (just as importantly) detrimental to retail customers. With the same resources available to perform the same work and a remedy attached to wholesale service quality that is potentially higher than any remedy associated with retail, an ILEC would be obligated to provide better service to the wholesale customer. This would create an incentive for Ameritech to provide

> substandard service to retail customers vis-a-vis a CLEC customer, thereby skewing the competitive marketplace in favor of CLECs.

According to Ameritech, its goal is to provide quality service in compliance with the Wisconsin retail service quality rules and with the wholesale performance measures as established in this proceeding. Ameritech states that it strives to provide wholesale offerings at least at parity with comparable retail services and its aim is to meet or exceed the Wisconsin retail standards. Finally, Ameritech states that it has the same incentive as the CLECs to provide quality service. It cannot, nor should it be required to, guarantee better service to wholesale customers at the expense of its own retail customers.

ALJ recommendation:

The Temporary ALJ supports the CLEC proposal and issued a Proposed Order dated September 25, 2000, on this issue (Attachment H.) The temporary ALJ recommends that the Commission set appropriate benchmarks for service quality defining adequate performance so that CLECs have a reasonable opportunity to provide adequate retail service to their own customers. The magnitude of those benchmarks should be an issue for the November 2000 hearing in this proceeding.

5. Issues J and K: Change Management Process

As outlined in paragraph 10 of the Commission's July 19, 2000, order, Ameritech and the CLECs agreed to Change Management Processes (CMP) to be applicable for any OSS functionality upgrades. However, parties are currently at an impasse with respect to one issue related to Change Management: CLEC voting rights on OSS releases.

CLECs Position:

Under Ameritech's proposal, a quorum of qualified CLECs is required to participate in its Outstanding Issues Solution (OIS) forum, a process that CLECs can invoke to raise a dispute about any feature of an Ameritech proposed release. If a CLEC quorum is not established, a vote cannot be taken and Ameritech may move forward with its implementation.

The CLECs argue that this process effectively requires that a majority of all CLECs in the Ameritech region would have to be participating in the resolution of a particular issue before Ameritech would allow a vote to go forward. The CLECs state that they are unaware of any meeting regarding systems or operations in the Ameritech region over the last year that included a "majority" of the CLECs operating in the region. Indeed, while Ameritech has indicated that over forty carriers are using its EDI interface, only seven carriers actively participated in the Change Management Process negotiations. Thus, the CLECs propose that, if a CLEC wishes to abstain from involvement in a debate about the pending change, it should be able to "opt-out" of the debate completely. Opting out should be considered an abstention vote, not a vote in favor of implementation.

CLECs believe that SBC's thirteen-state plan, including the modified voting process that allows for a majority vote by the OIS participants, should be adopted by this Commission as the permanent Wisconsin change management process.

Ameritech's position:

As a threshold matter, Ameritech points out that this narrow CMP voting issue was never discussed during the Wisconsin prehearing conferences, and that there is no reference

to this issue in the Commission's July 19, 2000, order. Ameritech argues that, in fact, the Order provides that if this issue is not resolved, then the Uniform and Enhanced Plan of Record (POR) Change Management Process will apply to the OSS functions to be deployed. Therefore, this issue should not be considered in the November hearings. If the Commission, nonetheless, wishes to address this issue—which is also pending before the ICC and the FCC—it should reject the CLECs position as unreasonable, and adopt Ameritech's approach.

Ameritech contends that in the CMP, there are two points at which a CLEC go/no-go vote can be taken in connection with Outstanding Issue Solution (OIS).

Because a release, or the change or delay of a release, can affect a CLEC in ways that might not be readily apparent, Ameritech contends that it is important that a minimum number of CLECs participate in a decision to hold a release that has been subject to the extensive discussions within the CMP. Ameritech believes that at least 50% of "qualified" CLECs or 8 CLECs (whichever is less) should participate in a vote to delay a release.

According to Ameritech, the current draft of the CMP agreed to by the parties contains provisions by which CLECs can call for a vote to delay a technical OSS-related release. Ameritech believes that a quorum or some minimum number of "qualified" CLECs should be required to ensure the "collaborative" nature of the CMP.

An OIS vote could result in the delay of a release, the redesign of requirements, or the delay in the introduction or retirement of an interface. A go/no-go vote would take place after CLEC joint testing of a release and prior to release implementation. If a CLEC feels the release software has defects or is not stable, it could request a vote to determine if the release should be delayed until the code is fixed.

Ameritech states that "qualified" CLECs may participate in an OIS vote and the CMP provides the criteria to determine which CLECs are "qualified" for each type of OIS. For example, in order to qualify to vote in an OIS on an EDI ordering release implementation (go-no/go) a CLEC must have tested for the release in question, and be in production with at least 30 EDI transactions in the previous month.

CLECs have expressed a concern about not knowing the number of qualified CLECs on a given issue and, therefore, not being able to determine what number of CLECs are necessary for a quorum or which CLECs to solicit to obtain a quorum. According to Ameritech, its normal practice is to send notices of the OIS to each CLEC (SBC sends these notices in the 13-State context). Ameritech submits that, in most cases, its suggested alternative of 8 minimum carriers (if it is less than 50%) solves that problem. Moreover, Ameritech agreed to circulate a list of qualified CLECs that have agreed to release of their identities.

6. Issue G: Hot Cuts

A number of CLECs are using what is referred to as the UNE-Loop entry strategy to serve local customers. That entry strategy involves the purchase of a loop from Ameritech and its use in conjunction with the CLEC's transport and switching facilities. The process of physically disconnecting the loop from the ILEC switch and re-connecting it to CLEC facilities is commonly referred to as a "hot cut." The hot cut process also makes it possible for the customer to retain its existing telephone number when the customer's service is transferred from Ameritech to a CLEC. Since the hot-cut process includes the physical disconnection of the customer's loop, the customer will be without service for some period of

time. In order to minimize that out-of-service time, close coordination between CLECs and Ameritech is essential.

Parties have successfully developed and documented a process to implement Coordinated Hot Cuts (CHC) (Attachment M). The CHC process includes special handling of trouble reports that occur within 24 hours of cutover; integration of DSL conversions; and a provision for "Throwbacks" whereby service is re-established temporarily to Ameritech on an expedited basis if a problem occurs during the cut process. Ameritech and the CLECs are conducting weekly conference calls to review and solve "hot cut" implementation issues. Generally, CLEC problems are being communicated to Ameritech as they occur and are being successfully resolved.

While the parties have made significant progress on CHC, there are two open issues that should be included in the November 2000 hearing: a) Dial tone and automatic number identification (ANI) testing; and, b) frame due time (FDT).

a) Dial-Tone/ANI Testing

The first issue in dispute involves the timing of pre-cut dial-tone/ANI testing. All parties agree that pre-cut testing is necessary to allow parties to determine if any problems or errors are present prior to the actual cutover. If testing determines that Ameritech has problems on its end of the hot cut process, they are resolved and the cut continues as scheduled. CLECs request the same opportunity to resolve problems on their side of the cut on a real-time basis. If a CLEC is not able to resolve its problems on its side of the cut, Ameritech cancels the order and the CLEC must supplement the order and begin the process again. Parties have agreed to perform testing prior to the cut but disagree as to when that testing should occur.

CLECs position:

CLECs have requested test results from Ameritech on dial-tone, switch translations, or facility problems in sufficient time to permit the CLEC to identify and correct errors in advance of a customer's cut-over date. Some CLECs have proposed conducting testing 48 hours prior to the cut (due date minus 2, or DD-2) while other CLECs have proposed this testing 24 hours in advance of the cut (DD-1). CLECs believe that Ameritech should not charge for this testing whenever it occurs.

Ameritech's position:

Ameritech's current proposal provides for testing 30 minutes prior to the time of the cut. If problems are identified on the CLEC side of the cut and the CLEC is able to resolve the problem in that time, the CLEC will notify Ameritech and the cut will proceed as scheduled. There is no Ameritech fee associated with testing conducted at such time. According to Ameritech, the initial request from CLECs was to have validation of the dial-tone/ANI testing performed at DD-2. Ameritech offered to perform this validation for all CLECs on DD-2 when Ameritech's technician is on location installing the wiring (Wire Office and Test, or WOT) for the CHC. Ameritech proposed to validate at that time if all CLECs complete their translation provisioning work by 8 a.m. of the WOT date, DD-2. Some CLECs advised Ameritech that they are unable to support this interval. Without complete CLEC agreement, Ameritech argues that there would be significant wasted effort validating, tracking and administering unprovisioned dial tone. Ameritech also contends that it would be cumbersome and expensive for it to "sort" through orders for CLECs that are prepared on DD-2 and for CLECs that are not prepared or that simply prefer DD-1. Since

Ameritech's central office technicians complete the wiring work on DD-2, additional central office visits to perform validation will be required at significant cost at other times. Moreover, Ameritech will have to develop a process to validate, track and administer these validations, which it understands several CLECs will not support.

Ameritech offered an alternative solution that gives a CLEC the ability to submit a request for validation to be conducted anytime up to the day prior to the due date, provided CLECs are charged the standard rate for time and material for central office work.

b) Frame Due Time

A Frame Due Time (FDT) hot cut requires Ameritech and a CLEC to negotiate a pre-arranged cut-over time. The nature of the dispute on this issue involves CLECs desire to indicate on the local service request (LSR) the time of day for the FDT hot cut. Further, Ameritech needs to include a data element on the firm order confirmation (FOC) indicating the time of day it has scheduled for the cut.

<u>CLECs position:</u>

CLECs have requested that Ameritech modify its systems, procedures, and processes to allow CLECs to request or negotiate a frame due time and to use functioning electronic OSS to support loop provisioning through frame due times. Specifically, CLECs argue that upon implementation, Ameritech should support the use of the industry standard Frame Due Time ("FDT") field on the return "855" (FOC) transaction. In the initial release requirements for the Frame Due Time process change, Ameritech has indicated that it plans to support a non-standard due time (DT) field on the return transaction until the implementation of the 13-state uniform platform. Under the proposed Frame Due Time

process, it is possible that Ameritech will not always be able to meet the Frame Due Time originally requested by the CLEC, and in those instances Ameritech will need to indicate a different Frame Due Time on the return transaction to the CLEC. Because the change to support the Frame Due Time entry on the form requires EDI coding on the part of the CLEC, CLECs have requested that, if in fact Ameritech will not use the standard FDT field upon DT implementation, Ameritech should provide an additional indicator on the return transaction, identifying that a change to the originally requested time has been made. This compromise, CLECs argue, would significantly shorten the coding timeframe needed by the CLECs to be able to implement this process.

Ameritech's position:

Ameritech determined that its current system could be quickly adopted to support "CHC" requests with FDT. In order to support CHC and FDT in a timely manner, Ameritech reviewed its current EDI transaction system and determined that the EDI data element called Due Time "DT" could be used on the FOC transaction to notify the CLEC of the confirmed Frame Due Time. This data element is currently used for transactions passed to CLECs, but is populated with zeros. According to the applicable standards, the DT EDI data element is intended to be used with the Due Date and not Frame Due Time. However, by using this field Ameritech indicated that it could implement FDT quickly without modifying existing EDI transaction systems. While CLEC's would be required to program to the CHC business rules if they currently or plan to use CHC, Ameritech believes other CLEC's would not be affected. In contrast, Ameritech stated that if it uses the FDT EDI data element, it would have to require that all CLEC's validate their systems and EDI translators to ensure the new

data element is mapped correctly to avoid system failure. Because of the potential negative impact on all CLECs, Ameritech believes that significant lead-time would be required prior to implementing the FDT change. Therefore, Ameritech proposes to use “DT” rather than “FDT” as an interim solution to expedite and support the frame due time hot cut process using the current EDI transaction system thus minimizing the potential negative impact on all CLECs.

During the Ameritech/CLEC Change Management Meeting on September 21, 2000, AT&T requested that Ameritech investigate providing a flag or indicator on the FOC that would provide confirmation that the returned Due Time is different from the requested Due Time. After reviewing the LSOG4 and LSOG5 standards, Ameritech determined that the applicable standard does not support this indicator. Ameritech therefore concluded that it cannot provide an indicator on the FOC related to the returned due time.

7. Issue O: Network Interface Devices (NIDs)

The network interface device (NID) is a device that connects the customer’s inside wiring to the telephone company provided outside plant. In the past, these interfaces were commonly installed inside, which meant the customer had to be home to allow companies access to the premises for any work required on the company side of the NID. With outside NIDs, customer access is no longer a problem. In the June 1, 2000, Report by the Temporary ALJ, it was reported that Ameritech had modified its NID policy to ensure that any remaining internal NIDs would be moved outside at the time of any Ameritech dispatch related to a CLEC order. Ameritech's proposed revised policy also included recalling technicians to any premises at no charge to the CLEC if, for some reason, the NID had not

been moved outside. Ameritech committed to implementing this new policy by September 30, 2000.

During the last prehearing conference (September 27, 2000), Ameritech indicated that its original policy from 1995 would remain in effect. Issues remain concerning the assurance that Ameritech will install external NIDs and the circumstances under which CLECs would be responsible for any Ameritech charges for that work.

CLECs position:

The CLECs noted that, at the prehearing conference on September 27, 2000, Ameritech stated that it would not be implementing a revised policy as represented in the Temporary ALJ's Report to address the issues as resolved by the parties, but instead would follow its policy originating in 1995. No prior notice had been made by Ameritech that it would not be implementing the mutually agreed upon revised policy. CLECs maintain their position that Ameritech should be required to implement the mutually agreed upon policy for the replacement of NIDs.

Ameritech's position:

During the last prehearing conference, Ameritech described its 1995 policy regarding the placement of NIDs and indicated it had no plans to change that policy.

8. Issue S: Flow-Through

Flow-through refers to CLEC orders that are processed by Ameritech's OSS without any manual intervention. At the prehearing conferences, Ameritech provided a list of services (e.g., Basic Exchange Residential Single Lines) and order types (e.g. Assume As

Is/As Specified) that by design should be able to flow-through its systems. Ameritech also provided lists of exceptions (e.g., Expedite, Caller ID, 800 Remarks) to each service and order type that prevent flow-through even for an Assume As Is order. In addition, Ameritech provided lists of the service order types that, by design, do not flow-through (e.g., Outside Moves, Line Activity). The issue in dispute is the quantity and type of orders that Ameritech should design its systems to flow through compared to those that will require manual intervention.

CLECs position:

Generally, CLECs believe that the capability of Ameritech's processes to "flow-through" CLEC orders is far below that required to sustain a competitive market. For example, loop orders with number portability (one of the most common types of CLEC orders) do not flow through. In fact, other than certain types of DSL, UNE-P and resale orders, Ameritech has indicated it has no current plans to improve its flow-through capabilities for any type of unbundled element orders, including loop and number portability orders.

CLECs believe that it is incumbent upon Ameritech to enhance the rates of flow-through for CLEC orders to the level of its retail flow through – i.e., CLEC flow through rates should be at parity with retail flow through experience. To accomplish this, CLECs recommend that Ameritech publish its flow-through types and exception lists monthly and identify which exceptions will be removed in the next software release. Specifically, CLECs recommend that Ameritech reduce flow through exceptions for unbundled element orders by at least 50% within one year. Ameritech should also measure the flow through rate for all

CLEC orders received so that this aggregate result can be compared to the flow through rates for flow-through eligible orders. Finally Ameritech should disaggregate this data by product type so that the CLECs, Ameritech, and the Commission can more easily identify the areas where flow through improvement is necessary.

Ameritech's position:

Ameritech has agreed to identify flow through initiatives as part of its 12 month OSS enhancement view with the information identified by order type before September 30, 2000. Ameritech also has agreed to provide CLECs with an updated flow-through matrix and overview sessions documenting the current state of flow through. While specifics for the future are still being defined, Ameritech is committed to continually increasing flow through as a matter of practice. Ameritech supports flow through of many order types today with more order types becoming flow-through eligible planned through the next several software releases. In addition, Ameritech believes that performance measures address the numerical commitments CLECs are requesting.

Ameritech points out specifically that two flow-through enhancements associated with unbundled network element ordering are scheduled for completion this year. The first is an enhancement to flow-through of Combined Platform Offering, Ameritech's UNE-P product, scheduled for October 2000. This enhancement was scheduled as a result of CLEC activity forecasts. The second enhancement, flow-through of xDSL loop orders and orders for line-sharing, came as a result of CLEC input during the SBC/Ameritech Advanced Services POR collaboratives, and is scheduled for implementation by December 2000.

Ameritech maintains that existing performance measures and the drive for internal operational efficiencies provide sufficient incentive for Ameritech to continue its program of flow-through improvement. Ameritech further states that selection of flow-through initiatives must be made based on technical feasibility, estimates of impact on both CLECs and Ameritech, and current and future order volumes affected. The applicable performance measures will allow the Commission, the CLECs and Ameritech to continue to monitor the effectiveness of these flow-through improvements over time.

9. Issue L: Directory Listing Ordering and Inquiry

Currently, if a CLEC order involves resale service and certain types of UNE products and services, the CLEC places its directory listing order through the Ameritech OSS interface. On the other hand, if a CLEC places a UNE loop order, it must place its directory listing order through a separate interface with Ameritech Advertising Services (AAS). CLECs are requesting that Ameritech incorporate the functionalities of both of these interfaces so that CLECs can use a single interface for its service orders and directory listing orders.

The issues for hearing include:

a. The acceleration of the single interface to a date earlier than September 1, 2001, and the development of a "work-around" solution for CLECs prior to that time;

b. Development of a single interface for both ordering and pre-ordering;

c. Development of performance measures related to directory publishing listings.

CLECs position:

Acceleration of the interface:

CLECs contend that the Commission's July 19, 2000, order, requires Ameritech to provide an interface or work around for integrating directory listings ordering ability by a date to be determined. Ameritech has stated that it will provide this interface by September 1, 2001. The CLECs request that Ameritech's implementation date be moved forward.

According to the CLECs, Ameritech has not adequately explained why it is unable to advance the ordering interface. In addition, CLECs contend that Ameritech has not yet provided a proposed work around to be implemented during the intervening period but has indicated it will provide that information to CLECs at some future date.

Single interface:

As currently planned, Ameritech intends to incorporate directory listing ordering but not pre-ordering functionality into its single ordering interface. The pre-ordering information on directory listings will remain available through AAS'directory system. CLECs request that Ameritech modify provide ordering and pre-ordering directory listing information over the single interface. After the CLEC has retained a new customer with a listing, the CLEC continues to require access to Ameritech's directory listing databases to assist end users with questions about the listings that were placed, to facilitate changes to those listings, and to update listing information. A single interface would facilitate that need.

Directory Publishing Accuracy:

CLECs request that Ameritech provide directory listing information for new directories at least 60 days prior to the publishing close date and an opportunity for CLECs to submit corrections 30 days prior to that date. Further, the CLECs request a second opportunity to review the proposed directory listings at least 15 days prior to the publishing close date and to submit final corrections before that date. The purpose of these reviews is to maximize the accuracy of the directory listing for the CLECs' customers.

Ameritech's position:

Acceleration of the interface:

According to Ameritech, the single directory/order interface is currently scheduled for September 2001. Because of IT resource limitations the single interface cannot be deployed earlier. To provide the interim solution "work around", Ameritech would have to code the changes required for sending directory information to AAS into its existing ordering system. Ameritech states that it will complete its assessment by end of October 2000, and at that time will be able to provide a written status report as to the feasibility of proceeding to develop a "work around" interim process.

Single interface:

Ameritech states that the CLECs request for a single interface requires development of a new functionality that links the CSR Inquiry process to an external directory database for listings information. This functionality is currently not available in the Ameritech CSR

database. According to Ameritech, standalone UNE loops have no Directory Listings information associated with them in the telephone company CSR databases. Thus, the CSR inquiry process does not include this information. However, Ameritech argues that when the Ameritech CSR database does have Directory Listings information (e.g. UNE-P and UNE Port), Ameritech will supply all available Directory Listing information via the CSR Inquiry process.

Ameritech notes that the functionality and data architecture of the AAS directory system are vastly different than the Ameritech based preorder directory listing inquiry tool used to retrieve Ameritech CSR information containing directory listing information. Ameritech claims that combining two different architectures and data structures into an existing pre-ordering platform that was not designed to handle AAS' functionality would require a complete re-write of both systems and interfaces.

Ameritech therefore believes that the existing Directory Listing inquiry processes should continue where the listing data is maintained in its CSR database. For directory listing information maintained only in AAS' directory systems, Ameritech states that CLECs should continue to work directly with AAS to obtain that information.

10. Line Splitting

With line sharing, both voice and data services are provided over a single copper loop. The voice service uses the low frequency portion of the loop and the data service uses the high frequency portion of the loop. The parties' disagreement is whether Ameritech should be required to offer what is referred to as "line splitting." Encompassed in this dispute is the scope of Ameritech's obligation to provide splitters when a CLEC requests access to the high frequency portion of the loop when it purchases UNE-P loops. A "splitter"

is a device that divides the data and voice signals that are transmitted concurrently over the single copper loop into separate voice and data components. Once separated, the data frequency is routed to a Digital Subscriber Line Access Multiplexer (DSLAM) that may or may not be integrated with the splitter. The voice frequency, on the other hand, must be routed back to the switch.

In the arbitration proceeding currently pending between Ameritech and AT&T in Wisconsin, AT&T and Ameritech have provided testimony and have fully briefed these issues. Although this issue is listed as open for the purposes of the November 2000 hearing in this proceeding, the parties have agreed to defer to the AT&T/Ameritech arbitration (Docket 05-MA-120) and to have the arbitration panel decide these issues.

T:\report\6720-TI-160\Attachment E

Wisconsin

measure #	Measure Name	Report Structure
Pre-Ordering / Ordering		
1	Average Response Time For OSS Pre-Order Interfaces	S
2	Percent Responses Received within "X" seconds – OSS Interfaces	S
3	EASE Average Response Time	NR
4	OSS Interface Availability	S
5	Percent Firm Order Confirmations (FOCs) Returned Within "X" Hours	S
5.1	Percent Firm Order Confirmations (FOCs) for XDSL-capable Loops & Line Sharing Returned Within "X" Hours	S
5.2	Percentage of Unsolicited FOCs by Reason Code	S
6	Average Time To Return FOC	S
6.1	Average Time to Return DSL FOCs	S
7	Percent Mechanized Completions Returned Within One Hour of Completion in Ordering System	S
7.1	Percent Mechanized Completions Returned Within One Day Of Work Completion	S
8	Average Time to Return Mechanized Completions	S
9	Percent Rejects	S
10	Percent Mechanized Rejects Returned within 1 hour of receipt of reject in Mor	S
10.1	Percent Mechanized Rejects Returned within One Hour of receipt of Order	S
10.2	Percent Manual Rejects Received Electronically and Returned Within Five Hours	S
10.3	Percent Manual Rejects Received Manually and Returned Within Five Hours	S
11	Mean Time to Return Mechanized Rejects	S
11.1	Mean Time to Return Manual Rejects that are Received via an Interface	S
11.2	Mean Time to Return Manual Rejects that are Received thru the Manual Process	S
12	Mechanized Provisioning Accuracy	S
13	Order Process Percent Flow Through	S
13.1	Total Order Process Percent Flow Through	S
Billing		
14	Billing Accuracy	CO
15	Percent of Accurate and Complete Formatted Mechanized Bills	S
16	Percent of Usage Records Transmitted Correctly	S
17	Billing Completeness	S
18	Billing Timeliness (Wholesale Bill)	S
19	Daily Usage Feed Timeliness	CO
20	Unbillable Usage	CO
Miscellaneous Administrative		
21	Local Service Center (LSC) Average Speed of Answer	S
22	Local Service Center (LSC) Grade Of Service (GOS)	S
23	Percent Busy in the Local Service Center (LSC)	S
24	Local Operations Center (LOC) Average Speed Of Answer	S
25	Local Operations Center (LOC) Grade Of Service (GOS)	S
26	Percent Busy in the Local Operations Center (LOC)	S
Provisioning – Resale POTS		
27	Mean Installation Interval	S
28	Percent Installations Completed Within "X" Business Days (POTS)	S
29	Percent Ameritech Caused Missed Due Dates	S
30	Percent Ameritech Missed Due Dates Due To Lack Of Facilities	S
31	Average Delay Days For Missed Due Dates Due To Lack Of Facilities	S
32	Average Delay Days For Ameritech Caused Missed Due Dates	S
33	Percent Ameritech Caused Missed Due Dates > 30 days	S

Wisconsin

measure #	Measure Name	Report Structure
34	Count of Orders Cancelled After the Due Date Which Were Caused by Ameritech	S
34.1	Average Delay Days for Ameritech Caused Canceled Orders –Resale POTS	S
35	Percent Trouble Reports Within 30 Days (I-30) of Installation	S
36	Percent No Access (Service Orders With No Access)	S
Maintenance – Resale POTS		
37	Trouble Report Rate	S
38	Percent Missed Repair Commitments	S
39	Receipt To Clear Duration	S
40	Percent Out Of Service (OOS) < 24 Hours	S
41	Percent Repeat Reports	S
42	Percent No Access (Percent of Trouble Reports with No Access)	S
Provisioning – Resale Specials & UNE Loop And Port Combinations		
43	Average Installation Interval	S
44	Percent Installations Completed Within 20 Calendar Days	S
45	Percent Ameritech Caused Missed Due Dates	S
46	Percent Trouble Reports Within 30 Days (I-30) of Installation	S
47	Percent Ameritech Missed Due Dates Due To Lack Of Facilities	S
48	Average Delay Days for Missed Due Dates Due to Lack Of Facilities	S
49	Average Delay Days For Ameritech Caused Missed Due Dates	S
50	Percent Ameritech Caused Missed Due Dates > 30 days	S
51	Count of Orders Cancelled After the Due Date Which Were Caused by Ameritech	S
51.1	Average Delay Days for Ameritech Caused Canceled Orders –Resale Specials	S
Maintenance - Resale Specials & UNE Loop And Port Combinations		
52	Mean Time To Restore	S
53	Percent Repeat Reports	S
54	Failure Frequency	S
Provisioning - Unbundled Network Elements		
55	Average Installation Interval	S
55.1	Average Installation Interval - DSL	S
55.2	Average Installation Interval for Loop with LNP	S
56	Percent Installations Completed Within "X" Days	S
57	Average Response Time for Manual Loop Make-up Information	S
58	Percent Ameritech Caused Missed Due Dates	S
59	Percent Trouble Reports Within 30 Days (I-30) of Installation	S
60	Percent Ameritech Missed Due Dates Due To Lack Of Facilities	S
61	Average Delay Days for Missed Due Dates Due To Lack Of Facilities	S
62	Average Delay Days For Ameritech Caused Missed Due Dates	S
63	Percent Ameritech Caused Missed Due Dates > 30 days	S
64	Count of Orders Cancelled After the Due Date Which Were Caused by Ameritech	S
64.1	Average Delay Days for Ameritech Caused Canceled Orders – UNE	S
Maintenance - Unbundled Network Elements		
65	Trouble Report Rate	S
66	Percent Missed Repair Commitments	S
67	Mean Time To Restore	S
68	Percent Out Of Service (OOS) < "24" Hours	S
69	Percent Repeat Reports	S
Interconnection Trunks		
70	Percentage of Trunk Blockage	S
71	Common Transport Trunk Blockage	S

Wisconsin

measure #	Measure Name	Report Structure
72	Distribution Of Common Transport Trunk Groups > 2%	S
73	Percentage Missed Due Dates – Interconnection Trunks	S
74	Average Delay Days For Missed Due Dates – Interconnection Trunks	S
75	Percentage Ameritech Caused Missed Due Dates > 30 Days – Interconnection Trunks	S
76	Average Trunk Restoration Interval – Interconnection Trunks	S
77	Average Trunk Restoration Interval for Service Affecting Trunk Groups	S
78	Average Interconnection Trunk Installation Interval	S
Directory Assistance & Operator Services		
79	Directory Assistance Grade Of Service	S
80	Directory Assistance Average Speed Of Answer	S
81	Operator Services Grade Of Service	S
82	Operator Services Speed Of Answer	S
83	Percentage of Calls Abandoned	S
84	Percentage of Calls Deflected	S
85	Average Work Time	S
86	Non-Call Busy Work Volumes	S
Interim Number Portability		
87	Percentage Installation Completed Within "X" (3, 7, 10) Days	NR
88	Average INP Installation Interval	NR
89	Percentage INP Only I-Reports Within 30 Days	NR
90	Percentage Missed Due Dates (INP Only)	NR
Local Number Portability		
91	Percentage of LNP Only Due Dates within Industry Guidelines	S
92	Percentage of Time the Old Service Provider Releases the Subscription Prior to the Expiration of the Second 9 Hour (T2) Timer	S
93	Percentage of Customer Accounts Restructured by the LNP Due Date	S
94	Percentage FOCs Returned Within "X" Hours	S
94.1	Average Time to Return FOC	S
95	Average Response Time for Non-Mechanized Rejects Returned With Complete and Accurate Codes	S
96	Percentage Pre-mature Disconnects for LNP Orders	S
97	Percentage of Time Ameritech Applies the 10-digit Trigger Prior to the LNP Order Due Date	S
98	Percentage Trouble LNP (I-Reports) in 30 Days	S
99	Average Delay Days for Ameritech Missed Due Dates	S
100	Average Time of Out of Service for LNP Conversions	S
101	Percent Out of Service < 60 minutes	S
911		
102	Average Time To Clear Errors	S
103	Percent Accuracy for 911 Database Updates	S
104	Average Time Required to Update 911 Database (Facility Based Providers)	S
Poles, Conduit & Right of Way		
105	Percentage of requests processed within 35 Days	S
106	Average Days Required to Process a Request	S
Collocation		
107	Percent Missed Collocation Due Dates	S
108	Average Delay Days for Ameritech Missed Due Dates	S
109	Percent of Requests Processed Within the Established Timelines	S
Directory Assistance Database		
110	Percentage of Updates Completed into the DA Database within 72 Hours for Facility Based	S

Wisconsin

measure #	Measure Name	Report Structure
	CLECs	
111	Average Update Interval for DA Database for Facility Based CLECs	S
112	Percentage DA Database Accuracy For Manual Updates	S
113	Percentage of Electronic Updates that Flow Through the update process Without Manual Intervention	S
Coordinated Conversions		
114	Percentage of Premature Disconnects (Coordinated Cutovers)	S
114.1	CHC LNP with Loop Provisioning Interval	S
115	Percentage of Ameritech caused delayed Coordinated Cutovers	S
115.1	Percent Provisioning Interval	S
115.2	Mean Time to Restore – Provisioning Trouble Report (PTR)	S
116	Percentage of Missed Mechanized INP Conversions	NR
NXX		
117	Percent NXXs loaded and tested prior to the LERG effective date	S
118	Average Delay Days for NXX Loading and Testing	S
119	Mean Time to Repair	S
Bona Fide Request Process (BFRs)		
120	Percentage of Requests Processed Within 30 Business Days	S
121	Percentage of Quotes Provided for Authorized BFRs Within 45 Business Days	S
Additional Measures		
MI 1	Percentage of Orders Given Jeopardy Notices	S
MI 2	Percentage of Orders Given Jeopardy Notices within 24 Hours of the Due Date	S
MI 3	Coordination Conversions Outside of Interval	S
MI 4	Average Time to Provide a Collocation Arrangement	S
MI 5	Structure Requests Completed Outside of Interval	S
MI 6	Erred Customer Record Update Files Not Returned by Next Business Day	S
MI 7	Errors in Customer Record Update Files	S
MI 8	Customer Record Update Files Not Updated by the Next Business Day	S
MI 9	Percent Missing FOCs	S
MI 10	Percent Time-Out Transactions	S
MI 11	Average Interface Outage Notification	CO
MI 12	Average Time to Clear Service Order Errors	S
MI 13	Percent Loss Notification w/in 1 Hour of Service Order Completion	S
MI 14	Percent Completion Notifications Returned w/in "x" hours of Completion of Maintenance Trouble Ticket	S
MI 15	Change Management	S
MI 16	Percentage Rejected Query Notices	S
WI 1	Percent No-Access for UNE Loops – Provisioning	S
WI 2	Percent No-Access for UNE Loops - Maintenance	S
WI 3	Installation Trouble Reports for Field Visit Orders to Move NID	S
WI 4	Percent Initial Facility Modification Notifications within Specified Timeframe	S
WI 5	Percent Complex Modification Classification, Requirements, and Revised Due Date within Specified Timeframe	S
WI 6	Percent New Build Notifications within Specified Timeframe	S
WI 7	Percent Good News Notice within Specified timeframe	S
WI 8	Percent Facility Modification Orders with Ameritech Caused Missed Due Dates	S
WI 9	Percent Facility Modification Orders	S

Reference:

CO = Ameritech will be reporting this measure on an Ameritech Company basis,

across all five states.

S = Ameritech will be reporting this measure on a state specific basis.

NR = Ameritech is not required to report on this measurement

PERFORMANCE MEASUREMENTS

RESALE POTS, RESALE SPECIALS AND UNES

Pre-Ordering/Ordering

1. Measurement	
Average Response Time For OSS Pre-Order Interfaces	
Definition:	
The average response time in seconds for pre-ordering queries measured from the Ameritech side of the Electronic Commerce Network (ECN).	
Exclusions:	
• Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's Performance shall not include Service Bureau Provider processing, availability or response time.	
Business Rules:	
The clock starts on the date/time when the request is received by Ameritech, and the clock stops on the date/time when Ameritech has completed the transmission of the response to the CLEC. The measurement is taken at the SWBT Ameritech side of the ECN (Electronic Commerce Network). This is just inside the Ameritech firewall. Response time is accumulated for each major query type, consistent with the specified reporting dimension, and then divided by the associated total number of queries received by Ameritech during the reporting period. The response time is measured only within the published hours of interface availability. Published hours of interface availability are documented on the CLEC web site. (Ameritech will not schedule system maintenance during normal business hours (8:00 a.m. to 5:30 p.m. Monday through Friday)).	
Levels of Disaggregation:	
• Address Verification. • Request For Telephone Number. • Request For Customer Service Record (CSR). • Service Availability - Offered via the Internet • Service Appointment Scheduling (Due Date) – Reported in "Dispatch Required" as these functions are by Ameritech. • Dispatch Required – Ameritech combines "Service Appointment Scheduling" and "Dispatch Required" functions in the "Due Date Selection" query • PIC - Offered via the internet. • Feature Availability • DSL Loop Qualification • NC/NCI Service Availability • CFA Availability	
Calculation:	**Report Structure:**
Σ[(Query Response Date & Time) -	Reported for CLEC ,all CLECs, and

(Query Submission Date & Time)] ÷ (Total queries Submitted in Reporting Period)	Ameritech Affiliate.

Measurement Type:

Tier 1 – Low
Tier 2 – Medium

Benchmark:

Measurement	**EDI/Internet**	
Address Verification	4.7 seconds	
Request For Telephone Number	4.5 seconds	
Request For Customer Service Record (CSR)	6.6 seconds	
Service Availability	6.6 seconds	
Service Appointment Scheduling (Due Date)	Reported in Dispatch Required	
Dispatch Required	12.6 seconds	
PIC	28.0 seconds	
Feature Availability	To be determined,	
DSL Loop Qualification	To be determined,	
NC/NCI Service Availability	To be determined,	
CFA Availability	To be determined,	

2. Measurement

Percent Responses Received within "X" seconds – OSS Interfaces

Definition:

The percent of responses completed in "x" seconds for pre-order interfaces () by function.

Exclusions:

See Measurement No. 1

Business Rules:

See Measurement No. 1

Levels of Disaggregation:

See Measurement No. 1

Calculation:	Report Structure:
(# of responses within each time interval ÷ total responses) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 – Low
Tier 2 – Medium

Benchmark:

Measurement		EDI/Internet	
Address Verification		90% in ≤ 8.0 seconds 95% in ≤ 12.0 seconds	
Request For Telephone Number		90% in ≤ 7.0 seconds 95% in ≤ 9.5 seconds	
Request For Customer Service Record (CSR)		90% in ≤ 8.0 seconds 95% in ≤ 13.0 seconds	
Service Availability		90% in ≤ 12.0 seconds 95% in ≤ 16.0 seconds	
Service Appointment Scheduling (Due Date)		Reported in "Dispatch Required"	
Dispatch Required		90% in ≤ 15.0 seconds 95% in ≤ 25.0 seconds	

PIC		90% in ≤ 39 seconds 95% in ≤ 60 seconds	
Feature Availability		90% in ≤ 20 seconds 95% in ≤ 25 seconds (Selected as an arbitrary timeframe, pending further review)	
DSL Loop Qualification		90% in ≤ 20 seconds 95% in ≤ 25 seconds (Selected as an arbitrary timeframe, pending further review)	
NC/NCI Service Availability		90% in ≤ 20 seconds 95% in ≤ 25 seconds (Selected as an arbitrary timeframe, pending further review)	
CFA Availability		90% in ≤ 20 seconds 95% in ≤ 25 seconds (Selected as an arbitrary timeframe, pending further review)	

3. Measurement	
~~EASE Average Response Time~~	
Definition:	
~~Average screen to screen response from the Ameritech side of the Remote Access Facility (RAF) and return.~~	
Exclusions:	
~~None~~	
Business Rules:	
~~The response time for a query is measured from the point in time when the CLEC customer service agent submits the query for information through a function key option on their keyboard into the OSS until the time when the OSS releases the information to the CLEC customer service agent by unlocking the keyboard for a new transaction. Response time is a combination of Network time, Host time and Fasterm time. Response time is accumulated for each query consistent with the specified reporting dimension, and then divided by the associated total number of queries received by Ameritech during the reporting period.~~	
Levels of Disaggregation:	
~~None~~	
Calculation:	**Report Structure:**
~~Σ[(Query Response Date & Time) - (Query Submission Date & Time)] ÷ (Number of Queries Submitted in Reporting Period)~~	~~Reported for all CLECs and Ameritech by division name (CPU platform).~~
Measurement Type:	
~~Tier 1 – None~~ ~~Tier 2 – None~~	
Benchmark:	
~~Parity~~	
Notes:	
This measure is not technically feasible to implement as Ameritech does not have a system equivalent to EASE.	

4. Measurement	
OSS Interface Availability	
Definition:	
Percent of time OSS interface is available compared to scheduled availability.	
Exclusions:	
• Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time.	
Business Rules:	
The total "number of hours functionality to be available" is the cumulative number of hours (by date and time on a 24 hour clock) over which Ameritech plans to offer and support CLEC access to Ameritech's operational support systems (OSS) functionality during the reporting period. "Hours Functionality is Available" is the actual number of hours, during scheduled available time, that the Ameritech interface is capable of accepting or receiving CLEC transactions or data files for processing through the interface and supporting operational support systems (OSS). The actual time available is divided by the scheduled time available and then multiplied by 100 to produce the "Percent system availability" measure. (Ameritech will not schedule system maintenance during normal business hours (8:00 a.m. to 5:30 p.m. Monday through Friday)). Additional levels of Dissagregation for gateway servers are in the process of being added.	
Levels of Disaggregation:	
• TCNET • AEMS • EDI • EBTA • EBTA – GUI • ARIS	
Calculation:	**Report Structure:**
[(Hours functionality is available during the scheduled available hours) ÷ Scheduled system available hours] * 100	Reported on an aggregate CLEC basis by interface and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – High	
Benchmark:	
99.5%. The critical Z allowance does not apply on this measurement only.	

5. Measurement:

Percent Firm Order Confirmations (FOCs) Returned Within "X" Hours

Definition:

Percent of FOCs returned within a specified time frame from receipt of a complete and accurate service request to return of confirmation to CLEC.

Exclusions:

- Rejected (manual and electronic) service requests.
- Ameritech retail disconnect orders in conjunction with wholesale migrations.
- Service requests involving major projects mutually agreed upon by CLECs and Ameritech. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.
- Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time.

Business Rules:

Orders are measured according to how the service order was submitted to Ameritech (i.e., electronically or manually) and are included in these disaggregations regardless of how they are processed.

Manually Submitted:
Manual service order requests are those initiated via the CLEC by fax. The receive date and times are recorded and input on each service order in the ordering system for each FOC opportunity. The end times are the actual dates and times the FOCs are sent back to the CLEC via EDI-to-Fax. FOC business rules are established to reflect the Local Service Center (LSC) normal hours of operation, as posted on the internet. If the receipt time is outside of normal business hours, then the start date/time is set to the beginning of the next business day. Example: If a request is received Monday through Friday between 7:00 a.m. to 5:00 p.m.; the valid start time will be Monday through Friday between 7:00 a.m. to 5:00 p.m. If the actual request is received Monday through Thursday after 5:00 p.m. and before. 7:00 a.m. the next day; the valid start time will be the next business day at. 7:00 a.m. If the actual request is received Friday after 5:00 p.m. and before 7:00 a.m. Monday; the valid start time will be at. 7:00 a.m. Monday. If the request is received on a holiday (anytime); the valid start time will be the next business day at 7:00 a.m. The returned confirmation to the CLEC will establish the actual end date/time.

Electronically Submitted:
FOC business rules are established to reflect the electronic interface normal hours of operation, as posted on the internet, excluding holidays and Sundays. For electronically originated service requests, the start date and time is the receive date and time that is automatically populated by the interface. The end date and time is recorded by the interface EDI and reflects the actual date and time the FOC is returned to the CLEC. The EDI data is captured within MOR and is used to calculate the FOC measure.

For orders where FOC times are negotiated with the CLEC, the entry on the ACIS service order is used in the calculation. The request type is determined from the order class and order type tables to report the various levels of disaggregation

For Interconnection Trunk Orders, Ameritech will attempt to contact CLEC with questions on interconnection trunk orders at least 2 days prior to FOC due date. This process will be in place until Ameritech institutes a reject process for these type orders.

Levels of Disaggregation:

Manually Submitted:

- Simple Res. And Bus. < 24 Hours
- Complex Business (1-200 Lines) < 24 Hours
- Complex Business (>200 Lines) < 48 Hours
- UNE Loop (1-49 Loops) < 24 Hours
- UNE Loop (>= 50 Loops) < 48 Hours
- Switch Ports < 24 Hours
- CIA Centrex (1-200 Lines) <24 hours
- CIA Centrex (>200 Lines) <48 hours
- CPO (UNE P)

Electronically Submitted :

- Simple Res. And Bus. < 5 Hours Interface hours only
- Complex Business (1-200 Lines) < 24 Hours
- Complex Business (>200 Lines) < 48 Hours
- UNE Loop (1-49 Loops) < 5 Hours Interface hours only
- UNE Loop (>= 50 Loops) < 48 Hours
- Switch Ports < 5 Hours
- Interconnection Trunks (< 5 DS1) < 6 days
- Interconnection Trunks (>= 5 DS1) < 8 days
- CIA Centrex (1-200 Lines) <24 hours
- CIA Centrex (>200 Lines) <48 hours
- CPO (UNE P)

Calculation:	Report Structure:
(# of FOCs returned within "x" hours ÷ total FOCs sent) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 – Low
Tier 2 – Medium

Benchmark:

All Res and Bus 95% / Complex Bus 94% / UNE Loop (1-49) 95% / UNE Loop (>50) 94% / Switch Ports 95% / Interconnection Trunks 95%, the Average for the remainder of each measure disaggregated shall not exceed 20% of the established benchmark.

<u>CIA Centrex will measure to interim benchmarks of 85% and 90% in August and September respectively with an ongoing benchmark set at 95% effective in October.</u>

5.1 Measurement (New Measure)

Percent Firm Order Confirmations (FOCs) for XDSL-capable loops & Line Sharing Returned Within "x" Hours

Definition:

Percent of FOCs returned within a specified time frame from receipt of a complete and accurate service request to return of confirmation to CLEC.

Exclusions:

- DSL Orders-orders rejected for incomplete or incorrect LSR
- DSL Orders-orders denied for pair gain
- Ameritech only Disconnect orders
- Orders involving major projects
- Rejected (manual and electronic) service requests.
- Ameritech retail disconnect orders in conjunction with wholesale migrations.
- Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time.

Business Rules:

Orders are measured according to how the service order was submitted to Ameritech (i.e., electronically or manually) and are included in these disaggregations regardless of how they are processed.

Manually Submitted:
Manual service order requests are those initiated via the CLEC by fax. The receive date and times are recorded and input on each service order in the ordering system for each FOC opportunity. The end times are the actual dates and times the FOCs are sent back to the CLEC via EDI-to-Fax. FOC business rules are established to reflect the Local Service Center (LSC) normal hours of operation, as posted on the internet. If the receipt time is outside of normal business hours, then the start date/time is set to the beginning of the next business day. Example: If a request is received Monday through Friday between 7:00 a.m. to 5:00 p.m.; the valid start time will be Monday through Friday between 7:00 a.m. to 5:00 p.m. If the actual request is received Monday through Thursday after 5:00 p.m. and before. 7:00 a.m. the next day; the valid start time will be the next business day at. 7:00 a.m. If the actual request is received Friday after 5:00 p.m. and before 7:00 a.m. Monday; the valid start time will be at. 7:00 a.m. Monday. If the request is received on a holiday (anytime); the valid start time will be the next business day at 7:00 a.m. The returned confirmation to the CLEC will establish the actual end date/time.

For a manual request that requires an associated loop qualification, the start date and time is when the loop qualification is completed by OSP Engineering and is made available in the LoopQual system, and the end date and time is when the fax is sent back to the CLEC.

Electronically Submitted:
FOC business rules are established to reflect the electronic interface normal hours

of operation, as posted on the internet, excluding holidays and Sundays. For electronically originated service requests, the start date and time is the receive date and time that is automatically populated by the interface once all. The received date and time is automatically populated ordering edits are satisfied. The end date and time is recorded by the interface EDI and reflect the actual date and time the FOC is returned to the CLEC. The EDI data is captured within MOR and is used to calculate the FOC measure.

For orders where FOC times are negotiated with the CLEC, the entry on the ACIS service order is used in the calculation. The request type is determined from the order class and order type tables to report the various levels of disaggregation

For DSL orders that require manual loop makeup information after the receipt of the LSR (CLEC did not request manual loop makeup information), the start time for the FOC is the date and time the loop makeup information is available in the Loop Qual System. The end date and time is automatically recorded by the interface (EDI) and reflects the actual date and time the FOC is available to the CLEC.

Levels of Disaggregation:

Manually submitted

- UNE xDSL Capable Loop (1-49 Loops) < 24 Hours
- UNE xDSL Capable Loop (> 49 Loops) < 48 Hours
- Line Sharing (1-49 Loops) < 24 Hours
- Line Sharing (>49) < 48 Hours

Electronically submitted

- UNE xDSL Capable Loop (1-19Loops) < 6 Business Hours
- UNE xDSL Capable Loop (>19 Loops) < 14 Business Hours
- Line Sharing (1-49 Loops) < 6 Business Hours
- Line Sharing (>49) < 14 Business Hours

Calculation:	Report Structure:
(# of FOCs returned within "x" hours ÷ total FOCs sent) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

DSL

Tier 1 – Low

Tier 2 – Medium

Line Sharing (new product)

Tier 1 – None

Tier 2 – None

Benchmark:

Diagnostic

5.2 Measurement:	
Percentage of Unsolicited FOCs by Reason Code	
Definition:	
Exclusions:	
• CLEC Caused Errors	
Business Rules:	
Levels of Disaggregation:	
•	
Calculation:	**Report Structure:**
Σ[( )]	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
No Benchmark	

6. Measurement:

Average Time To Return FOC

Definition:

The average time to return FOC from receipt of complete and accurate service request to return of confirmation to CLEC.

Exclusions:

- Rejected Orders.
- Ameritech retail disconnect orders conjunction with wholesale migrations.
- Orders involving major projects. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.
- Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time.

Business Rules:

See Measurement No. 5.
Measurement is disaggregated according to product type and order size only, and includes orders submitted either electronically or manually.

Levels of Disaggregation:

Manually Submitted

- All Res. And Bus.
- Complex Business (1-200 Lines)
- Complex Business (>200 Lines)
- UNE Loop (1-49 Loops)
- UNE Loop (>= 50 Loops)
- Switch Ports
- CIA Centrex (1-200 Lines)
- CIA Centrex (>200 Lines)
- CPO (UNE P)

Electronically Submitted

- All Res. And Bus.
- Complex Business (1-200 Lines)
- Complex Business (>200 Lines)
- UNE Loop (1-49 Loops)
- UNE Loop (>= 50 Loops)
- Switch Ports
- Interconnection Trunks
- CIA Centrex (1-200 Lines)
- CIA Centrex (>200 Lines)
- CPO (UNE P)

Calculation:	Report Structure:
Σ[(Date and Time of FOC) - (Date and Time of Order Acknowledgment)] / Total FOCs)	Reported for CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 – None Tier 2 – None
Benchmark:
No Benchmark

6.1 Measurement (New Measure)

Average Time to Return DSL FOC's

Definition:

The average time to return DSL FOC's from receipt of complete and accurate service request to return of confirmation to CLEC.

Exclusions:

- DSL Orders-orders rejected for incomplete or incorrect LSR
- DSL Orders-orders denied for pair gain
- Ameritech only Disconnect orders
- Orders involving major projects
- Ameritech retail disconnect orders in conjunction with wholesale migrations.
- Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time.

Business Rules:

See Measurement No. 5.1

Levels of Disaggregation:

Products need to be disaggregated as specified in PM 5.1

Disaggregate for EDI by the following:

- Mechanically received via EDI and FOC'd without LSC intervention (mechanical/mechanical)
  - Overall average
  - Reported for 90% and 95%
- Mechanically received via EDI and FOC'd with LSC intervention (mechanical/manual)
  - Overall average
  - Reported for 90% and 95%
- Received manually via FAX/paper and FOC'd via FAX (manual/manual)
  - Overall average
  - Reported for 90% and 95%

Calculation:	Report Structure:
Σ[(Date and Time of FOC) - (Date and Time of Order Received by Ameritech)]/(# of FOCs)	Reported for CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 – None
Tier 2 – None

Benchmark:

Diagnostic

7. Measurement	
Percent Mechanized Completions Returned Within One Hour of Completion in Ordering Systems	
Definition:	
Percent mechanized completions returned within one hour of completion.	
Exclusions:	
• Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time.	
Business Rules:	
The elapsed time for an order is calculated based on the time of the last service order, which establishes service, being completed in the ordering system to the actual time MOR receives notification and the completion is sent to the CLEC. For example, if a multi-line order has 10 lines, the stop time would be when the last of the 10 lines is completed in the ordering system. Calculated based on calendar days only. Regardless of whether the order was submitted or processed electronically or manually, it is included in this measure. Note: All completion notifications are returned via a mechanized interface (EDI or EDI-to-Fax).	
Levels of Disaggregation:	
• Resale • UNEs • Combinations	
Calculation:	**Report Structure:**
(# of mechanized completions returned to CLEC within 1 hour ÷ total mechanized completions) * 100	Reported for CLEC all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
97%	

7.1 Measurement	
Percent Mechanized Completions Returned Within One Day Of Work Completion	
Definition:	
Percent mechanized completions returned within one day.	
Exclusions:	
• Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time.	
Business Rules:	
Days are calculated by subtracting the date the completion notification was returned to the CLEC minus the work completion date. Calculated based on calendar days only. Regardless of whether the order was submitted or processed electronically or manually, it is included in this measure. Note: All completion notifications are returned via a mechanized interface(EDI or EDI-to-Fax).	
Levels of Disaggregation:	
• Resale • UNEs • Combinations	
Calculation:	**Report Structure:**
(# of mechanized completions returned to the CLEC within 1 day of work completion ÷ total mechanized completions) * 100	Reported for CLEC all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 - None Tier 2 – None	
Benchmark:	
97%	

8. Measurement	
Average Time to Return Mechanized Completions	
Definition:	
Average time required to return a mechanized completion.	
Exclusions:	
See Measurement No. 7	
Business Rules:	
See Measurement No. 7	
Levels of Disaggregation:	
See Measurement No. 7	
Calculation:	**Report Structure:**
Σ[(Date and Time of Notice Of Completion Issued to the CLEC) - (Date and Time of Work Completion)] ÷ Total Mechanized Completions	Reported for CLEC, all CLECs, and Ameritech Affiliate
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
To be Determined.	

9. Measurement	
Percent Rejects	
Definition:	
The number of rejects compared to the issued orders for orders submitted via the electronic interfaces	
Exclusions:	
• Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time. • Orders involving major projects. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.	
Business Rules:	
A rejected order does not pass edit checks or other edits prior to the order being distributed. This measure includes all orders that are submitted through an electronic interface, regardless of whether the order was processed electronically or manually. Notes: All rejects are returned to the CLEC via a mechanized interface (EDI or EDI-to-Fax).	
Levels of Disaggregation:	
• CLEC Caused Reject • Ameritech Caused Rejects (Re-flowed Orders)	
Calculation:	**Report Structure:**
(# of rejects ÷ total unique orders and supplements for electronic interfaces) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Measurement is diagnostic. No benchmark required.	

10. Measurement	
Percent Mechanized Rejects Returned Within One Hour of Receipt of Reject in MOR	
Definition:	
Percent mechanized rejects returned within one hour of the receipt of the reject in MOR .	
Exclusions:	
• Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's Performance shall not include Service Bureau Provider processing, availability or response time. • Orders involving major projects. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.	
Business Rules:	
The start time used is the date and time the reject is available to MOR and the end time is the date and time the reject notice is sent to the CLEC. This measure includes all rejects regardless of how the order was initially submitted or processed (i.e., electronically or manually).	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of mechanized rejects sent within 1 hour ÷ total mechanized rejects) * 100	Reported for CLEC, all CLECs¸and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
97% within 1 hour of the receipt of a reject in MOR.	

10.1 Measurement:	
Percent Mechanized Rejects Returned within One Hour of Receipt of Order	
Definition:	
Percentage of mechanized rejects returned within one hour of the receipt of order from CLEC.	
Exclusions:	
• Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time. • Orders involving major projects. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.	
Business Rules:	
The start time is the time the order is received in the LSC and the end time is the date and time the reject notice. Sent to the CLEC. This measure includes all rejects that were submitted via an electronic interface and processed mechanically (Auto-Auto).	
Levels of Disaggregation:	
• None	
Calculation:	**Report Structure:**
(# of mechanized rejects sent within 1 hour of receipt of order ÷ total mechanized rejects) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
See Measurement 10.	

10.2 Measurement:	
Percent Manual Rejects Received Electronically and Returned Within Five Hours	
Definition:	
Percentage of manual rejects of orders received electronically where the reject notification is sent within five hours of the receipt of the order from the CLEC. A "manual reject" is any reject that results from the manual processing of an order.	
Exclusions:	
• Manual rejects for orders received manually • Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time. • Orders involving major projects. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.	
Business Rules:	
The start time is the time the order is electronically received and logged into the ordering system. The end time is the date and time the reject notice is sent back to the CLEC. This measure includes all orders received electronically and processed manually that resulted in a reject.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of manual rejects returned within 5 hours of receipt of electronic order ÷ total manual rejects) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
97% within 5 Hours.	

10.3 Measurement:	
Percent Manual Rejects Received Manually and Returned Within Five Hours	
Definition:	
Percentage of manual rejects for orders received manually and returned to the CLEC within 5 hours. A "manual reject" is any reject that results from the manual processing of an order.	
Exclusions:	
• Manual rejects for orders received electronically. • Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time. • Orders involving major projects. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.	
Business Rules:	
The start time is the time the manual LSR order is received in the LSC via fax, and the end time is the date and time the reject notice is sent back to the CLEC via EDI-to-Fax. This measure includes all orders submitted manually that resulted in a reject.	
Levels of Disaggregation:	
• None	
Calculation:	**Report Structure:**
(# of manual rejects returned within 5 hours of receipt of manual orders ÷ total manual rejects) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
97% within 5 hours.	

11. Measurement	
Mean Time to Return Mechanized Rejects	
Definition:	
Average time required to return a mechanized reject.	
Exclusions:	
• Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time. • Orders involving major projects. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.	
Business Rules:	
See Measurement No. 10.	
Levels of Disaggregation:	
See Measurement No. 10.	
Calculation:	**Report Structure:**
Σ[(Date and Time reject sent) - (Date and Time of Order receipt)] ÷ total mechanized rejects	Reported for CLEC all CLECs¸and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
None	

11.1 Measurement:	
Mean Time to Return Manual Rejects that are Received via an Electronic Interface	
Definition:	
Average time to return manual rejects received via an electronic interface.	
Exclusions:	
• See Measurement 10.2	
Business Rules:	
See Measurement 10.2.	
Levels of Disaggregation:	
• None	
Calculation:	**Report Structure:**
{∑(date and time reject sent – date and time of order receipt) ÷ total manual rejects}	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Five Hours	

11.2 Measurement:	
Mean Time to Return Manual Rejects that are Received thru the Manual Process	
Definition:	
Average time to return manual rejects received thru the manual process (Fax).	
Exclusions:	
• See Measurement 10.3	
Business Rules:	
See Measurement 10.3	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
{∑(date and time rejects sent – date and time of order receipt) ÷ total manual rejects}	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Five Hours	

12. Measurement	
Mechanized Provisioning Accuracy	
Definition:	
Percent of mechanized orders completed as ordered.	
Exclusions:	
• Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time.	
Business Rules:	
This measurement compares the features ordered on a mechanized order, to the copy of the order which updates the customer billing database.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of orders completed as ordered ÷ total orders) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – Low	
Benchmark:	
Parity	

13. Measurement	
Order Process Percent Flow Through	
Definition:	
Percent of orders from receipt to distribution that progress mechanically through to Ameritech provisioning systems.	
Exclusions:	
• Orders both electronically generated and rejected if error is caused by CLEC. • Manually received orders • Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time.	
Business Rules:	
The number of eligible orders, that flow through Ameritech's ordering systems without manual intervention, divided by the total number of eligible electronically generated orders within the reporting period. Manually intervened orders that are electronically generated are considered failed pass-through. Orders that fall out after receipt, but are not rejected back to CLEC due to CLEC caused errors, will be included as failed pass-through occurrences. This measure is based on orders designed to flow through.	
Levels of Disaggregation:	
• UNE loops • Resale • UNE Combos • Other	
Calculation:	**Report Structure:**
(# of orders that flow through ÷ total eligible electronic orders) * 100	Reported for CLEC, all CLECs, Ameritech¸ and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – High	
Benchmark:	
Parity	

13.1 Measurement (New Measure)	
Total Order Process Percent Flow Through	
Definition:	
Percent of EDI orders from entry to distribution that progress through SWBT ordering systems without manual intervention.	
Exclusions:	
• Excludes rejected orders • Orders w/ CLEC Remarks Received	
Business Rules:	
The number of orders that flow through Ameritech's ordering systems and are distributed in the Service Order System without manual intervention, divided by the total number of orders submitted via EDI within the reporting period.	
Levels of Disaggregation:	
• Resale • UNE Loops • LNP • LSNP • CPO (UNE-P)	
Calculation:	**Report Structure:**
(# of orders that flow through ÷ total orders) * 100	Reported by CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Diagnostic	

Billing

14. Measurement	
Billing Accuracy	
Definition:	
Ameritech performs audits on three billing systems: ACIS (Retail), RBS (Wholesale) and CABS (Access) to ensure the accuracy of the bills rendered to its customers.	
Exclusions:	
None	
Business Rules:	
The purpose of these audits are to review and recalculate for services billed in the five states. This is to ensure that monthly bills sent to the CLECs, and retail customers are rated accurately according to the billing tables. This is performed by extracting recurring, non-recurring, and usage elements from the above listed billing systems and comparing the billed elements to expected results. For all validations performed, the number of elements that have been released prior to correction (bills are audited for accurate calculations) are counted as an error against the total elements audited.	
Levels of Disaggregation:	
• Resale Monthly Recurring/Non-recurring • Resale Usage/Unbundled Local Switching • Other Unbundled Network Elements	
Calculation:	**Report Structure:**
(# of elements not corrected prior to bill release ÷ total elements audited) * 100	Reported for the aggregate of all CLECs, Ameritech, and Ameritech Affiliate. Reported on an Ameritech Company basis.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity	Retail Comparison
1. Resale Monthly Recurring/Non-Recurring	Retail
2. Resale Usage/Unbundled Local Switching	Retail
3. Other Unbundled Network Elements	Access

15. Measurement	
Percent of Accurate and Complete Formatted Mechanized Bills	
Definition:	
The percent of monthly bills sent to the CLECs via the mechanized AEBS process and the paper billing process that are accurate and complete.	
Exclusions:	
None	
Business Rules:	
Billing accuracy is based upon many factors including: totaling, formatting, content and syntax. Both the electronic and paper bill are validated in unison and are not counted separately in the calculation.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of accurate and complete formatted bills ÷ total bills) * 100	Reported for CLEC, all CLECs¸and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – High	
Benchmark:	
99%	

16. Measurement:	
Percent of Usage Records Transmitted Correctly	
Definition:	
The percent of usage records transmitted correctly on the Daily Usage extract feed.	
Exclusions:	
• CLEC-caused errors.	
Business Rules:	
Controls and edits within the billing process uncover certain types of errors that are likely to appear on the usage records. When these errors are uncovered, a new release of the program is written to ensure that the error does not occur again. Thus, an error that is reported in one month should not occur the next month because the billing program error would have been fixed by the next month. The usage records retransmitted due to Ameritech caused errors are counted in this measure.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of usage records transmitted correctly ÷ total usage records transmitted) * 100	Reported for CLEC¸ all CLECs¸and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
95%	

17. Measurement	
Billing Completeness	
Definition:	
Percent of on-time service orders (SOs) in both ACIS and CABS that post within a 30 day billing cycle.	
Exclusions:	
• Feature Group A • Feature Group B • Feature Group D • Wireless	
Business Rules:	
On time SOs are SOs that reached "Updated" (3U) status in 19 cycles or less. A SO that was updated in 20 cycles or more has missed at least one bill. Twenty cycles is approximately 30 calendar days. The start date is the date the SO is available for billing and the end date is the date (Update date) the SO reaches the "Updated" status. This time span is measured in cycles. SOs are reported by the month of their Update.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of on-time updated SOs in current month ÷ total updated SOs in current month) *100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – Medium	
Benchmark:	
Parity with Ameritech Retail.	

18. Measurement	
Billing Timeliness (Wholesale Bill)	
Definition:	
Billing Timeliness measures the length of time from the wholesale billing date (end of billing period) to the time it is electronically transmitted to the CLEC.	
Exclusions:	
• Weekends and Holidays.	
Business Rules:	
The transmission date is used to gather the data for the reporting period. The measure compares the transmission date of the bill to the transmission due date. The transmission due date is six business days after the wholesale bill period. For example, a CLEC with a wholesale billing date of Monday the 1st, the transmission due date would be on the following Monday, the 8th assuming no weekday holidays.	
Levels of Disaggregation:	
• AEBS. • CABS.	
Calculation:	**Report Structure:**
(# of bills transmitted on time ÷ total bills released) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – High	
Benchmark:	
95% within 6th workday.	

19. Measurement	
Daily Usage Feed Timeliness	
Definition:	
Usage information is sent to the CLECs on a daily basis. This usage data must be sent to the CLEC within 6 work days in order to be considered timely.	
Exclusions:	
• Weekends and Holidays.	
Business Rules:	
The measure uses the actual EMI usage records that are sent to the CLECs. Data date is the recording date of the usage and is part of the EMI usage record. Cycle date is the day the Daily Usage file is sent to the CLEC. Cycle date is found on the pack header record of the Daily Usage file.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of usage records transmitted on time ÷ total usage records) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate. Reported on an Ameritech Company basis.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
95% within 6th workday	

20. Measurement	
Unbillable Usage	
Definition:	
The percent usage data that is unbillable.	
Exclusions:	
None	
Business Rules:	
The total dollars written off by MEC (Message Error Correction) and the total CABS uncollectable dollars are divided by the total billed revenue in the calendar month.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Total unbillable revenue ÷ total billed revenue) * 100	Reported on an Ameritech Company basis (aggregated).
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

Miscellaneous Administrative

21. Measurement	
Local Service Center (LSC) Average Speed Of Answer	
Definition:	
The average time a customer is in queue.	
Exclusions:	
• Weekends and Holidays.	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when a Ameritech representative answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the Ameritech call management system queue until the CLEC customer call is transferred to Ameritech personnel assigned to handling CLEC calls for assistance. Data is accumulated from 12:00 a.m. on the first calendar day to 11:59 p.m. on the last calendar day of the month for the reporting period. LSC Hours of operation are posted on the internet.	
Levels of Disaggregation:	
• Resale • UNE	
Calculation:	**Report Structure:**
Total queue time ÷ total calls answered	Reported for LSC Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail.	

22. Measurement	
Local Service Center (LSC) Grade Of Service (GOS)	
Definition:	
Percent of calls answered by the Local Service Center (LSC) within 20 seconds.	
Exclusions:	
See Measurement No. 21	
Business Rules:	
See Measurement No. 21	
Levels of Disaggregation:	
• Resale • UNE	
Calculation:	**Report Structure:**
# of calls answered by the LSC within a specified period of time ÷ Total calls answered	Reported for LSC, Ameritech¸ and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – High	
Benchmark:	
Parity with Ameritech Retail.	

23. Measurement	
Percent Busy in the Local Service Center (LSC)	
Definition:	
Percent of calls which are unable to reach the Local Service Center (LSC) due to a busy condition in the ACD.	
Exclusions:	
• See Measurement No. 21	
Business Rules:	
This measurement determines the number of calls that encounter a busy condition in the ACD. Data is accumulated from 12:00 a.m. on the first calendar day to 11:59 p.m. on the last calendar day of the month for the reporting period. LSC Hours of operation are posted on the internet.	
Levels of Disaggregation:	
See Measurement No. 21	
Calculation:	**Report Structure:**
(# of blocked calls ÷ total calls offered) * 100	Reported for LSC, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – Low	
Benchmark:	
Parity with Ameritech Retail.	

24. Measurement	
Local Operations Center (LOC) Average Speed Of Answer	
Definition:	
The average time a customer is in queue.	
Exclusions:	
None	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when the Ameritech representative answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the Ameritech call management system queue until the CLEC customer call is transferred to Ameritech personnel assigned to handling CLEC calls for assistance. Data is accumulated from 12:00 a.m. on the first calendar day to 11:59 p.m. on the last calendar day of the month for the reporting period. LOC hours of operation are posted on the internet.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Total queue time ÷ total calls answered	Reported for LOC, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail.	

25. Measurement	
Local Operations Center (LOC) Grade Of Service (GOS)	
Definition:	
Percent of calls answered by the Local Operations Center (LOC) within 20 seconds .	
Exclusions:	
• See Measurement No. 24	
Business Rules:	
See Measurement No. 24.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
# of calls answered by the LOC within a specified period of time ÷ total calls answered	Reported for LOC, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – High	
Benchmark:	
Parity with Ameritech Retail.	

26. Measurement	
Percent Busy in the Local Operations Center (LOC)	
Definition:	
Percent of calls which are unable to reach the Local Operations Center (LOC) due to a busy condition in the ACD.	
Exclusions:	
• See Measurement #24.	
Business Rules:	
This measurement determines the number of calls that encounter a busy condition in the ACD. Data is accumulated from 12:00 a.m. on the first calendar day to 11:59 p.m. on the last calendar day of the month for the reporting period. LSC Hours of operation are posted on the internet.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of blocked calls ÷ total calls offered) * 100	Reported for LOC, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – Low	
Benchmark:	
Parity with Ameritech Retail.	

RESALE POTS AND UNE LOOP AND PORT COMBINATIONS BY Ameritech

Provisioning

27. Measurement
Mean Installation Interval
Definition:
Average business days from application date to completion date for N, T, C orders.
Exclusions:
• CLEC caused misses. • Field Work orders – excludes customer requested due dates beyond the offer date. • No Field Work orders – excluded if order applied for before 3:00 p.m. and the due date requested is not same day; and if order applied for after 3:00 p.m. and the due date requested is beyond the next business day. • CIA Centrex excluded if customer requested due dates greater than 5 business days. • Orders that are not N, T, and C orders. • Orders where CLECs are charged expedite charges
Business Rules:
The clock starts on the Application Date, which is the day that Ameritech receives a correct Service Order. The clock stops on the Completion Date, which is the day that Ameritech personnel complete the service order activity. Orders are included in the month they are closed. There are 2 types of orders in the measurement. Same Day Due orders (defined as distribution time EQUAL or BEFORE 3:00 p.m. and Application Date = Distribution Date = Due Date. Next Day Due orders (defined as distribution time AFTER 3:00 p.m. and Application Date = Distribution Date and Due Date is one business day after Application Date. If the order is Same Day Due, then the interval is (Completion – Application Date). If the order is Next Day Due, then the interval is [(Completion – Next Business Day) + 1]. UNE Combos are also reported at order level.
Levels of Disaggregation:

Geographic, per State Agreements
POTS
- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service
- CIA Centrex

UNE Combo (UNE P)
- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service

Calculation:	Report Structure:
[Σ(completion date – application date)]/(Total orders completed)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.

Measurement Type:

Tier 1 – High
Tier 2 – High

Benchmark:

Resale POTS parity between Field Work compared to Ameritech Field Work (N, T, C order types) and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types). UNE Combo Parity between Field Work compared to Ameritech Field Work (N, T, C order types) and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types).
CIA Centrex parity between Field Work compared to Ameritech Centrex Field Work (N, T, C order types) and No Field Work compared to a 4 day interval.

28. Measurement

Percent Installations Completed Within "X" Business Days (POTS)

Definition:

Measure of orders completed within "X" business days of the application date. For Field Work(FW) orders "X" equals five business days, for No Field Work (NFW) orders "X" equals three business days.

Exclusions:

- CLEC caused misses.
- Field Work orders – excludes customer requested due dates beyond the offer date.
- No Field Work orders – excluded if order applied for before 3:00 p.m.; and the due date requested is not same day; and if order applied for after 3:00 p.m.; and the due date requested is beyond the next business day.
- CIA Centrex excluded if customer requested due dates greater than 5 business days.
- All orders except N, T, and C orders.
-
- Orders where CLECs are charged expedite charges

Business Rules:

The clock starts on the Application Date, which is the day that Ameritech receives a correct Service Order. The clock stops on the Completion Date which is the day that Ameritech personnel complete the service order activity. Orders are included in the month they are closed. There are 2 types of orders in the measurement. Same Day Due orders (defined as distribution time EQUAL or BEFORE 3:00 p.m. and Application Date = Distribution Date = Due Date. Next Day Due orders (defined as distribution time AFTER 3:00 p.m. and Application Date = Distribution Date and Due Date is one business day after Application Date. If the order is Same Day Due, then the interval is (Completion – Application Date). If the order is Next Day Due, then the interval is [(Completion – Next Business Day) + 1]. UNE Combos are also reported at order level.

Levels of Disaggregation:

Geographic, per State Agreements

POTS

- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service
- CIA Centrex

UNE Combo (UNE P)

- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service

Calculation:	Report Structure:
(# of orders installed within "X" business days ÷ total orders) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Resale POTS parity between Field Work compared to Ameritech Field Work (N, T, C order types) and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types). UNE Combo Parity between Field Work compared to Ameritech Field Work (N, T, C order types and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types) CIA Centrex parity between Field Work compared to Ameritech Centrex Field Work (N, T, C order types) and No Field Work compared to 95% within a 5 day interval.	

29. Measurement

Percent Ameritech Caused Missed Due Dates

Definition:

Percent of N, T, and C orders where installation was not completed by the due date as a result of a Ameritech caused missed due date.

Exclusions:

- Orders that are not N, T, or C.
- CLEC caused misses.

Business Rules:

This includes orders completed after the Due Date, due to an Ameritech reason. This measurement is reported at an order level. UNE Combos are also reported at an order level.

Levels of Disaggregation:

Geographic, per State Agreements

POTS

- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service

UNE Combo (UNE P)

- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service

Calculation:	Report Structure:
(# of orders not completed by the due date ÷ total orders) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.

Measurement Type:

Tier 1 – High

Tier 2 – High

Benchmark:

Resale POTS parity between Field Work compared to Ameritech Field Work (N, T, C order types) and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types). UNE Combo Parity between Field Work compared to Ameritech Field Work (N, T, C order types) and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types).

30. Measurement

Percent Ameritech Missed Due Dates Due To Lack Of Facilities

Definition:

Percent N, T, and C orders with missed committed due dates due to lack of facilities.

Exclusions:

- Orders that are not N, T, or C.
- No Field Work (NFW) Orders.

Business Rules:

Includes orders with a completion date that is greater than the due date based on an Ameritech missed reason code for lack of facilities. This measurement is reported at an order level. UNE Combos are also reported at an order level.

Levels of Disaggregation:

Geographic, per State Agreements

POTS

- Residence class of service
- Residence class of service > 30 calendar days
- Residence class of service > 90 calendar days
- Business class of service
- Business class of service > 30 calendar days
- Business class of service > 90 calendar days

POTS / UNE Combo (UNE P)

- Residence class of service
- Residence class of service > 30 calendar days
- Residence class of service > 90 calendar days
- Business class of service
- Business class of service > 30 calendar days
- Business class of service > 90 calendar days

Calculation:	Report Structure:
(# of orders with missed due dates due to lack of facilities ÷ total orders completed) * 100	Reported for CLEC, all CLECs Ameritech, and Ameritech Affiliate.

Measurement Type:

Tier 1 – Low

Tier 2 – None

Benchmark:

Resale POTS parity compared to Ameritech (N, T, and C order types). UNE Combo Parity compared to Ameritech (N, T, C order types).

31. Measurement	
Average Delay Days For Missed Due Dates Due To Lack Of Facilities	
Definition:	
Average calendar days from due date to completion date on company missed orders due to lack of facilities.	
Exclusions:	
• Orders that are not N, T, or C. • No Field Work (NFW) Orders.	
Business Rules:	
Includes orders missed due to Company reasons other than lack of facilities that are selected based on the missed reason code. This measurement is reported at an order level. UNE Combos are also reported at an order level.	
Levels of Disaggregation:	
Geographic, per State Agreements POTS • Business class of service • Residence class of service UNE Combo (UNE P) • Business class of service • Residence class of service	
Calculation:	**Report Structure:**
Σ(Completion date – due date) ÷ (total completed orders with a Ameritech caused missed due date due to lack of facilities)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Resale POTS parity compared to Ameritech (N, T, and C order types). UNE Combo Parity compared to Ameritech (N, T, and C order types).	

32. Measurement	
Average Delay Days For Ameritech Caused Missed Due Dates	
Definition:	
Average calendar days from due date to completion date on company missed orders.	
Exclusions:	
• Orders that are not N, T, or C. • Company delayed orders as a result of lack of facilities.	
Business Rules:	
Includes orders missed due to lack of facilities that are selected based on the missed reason code. This measurement is reported at an order level. UNE Combos are also reported at an order level.	
Levels of Disaggregation:	
Geographic, per State Agreements POTS • Field Work (FW) • No Field Work (NFW) • Business class of service • Residence class of service UNE Combo (UNE P) • Field Work (FW) • No Field Work (NFW) • Business class of service • Residence class of service	
Calculation:	**Report Structure:**
Σ(Completion date – due date) ÷ (total completed orders with a Ameritech caused missed due date)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
Resale POTS Field Work parity compared to Ameritech Field Work (N, T, C order types) and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types). UNE Combo Field Work Parity compared to Ameritech Field Work (N, T, C order types) and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types	

33. Measurement	
Percent Ameritech Caused Missed Due Dates > 30 days	
Definition:	
Percent of orders where installation was completed greater than 30 days following the due date.	
Exclusions:	
• Orders that are not N, T, or C.	
Business Rules:	
This includes items completed after the Due Date, due to an Ameritech reason. This measurement is reported at an order level. UNE Combos are also reported at an order level.	
Levels of Disaggregation:	
Geographic, per State Agreements POTS • Field Work (FW) • No Field Work (NFW) • Business class of service • Residence class of service UNE Combo (UNE P) • Field Work (FW) • No Field Work (NFW) • Business class of service • Residence class of service	
Calculation:	**Report Structure:**
(# of orders completed greater than 30 calendar days following the due date ÷ total orders completed) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Resale POTS Field Work parity compared to Ameritech Field Work (N, T, C order types) and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types). UNE Combo Field Work Parity compared to Ameritech Field Work (N, T, C order types) and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types).	

34. Measurement	
Count of Orders Cancelled After the Due Date Which Were Caused by Ameritech	
Definition:	
The total number of orders that were cancelled by the CLEC after the order due date. Only orders cancelled with Ameritech missed codes are included.	
Exclusions:	
• CLEC delayed orders. • Orders that are not N, T, or C.	
Business Rules:	
Includes orders that are cancelled by the customer after the negotiated due date and prior to completion.	
Levels of Disaggregation:	
Geographic, per State Agreements POTS • Business class of service • Residence class of service UNE Combos (UNE P) • Business class of service • Residence class of service The count will be divided into the following days past due groupings: • 1-30 • 31-90 • > 90.	
Calculation:	**Report Structure:**
# of orders cancelled after the Due Date	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail. Diagnostic. No benchmark required.	

34.1 Measurement (New Measure)	
Average Delay Days for Ameritech Caused Canceled Orders	
Definition:	
Average calendar days from due date to Cancel date on company missed orders. Only orders cancelled with Ameritech missed codes are included.	
Exclusions:	
• CLEC delayed orders. • Orders that are not N, T, or C.	
Business Rules:	
Counts the average calendar days between the due date and the cancel date for orders that are cancelled by the customer after the negotiated due date and prior to completion.	
Levels of Disaggregation:	
Geographic, per State Agreements POTS • Business class of service • Residence class of service UNE Combos (UNE P) • Business class of service • Residence class of service	
Calculation:	**Report Structure:**
(total number of delay days)/ total canceled orders <u>Delay Days are defined as (complete date – due date)</u>	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail. Diagnostic. No benchmark required.	

35. Measurement

Percent Trouble Reports Within 30 Days (I-30) of Installation

Definition:

Percent of N, T, C orders that receive a network customer trouble report within 30 calendar days of service order completion.

Exclusions:

- Subsequent reports. A subsequent report is a repair report that is received while an existing repair report is open on the same number.
- Disposition codes "11", "12", & "13" reports (excludable reports)
- Reports caused by customer provided equipment (CPE) or wiring.
- Trouble report received on the due date before service order completion.
- Orders that are not N, T, or C.

Business Rules:

Includes trouble reports received the day after Ameritech personnel complete the service order through 30 calendar days after completion.

Levels of Disaggregation:

Geographic, per State Agreements

POTS

- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service

UNE Combo (UNE P)

- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service

Calculation:	Report Structure:
(# of orders that receive a network customer trouble report within 30 calendar days of service order completion ÷ total orders) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.

Measurement Type:

Tier 1 – High
Tier 2 – High

Benchmark:

Resale POTS Field Work parity compared to Ameritech Field Work (N, T, C order types) and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types). UNE Combo Field Work Parity compared to Ameritech Field Work (N, T, C order types) and No Field Work compared to Ameritech Retail No Field Work (N, T, C order types)

36. Measurement	
Percent No Access (Service Orders With No Access)	
Definition:	
Percent of Field Work (FW) orders with a status of "No Access."	
Exclusions:	
• CLEC caused misses. (SL – customer requests later date, SO – other customer reasons, SR - customer not ready). • All orders that are not N, T, or C. • No Field Work.	
Business Rules:	
Ameritech personnel set the "No Access" flag when access cannot be obtained to the customer's premises. Order must be Completed.	
Levels of Disaggregation:	
Geographic, per State Agreements POTS • Business class of service • Residence class of service UNE Combo (UNE P) • Business class of service • Residence class of service	
Calculation:	**Report Structure:**
(# of orders that are No Access ÷ Total Field Work orders) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Resale POTS Field Work parity compared to Ameritech Field Work (N, T, and C order types) . UNE Combo Field Work Parity compared to Ameritech Field Work (N, T, and C order types).	

Maintenance

37. Measurement	
Trouble Report Rate	
Definition:	
The number of customer trouble reports per 100 lines.	
Exclusions:	
• Subsequent reports. A subsequent report is one that is received while an existing repair report is open. • Reports caused by customer provided equipment (CPE) or wiring. • All disposition codes "11", "12", & "13" reports (excludable reports), with the exception of code 1316, unless the report is taken prior to the completion of the service order.	
Business Rules:	
CLEC and Ameritech repair reports are entered into and tracked via WFA or LMOS. Reports are counted in the month they are closed.	
Levels of Disaggregation:	
Geographic, per State Agreements POTS • Business class of service • Residence class of service UNE Combo (UNE P) • Business class of service • Residence class of service	
Calculation:	**Report Structure:**
[# of customer trouble reports ÷ (total lines in service ÷100)]	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
POTS – Parity with Ameritech Retail. UNE Combo – Parity with Ameritech Residence and parity with Ameritech Business.	

38. Measurement

Percent Missed Repair Commitments

Definition:

Percent of trouble reports not cleared by the commitment time due to Ameritech reasons.

Exclusions:

- Subsequent reports. A subsequent report is one that is received while an existing repair report is open.
- Reports caused by customer provided equipment (CPE) or wiring.
- All disposition codes "11", "12", & "13" reports (excludable reports

Business Rules:

The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that Ameritech personnel clear the repair activity and complete the trouble report in the work and force systems. If this is after the commitment time, the report is flagged as a "Missed Commitment."

Levels of Disaggregation:

Geographic, per State Agreements

POTS

- Business class of service
- Residence class of service
- Dispatch
- No Dispatch

UNE Combo (UNE P)

- Dispatch
- No Dispatch
- Business class of service
- Residence class of service

Calculation:	Report Structure:
(# of trouble reports not cleared by the commitment time ÷ total trouble reports) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.

Measurement Type:

Tier 1 – High

Tier 2 – High

Benchmark:

POTS – Parity with Ameritech Retail.

UNE Combo – Parity with Ameritech Residence and parity with Ameritech Business.

39. Measurement

Receipt To Clear Duration

Definition:

Average duration of customer trouble reports from the receipt of the customer trouble report to the time the trouble report is cleared.

Exclusions:

- Subsequent reports. A subsequent report is one that is received while an existing repair report is open.
- Reports caused by customer provided equipment (CPE) or wiring.
- Disposition codes “11”, “12”, & “13” reports (excludable reports

Business Rules:

The clock starts on the date and time Ameritech receives a trouble report. The clock stops on the date and time that Ameritech personnel clear the repair activity and complete the trouble report in WFA or LMOS.

Levels of Disaggregation:

Geographic, per State Agreements

POTS

- Business class of service
- Residence class of service
- Dispatch
- No Dispatch
- Affecting Service
- Out of Service

UNE Combo (UNE P)

- Dispatch
- No Dispatch
- Affecting Service
- Out of Service
- Business class of service
- Residence class of service

Calculation:	Report Structure:
Σ[(Date and time Ameritech clears trouble report) - (Date and time trouble report is received)] ÷ Total customer trouble reports	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.

Measurement Type:

Tier 1 – High

Tier 2 – High

Benchmark:

Resale POTS Dispatch parity compared to Ameritech Dispatch (N, T, C order types) and No Dispatch compared to Ameritech Retail No Dispatch (N, T, C order types). UNE Combo Dispatch Parity compared to Ameritech Dispatch(N, T, C order types**)** and No Dispatch compared to Ameritech Retail No Dispatch(N, T, C order types).

40. Measurement	
Percent Out Of Service (OOS) < 24 Hours	
Definition:	
Percent of OOS trouble reports cleared in less than 24 hours.	
Exclusions:	
• Subsequent reports. A subsequent report is one that is received while an existing repair report is open. • Disposition codes "11", "12", & "13" reports (excludable reports. • Affecting Service reports. • Reports caused by customer provided equipment (CPE) or wiring.	
Business Rules:	
Utilize state specific Business Rule or Standard clock hours as appropriate.	
Levels of Disaggregation:	
Geographic, per State Agreements POTS • Business class of service • Residence class of service UNE Combo (UNE P) • Business class of service • Residence class of service	
Calculation:	**Report Structure:**
(# of OOS trouble reports < 24 hours ÷ total OOS trouble reports) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
POTS – Parity with Ameritech Retail. UNE Combo – Parity with Ameritech Residence and parity with Ameritech Business.	

41. Measurement

Percent Repeat Reports

Definition:

Percent of customer trouble reports received within 30 calendar days of a previous customer report.

Exclusions:

- Subsequent reports. A subsequent report is one that is received while an existing repair report is open.
- Disposition codes "11", "12", & "13" reports (excludable reports
- Reports caused by customer provided equipment (CPE) or wiring.

Business Rules:

Includes customer trouble reports received within 30 calendar days of an original customer report. When the second report is received in 30 days, the original report is marked as an Original of a Repeat, and the second report is marked as a Repeat. If a third report is received within 30 days, the second report is marked as an Original of a Repeat as well as being a Repeat, and the third report is marked as a Repeat. In this case there would be two repeat reports. If either the original or the second report within 30 days is a measured report, then the second report counts as a Repeat report.

Levels of Disaggregation:

Geographic, per State Agreements

POTS

- Business class of service
- Residence class of service

UNE Combo (UNE P)

- Business class of service
- Residence class of service

Calculation:	Report Structure:
(# of network customer trouble reports received within 30 calendar days of a previous customer trouble report ÷ total network customer trouble reports) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.

Measurement Type:

Tier 1 – High

Tier 2 – High

Benchmark:

POTS – Parity with Ameritech Retail.

UNE Combo – Parity with Ameritech Residence and parity with Ameritech Business .

42. Measurement	
Percent No Access (Percent of Trouble Reports with No Access)	
Definition:	
Percentage of dispatched customer trouble reports with a status of "No Access."	
Exclusions:	
• Subsequent reports. A subsequent report is one that is received while an existing repair report is open. • Disposition codes "11", "12", & "13" reports (excludable reports. • Reports caused by customer provided equipment (CPE) or wiring. • Reports that are not dispatched.	
Business Rules:	
Ameritech personnel set the "No Access" flag when access cannot be obtained at the customer's premises. Reports are counted the month they are closed.	
Levels of Disaggregation:	
Geographic, per State Agreements POTS • Business class of service • Residence class of service UNE Combo (UNE P) • Business class of service • Residence class of service	
Calculation:	**Report Structure:**
(# of trouble reports with a status of "No Access" ÷ Total dispatched customer trouble reports) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
POTS – Parity with Ameritech Retail. UNE Combo – Parity with Ameritech Residence and parity with Ameritech Business .	

RESALE SPECIALS AND UNE LOOP AND PORT COMBINATIONS COMBINED BY Ameritech (EXCLUDES "ACCESS" ORDERS)

Provisioning

43. Measurement

Average Installation Interval

Definition:

Average business days from LSR receipt application date to completion date for N, T, and C orders.

Exclusions:

- UNE and Interconnection Trunks.
- Orders that are not N, T, or C.
- Circuits that have a customer requested Due Date greater than 20 business days.
- Official company service from Retail.
- Orders where CLECs are charged expedite charges
- Service requests involving major projects mutually agreed upon by CLECs and Ameritech. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.

Business Rules:

The Application Date is the day that Ameritech receives the customer initiated service request. The Completion Date is the day that Ameritech personnel complete the service order activity by circuit. The base of items is out of WFA (Work Force Administration) and it is reported at an item or circuit level.

Levels of Disaggregation:

Geographic, per State Agreements

- Resold Specials
  - DDS
  - DS1
  - DS3
  - Voice Grade Private Line (VGPL)
  - ISDN BRI
  - ISDN PRI
  - Any other services available for resale
- UNE Loop and Port
  - ISDN BRI
  - ISDN PRI
  - Other combinations

Calculation:	Report Structure:
[Σ(completion date - application date)] ÷ (Total circuits completed)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate..

Measurement Type:
Tier 1 – High Tier 2 – High
Benchmark:
Parity with Ameritech Retail.

44. Measurement	
Percent Installations Completed Within 20 Calendar Days	
Definition:	
Percent installations completed within 20 calendar days.	
Exclusions:	
See Measurement No. 43	
Business Rules:	
See Measurement No. 43 Count any unsolicited FOC which modifies the due date as a missed due date.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
(# of circuits installed within 20 calendar days ÷ total circuits installed) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail.	

45. Measurement	
Percent Ameritech Caused Missed Due Dates	
Definition:	
Percentage of N, T, and C orders by circuit where installations were not completed by the due date as a result of an Ameritech caused missed due date.	
Exclusions:	
• UNE and Interconnection Trunks. • Orders that are not N, T, or C. • Official company service from Retail.	
Business Rules:	
This includes items completed after the Due Date, due to an Ameritech reason. The source is WFA (Work Force Administration) and is at an item or circuit level. Specials are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
(# of circuits with Ameritech caused missed due dates ÷ total circuits installed) * 100	Reported for CLEC all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with Ameritech Retail.	

46. Measurement	
Percent Trouble Reports Within 30 Days (I-30) of Installation	
Definition:	
Percent of N, T, and C orders by circuit that receive a network customer trouble report within 30 calendar days of service order completion.	
Exclusions:	
• UNE and Interconnection Trunks. • Orders that are not N, T, or C. • Trouble report received on the due date before service order completion.	
Business Rules:	
A trouble report is counted if it is flagged in WFA (Work Force Administration) as a trouble report that had a service order completion within 30 days. It cannot be a repeat report and must be a measured report. The order flagged against must be an addition in order for the trouble report to be counted. Specials are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
[# of circuits that receive a network customer trouble report within 30 calendar days of service order completion ÷ total circuits installed] * 100	Reported for CLEC all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with Ameritech Retail.	

47. Measurement	
Percent Ameritech Missed Due Dates Due To Lack Of Facilities	
Definition:	
Percentage of N, T, and C orders by circuit with missed committed due dates due to lack of facilities.	
Exclusions:	
• UNE and Interconnection Trunks. • Orders that are not N, T, or C.	
Business Rules:	
Includes orders with a completion date that is greater than the due date based on an Ameritech missed reason code for lack of facilities. This measurement is reported at a circuit level for all specials. Count any unsolicited FOC which modifies the due date as a missed due date.	
Levels of Disaggregation:	
• See Measurement No. 43. • Reported for > 30 calendar days & > 90 calendar days.	
Calculation:	**Report Structure:**
(# of circuits with missed committed due dates due to lack of facilities ÷ total circuits installed) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail.	

48. Measurement	
Average Delay Days for Missed Due Dates Due to Lack Of Facilities	
Definition:	
Average calendar days from due date to completion date on company missed circuits due to lack of facilities.	
Exclusions:	
• UNE and Interconnection Trunks. • Orders that are not N, T, or C.	
Business Rules:	
Includes orders missed due to lack of facilities that are selected based on the missed reason code. The source is WFA (Work Force Administration) and is at an item or circuit level. UNEs are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
Σ(Completion date - Committed circuit due date) ÷ (Total completed circuits with Ameritech caused missed due dates due to lack of facilities)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate. .
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail.	

49. Measurement	
Average Delay Days For Ameritech Caused Missed Due Dates	
Definition:	
Average calendar days from due date to completion date on company missed circuits.	
Exclusions:	
• UNE and Interconnection Trunks. • Orders that are not N, T, or C.	
Business Rules:	
The calculation is the difference in calendar days between the completion date and the due date. The source is WFA (Work Force Administration) and is at an item or circuit level. Specials are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
Σ(Completion date – committed circuit due date) ÷ (Total completed circuits with a Ameritech caused missed due date)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail.	

50. Measurement	
Percent Ameritech Caused Missed Due Dates > 30 days	
Definition:	
Percentage of circuits where installation was completed greater than 30 days following the due date.	
Exclusions:	
• CLEC caused misses. • UNE and Interconnection Trunks. • Orders that are not N, T, or C.	
Business Rules:	
This includes items completed after the Due Date, due to an Ameritech reason. This measurement is reported at a circuit level for all Specials.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
(# of circuits completed greater than 30 days following the due date ÷ total installed circuits) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail.	

51. Measurement	
Count of Orders Cancelled After the Due Date Which Were Caused by Ameritech	
Definition:	
The total number of orders that were cancelled by the CLEC after the order due date. Only orders cancelled with Ameritech missed codes are included.	
Exclusions:	
• UNE and Interconnection Trunk. • Orders that are not N, T, or C. • CLEC delayed orders.	
Business Rules:	
Includes orders that are cancelled by the customer after the negotiated due date and prior to completion.	
Levels of Disaggregation:	
• See Measurement No. 43 The count will be divided into the following days past due groupings: • 1-30 • 31-90 • > 90	
Calculation:	**Report Structure:**
# of orders cancelled after the Due Date	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail. Diagnostic. No benchmark required.	

51.1 Measurement (New Measure)	
Average Delay Days for Ameritech Caused Canceled Orders	
Definition:	
Average calendar days from due date to Cancel date on company missed orders. Only orders cancelled with Ameritech missed codes are included.	
Exclusions:	
• UNE and Interconnection Trunk. • Orders that are not N, T, or C. • CLEC delayed orders.	
Business Rules:	
Counts the average calendar days between the due date and the cancel date for orders that are cancelled by the customer after the negotiated due date and prior to completion.	
Levels of Disaggregation:	
See Measure 51 • Resale Specials	
Calculation:	**Report Structure:**
(total number of delay days)/ total canceled orders <u>Delay Days are Defined as (complete date – due date)</u>	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail. Diagnostic. No benchmark required.	

Maintenance

52. Measurement	
Mean Time To Restore	
Definition:	
Average duration of network customer trouble reports from the receipt of the customer trouble report to the time the trouble report is cleared.	
Exclusions:	
• UNE and Interconnection Trunk. • No Access Time. • Delayed Maintenance Time.	
Business Rules:	
The start time is when the customer report is received and the stop time is when the report is closed in WFA. Specials are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
Σ[(Date and time trouble report is cleared) - (date and time trouble report is received)] ÷ total network customer trouble reports	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with Ameritech Retail.	

53. Measurement	
Percent Repeat Reports	
Definition:	
Percentage of network customer trouble reports received within 30 calendar days of a previous customer report.	
Exclusions:	
• UNE and Interconnection Trunk	
Business Rules:	
Includes customer trouble reports received within 30 calendar days of an original customer report. When the second report is received in 30 days, the original report is marked as an Original of a Repeat, and the second report is marked as a Repeat. If a third report is received within 30 days, the second report is marked as an Original of a Repeat as well as being a Repeat, and the third report is marked as a Repeat. In this case there would be two repeat reports. If either the original or the second report within 30 days is a measured report, then the second report counts as a Repeat report.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
(# of network customer trouble reports received within 30 calendar days of a previous customer trouble report ÷ total network customer trouble reports) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with Ameritech Retail.	

54. Measurement	
Failure Frequency	
Definition:	
The number of network customer trouble reports within a calendar month per 100 circuits.	
Exclusions:	
• UNE and Interconnection Trunks.	
Business Rules:	
CLEC and Ameritech repair reports are entered into and tracked via WFA. Measured reports are counted in the month they close.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
(# of network trouble reports ÷ Total in service circuits) ÷ 100)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail.	

UNBUNDLED NETWORK ELEMENTS (UNES)

Provisioning

55. Measurement
Average Installation Interval
Definition:
Average business days from application date to completion date for N, T, and C orders. The "X" business days is determined based on quantity of UNE loops ordered and the associated standard interval.
Exclusions:
• Specials and Interconnection Trunks. • UNE Combos captured in the POTS or Specials measurements. • Orders that are not N, T, or C. • CLEC requested due dates greater than "X" business days as set out below. • CLEC caused misses. • • Orders where CLECs are charged expedite charges • Service requests involving major projects mutually agreed upon by CLECs and Ameritech. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.
Business Rules:
The Application Date is the day that Ameritech receives the customer initiated service request. The Completion Date is the day that Ameritech personnel complete the service order activity. The base of items is out of WFA (Work Force Administration).
Levels of Disaggregation:

Geographic, per State Agreements

- 2 Wire Analog (1-10)
- 2 Wire Analog (11-20)
- 2 Wire Analog (20+)
- 2 Wire Digital (1-10)
- 2 Wire Digital (11-20)
- 2 Wire Digital (20+)
- 2 Wire INP (1-10)
- 2 Wire INP (11-20)
- 2 Wire INP (20+)
- DS1 loop(includes PRI)
- Switch Ports – Analog Port
- Switch Ports – BRI Port (1-50)
- Switch Ports – BRI Port (50+)
- Switch Ports – PRI Port (1-20)
- Switch Ports – PRI Port (20+)
- DS1 Trunk Port (1 to 10)
- DS1 Trunk Port (11 to 20)
- DS1 Trunk Port (20+)
- Dedicated Transport (DS0, DS1, and DS3) (1 to 10)
- Dedicated Transport (DS0, DS1, and DS3) (11 to 20)
- Dedicated Transport (DS0, DS1, and DS3) (20+) and all other types

Calculation:	Report Structure:
[Σ(Completion Date - Application Date)] ÷ (Total items completed)	Reported for CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 – None
Tier 2 – None

Benchmark:

- No Benchmark

55.1. Measurement

Average Installation Interval - DSL

Definition:

Average business days from application date to completion date for N, T, and C orders.

Exclusions:

- Orders that are not N, T, or C.
- CLEC requested due dates greater than the offered interval.
- CLEC caused misses.
- Weekends and Holidays.
- Orders where CLECs are charged expedite charges

Business Rules:

The Application Date is the day that the customer CLEC authorizes Ameritech to provision the DSL based on the loop qualification. If the loop qualification determines that no conditioning is required, Ameritech will initiate the service order when the loop qualification is returned from Ameritech engineering but the date the order was received will be the application date. If conditioning is required, Ameritech will reject the order back to the CLEC and wait for a supplement from the CLEC notifying Ameritech of the appropriate action to take. If the CLEC supplements the DSL order, Ameritech will issue the order and the application date will be the date that Ameritech receives the supplement. The Completion Date is the day that Ameritech personnel complete the service order activity. The base of items is out of WFA (Work Force Administration) and it is reported at a circuit level.

Levels of Disaggregation:

Geographic, per State Agreements

Loops requiring conditioning

- Line Sharing
- No Line Sharing

Loops requiring no conditioning

- Line Sharing
- No Line Sharing

Calculation:	Report Structure:
[Σ(Completion Date - Application Date)] ÷ (Total items completed)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.

Measurement Type:

Tier 1 – High

Tier 2 – High

Benchmark:

Parity with Ameritech Affiliate

55.2 Measurement (New Measure)

Average Installation Interval for Loop With LNP

Definition:

Average business days from the receipt of an accurate LSR to completion date for N, T, and C orders excluding customer caused misses and customer requested due date greater than "X" business days. The "X" business days is determined based on quantity of UNE loops ordered and the associated standard interval.

Exclusions:

- Specials and Interconnection Trunks
- Excludes UNE Combinations captured in the POTS or Specials measurements
- Excludes orders that are not N, T, or C
- Excludes customer requested due dates greater than "X" business days. X is defined as follows:
  - Loop with LNP (1-10) – 4 business days
  - Loop with LNP (11-20) – 8 business days
  - Loop with LNP (21-50) – 11 business days
- Excludes customer caused misses
- Excludes Weekends and Holidays
- NPAC caused delays unless caused by Ameritech
- <u>Orders where CLECs are charged expedite charges</u>

Business Rules:

The start time is the date of the receipt of an accurate LSR. The Completion Date is the day that Ameritech personnel complete the service order activity. If the CLEC submits the LSR prior to 3:00 p.m. the CLEC may request a 3 day interval. If the LSR is submitted after 3:00 p.m. the CLEC can request a 4 day interval. The base of items is out of WFA (Work Force Administration) and it is reported at an order level to account for different measurement standards based on the number of circuits per order.

For partial LNP conversions that require restructuring of customer account:

- 1-30 TNs: Add one additional day to the FOC interval. The LNP due date intervals will continue to be three business days and five business days from the receipt of the FOC depending on whether the NXX has been previously opened or is new.
- >30 TNs, including entire NXX: The due dates are negotiated.

Levels of Disaggregation:

Geographic, per State agreements
CHC

- Loop with LNP (1-10)
- Loop with LNP (11-20
- Loop with LNP (21-50)

Calculation:	Report Structure:
[Σ(completion date – application date)] ÷ (Total number of orders completed)	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Diagnostic	

56. Measurement	
Percent Installations Completed Within "X" Days	
Definition:	
Percent installations completed within "X" business days.	
Exclusions:	
• Specials and Interconnection Trunks. • UNE Combos captured in the POTS or Specials measurements. • Orders that are not N, T, or C. • CLEC requested due dates greater than "X" business days as set out in benchmark. • CLEC caused misses. • Orders where CLECs are charged expedite charges • Service requests involving major projects mutually agreed upon by CLECs and Ameritech. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.	
Business Rules:	
See Measurement No. 55.	
Levels of Disaggregation:	
Geographic, per State Agreements • See Benchmark	
Calculation:	**Report Structure:**
(# of items installed within "X" business days ÷ total items) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	

95% within "X" days

- 2 Wire Analog (1-10) – 3 Days
- 2 Wire Analog (11-20) – 7 Days
- 2 Wire Analog (20+) – 10 Days
- 2 Wire Digital (1-10) – 3 Days
- 2 Wire Digital (11-20) – 7 Days
- 2 Wire Digital (20+) – 10 Days
- 2 Wire INP (1-10) – 3 Days
- 2 Wire INP (11-20) – 7 Days
- 2 Wire INP (20+) – 10 Days
- DS1 loop(includes PRI) – 3 Days
- Switch Ports – Analog Port – 2 Days
- Switch Ports – BRI Port (1-50) – 3 Days
- Switch Ports – BRI Port (50+) – 5 Days
- Switch Ports – PRI Port (1-20) – 5 Days
- Switch Ports – PRI Port (20+) – 10 Days
- DS1 Trunk Port (1 to 10) – 3 Days
- DS1 Trunk Port (11 to 20) – 5 Days
- DS1 Trunk Port (20+) – ICB
- Dedicated Transport (DS0, DS1, and DS3) (1 to 10) – 3 Days
- Dedicated Transport (DS0, DS1, and DS3) (11 to 20) – 5 Days
- Dedicated Transport (DS0, DS1, and DS3) (20+) and all other types – ICB

57. Measurement	
Average Response Time for Manual Loop Make-Up Information	
Definition:	
The average time required to provide loop qualification for ADSL.	
Exclusions:	
None	
Business Rules:	
The time starts when a request is received by the CLEC and ends when the information on the loop qualification has been made available to the CLEC.	
Levels of Disaggregation:	
Geographic, per State Agreements • ADSL. • Other DSL as required.	
Calculation:	**Report Structure:**
∑(Date and Time the Loop Qualification is made available to CLEC – Date and Time the CLEC request is received)/Total loop qualifications	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – Medium	
Benchmark:	
Parity with Ameritech Affiliate	

58. Measurement	
Percent Ameritech Caused Missed Due Dates	
Definition:	
Percentage of items where installations are not completed by the negotiated due date.	
Exclusions:	
• Specials and Interconnection Trunks. • UNE Combos captured in the POTS or Specials measurements. • Orders that are not N, T, or C. • CLEC caused misses.	
Business Rules:	
This includes items completed after the Due Date, due to an Ameritech reason. This measurement is reported at a circuit level for all UNEs. Count any unsolicited FOC which modifies the due date as a missed due date.	
Levels of Disaggregation:	
Geographic, per State Agreements See benchmark.	
Calculation:	**Report Structure:**
(# of UNEs with missed due dates ÷ total items installed) *100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	

Wisconsin

Parity:	Retail Comparison:
1. 8.0 dB Loop with Test Access and 8.0 dB Loop without Test Access	POTS (Res/Bus and FW)
The Ameritech comparable to the 8db loop with test access is the basic 2-wire POTS loop. Acceptable db level varies by state.	
2. 5.0 dB Loop with Test Access and 5.0 dB Loop without Test Access	VGPL
3. BRI Loop with Test Access	ISDN BRI
4. ISDN BRI Port	ISDN BRI
5. DS1 Loop with Test Access	DS1 & ISDN PRI
6. DS1 Dedicated Transport	DS1
7. Subtending Channel (23B)	DDS
8. Subtending Channel (1D)	DDS
9. Analog Trunk Port	VGPL
10. Subtending Digital Direct Combination Trunks	VGPL
11. DS3 Dedicated Transport	DS3
12. Dark Fiber	DS3
13. DSL Loops w/ Line Sharing	Ameritech Affiliate
14. DSL Loops w/out Line Sharing	Ameritech Affiliate

59. Measurement	
Percent Trouble Reports Within 30 Days (I-30) of Installation	
Definition:	
Percentage of items that receive a network customer trouble report within 30 calendar days of service order completion.	
Exclusions:	
• Specials and Interconnection Trunks. • Non-measured reports (CPE, Interexchange, and Information reports). • UNE Combos captured in the POTS or Specials measurements. • Trouble report received on the due date before service order completion. • Orders that are not N, T, or C.	
Business Rules:	
A trouble report is counted if it is received within 30 days of a service order completion. The service order which generated the report must be an "add" in order for the trouble report to be counted. UNEs are selected based on a specific service code off of the circuit ID. This measurement is reported at a circuit level for all UNEs.	
Levels of Disaggregation:	
Geographic, per State Agreements See Benchmark.	
Calculation:	**Report Structure:**
(# of UNEs that receive a network customer trouble report within 30 calendar days of service order completion ÷ total items installed) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
See Measurement 58	

60. Measurement	
Percent Ameritech Missed Due Dates Due To Lack Of Facilities	
Definition:	
Percentage of items with missed committed due dates due to lack of facilities.	
Exclusions:	
• Specials and Interconnection Trunks. • UNE Combos captured in the POTS or Specials measurements. • Orders that are not N, T, or C.	
Business Rules:	
Includes orders with a completion date that is greater than the due date based on an Ameritech missed reason code for lack of facilities. This measurement is reported at a circuit level for all UNEs. Count any unsolicited FOC which modifies the due date as a missed due date.	
Levels of Disaggregation:	
Geographic, per State Agreements • See Benchmark • Reported for > 30 calendar days & > 90 calendar days	
Calculation:	**Report Structure:**
(# of UNEs with missed committed due dates due to lack of facilities ÷ total items installed) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
See Measurement No. 58.	

61. Measurement	
Average Delay Days for Missed Due Dates Due To Lack Of Facilities	
Definition:	
Average calendar days from due date to completion date on company missed items due to lack of facilities.	
Exclusions:	
• Specials and Interconnection Trunks. • UNE Combos captured in the POTS or Specials measurements. • Orders that are not N, T, or C.	
Business Rules:	
Includes orders missed due to lack of facilities that are selected based on the missed reason code. The source is WFA (Work Force Administration) and is at an item or circuit level. UNEs are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
Geographic, per State Agreements • See Benchmark	
Calculation:	**Report Structure:**
Σ(Completion date - UNE(8db loops are measured at the order level) due date) ÷ (total closed items with Ameritech caused missed due dates due to lack of facilities)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate. .
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
See Measurement No. 58	

62. Measurement	
Average Delay Days For Ameritech Caused Missed Due Dates	
Definition:	
Average calendar days from due date to completion date on company missed items.	
Exclusions:	
• Specials and Interconnection Trunks. • UNE Combos captured in the POTS or Specials measurements. • Orders that are not N, T, or C.	
Business Rules:	
The calculation is the difference in calendar days between the completion date and the due date. The source is WFA (Work Force Administration) and is at an item or circuit level. UNEs are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
Geographic, per State Agreements See Benchmark	
Calculation:	**Report Structure:**
∑(Completion date – UNE due date ÷ (total closed items with Ameritech caused missed due dates)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
See Measurement No. 58	

63. Measurement	
Percent Ameritech Caused Missed Due Dates > 30 days	
Definition:	
Percentage of items where installation was completed greater than 30 days following the due date.	
Exclusions:	
• Specials and Interconnection Trunks. • CLEC caused misses.	
Business Rules:	
Geographic, per State Agreements See Measurement No. 58	
Levels of Disaggregation:	
See Benchmark	
Calculation:	**Report Structure:**
(# of UNEs completed greater than 30 days following the due date ÷ total items * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
See Measurement No. 58	

64. Measurement	
Count of Orders Cancelled After the Due Date Which Were Caused by Ameritech	
Definition:	
A count of the total number of orders that were cancelled after the order due date. Only orders cancelled with Ameritech missed codes are included.	
Exclusions:	
• CLEC delayed orders. • Orders that are not N, T, or C.	
Business Rules:	
Includes orders that are cancelled by the CLEC after the negotiated due date and prior to completion.	
Levels of Disaggregation:	
Geographic, per State Agreements See Measure #58. The count will be divided into the following days past due groupings: • 1-30 • 31-90 • > 90	
Calculation:	**Report Structure:**
# of orders cancelled after the Due Date	Reported for individual CLECs, the aggregate of all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail. Diagnostic. No benchmark required.	

64.1 Measurement (New Measure)	
Average Delay Days for Ameritech Caused Canceled Orders - UNE	
Definition:	
Average calendar days from due date to Cancel date on company missed orders. Only orders cancelled with Ameritech missed codes are included.	
Exclusions:	
• CLEC delayed orders. • Orders that are not N, T, or C.	
Business Rules:	
Counts the average calendar days between the due date and the cancel date for orders that are cancelled by the customer after the negotiated due date and prior to completion.	
Levels of Disaggregation:	
See measure 64 • UNE	
Calculation:	**Report Structure:**
(total number of delay days)/ total canceled orders <u>Delay Days are Defined as (complete date – due date)</u>	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail. Diagnostic. No benchmark required.	

Maintenance

65. Measurement	
Trouble Report Rate	
Definition:	
The number of network customer trouble reports within a calendar month per 100 UNEs.	
Exclusions:	
• Specials and Interconnection Trunks. • Non-measured reports (CPE, Interexchange, and Information reports).	
Business Rules:	
Repair reports are entered into and tracked via WFA. Reports are counted in the month they close.	
Levels of Disaggregation:	
Geographic, per State Agreements See Benchmark • Trunks	
Calculation:	**Report Structure:**
[# of network trouble reports ÷ (Total UNEs in service ÷ 100)]	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	

Wisconsin

Parity:	Retail Comparison:
1. 8.0 dB Loop with Test Access and 8.0 dB Loop without Test Access	POTS (Bus FW)

The Ameritech comparable to the 8db loop with test access is the basic 2-wire POTS loop. Acceptable db level varies by state.

2. 5.0 dB Loop with Test Access and 5.0 dB Loop without Test Access	VGPL
3. BRI Loop with Test Access	ISDN BRI
4. ISDN BRI Port	ISDN BRI
5. DS1 Loop with Test Access	DS1 & ISDN PRI
6. DS1 Dedicated Transport	DS1
7. Subtending Channel (23B)	DDS
8. Subtending Channel (1D)	DDS
9. Analog Trunk Port	VGPL
10. Subtending Digital Direct Combination Trunks	VGPL
11. DS3 Dedicated Transport	DS3
12. Dark Fiber	DS3
13. DSL Loops w/ Line Sharing	Ameritech Affiliate
14. DSL Loops w/out Line Sharing	Ameritech Affiliate
15. Trunks	Interconnection Trunks

66. Measurement	
Percent Missed Repair Commitments	
Definition:	
Percentage of trouble reports not cleared by the commitment time due to Ameritech reasons.	
Exclusions:	
• Specials and Interconnection Trunks. • All Combos other than 8db loops. • Non-measured reports (CPE, Interexchange, and Information reports).	
Business Rules:	
The commitment time is defined as 24 hours. If the cleared date and time minus the receive date and time > 24 hours, it counts as a trouble report that missed the repair commitment. UNEs are selected based on a specific service code off of the circuit ID. Reports are counted the month they are closed.	
Levels of Disaggregation:	
Geographic, per State Agreements 2-Wire Analog 8dB Loop. DSL line sharing	
Calculation:	**Report Structure:**
(# of trouble reports not cleared by the commitment time for company reasons ÷ total trouble reports) * 100	Reported for CLEC all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with Ameritech POTS Business FW for 2-Wire Analog 8dB Loop. Parity with Ameritech Affiliate for DSL line sharing.	

67. Measurement	
Mean Time To Restore	
Definition:	
Average duration of network CLEC trouble reports from the receipt of the CLEC trouble report to the time the trouble report is cleared.	
Exclusions:	
• See Measurement No. 65. • No Access Time. • Delayed Maintenance Time.	
Business Rules:	
The start time is when the report is received. The stop time is when the report is cleared in WFA.	
Levels of Disaggregation:	
Geographic, per State Agreements See Benchmark. • Dispatch / No Dispatch.	
Calculation:	**Report Structure:**
Σ[(Date and time trouble report is cleared) - (date and time trouble report is received)] ÷ total network customer trouble reports	Reported for CLEC all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
See Measurement No. 58.	

68. Measurement	
Percent Out Of Service (OOS) < "24" Hours	
Definition:	
Percentage of OOS trouble reports cleared in less than 24 hours.	
Exclusions:	
See Measurement No. 66.	
Business Rules:	
The close date and time minus the receive date and time must be greater than 0 and less than 24 hours for it to count as a trouble report that was cleared in less than 24 hours.	
Levels of Disaggregation:	
Geographic, per State Agreements • 2-Wire Analog 8dB Loop.	
Calculation:	**Report Structure:**
(# of OOS trouble reports < 24 hours ÷ total OOS trouble reports) * 100	Reported for CLEC all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
Parity with Ameritech POTS Business and Residence .	

69. Measurement	
Percent Repeat Reports	
Definition:	
Percentage of network customer trouble reports received within 30 calendar days of a previous customer trouble report.	
Exclusions:	
• Specials and Interconnection Trunks. • Non-measured reports (CPE, Interexchange, and Information reports).	
Business Rules:	
Includes customer trouble reports received within 30 calendar days of an original customer report. When the second report is received in 30 days, the original report is marked as an Original of a Repeat, and the second report is marked as a Repeat. If a third report is received within 30 days, the second report is marked as an Original of a Repeat as well as being a Repeat, and the third report is marked as a Repeat. In this case there would be two repeat reports. If either the original or the second report within 30 days is a measured report, then the second report counts as a Repeat report.	
Levels of Disaggregation:	
Geographic, per State Agreements See Benchmark. • Trunks	
Calculation:	**Report Structure:**
(# of network customer trouble reports received within 30 calendar days of a previous customer trouble report ÷ total network customer trouble reports) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
See Measurement No. 58.	

INTERCONNECTION TRUNKS

70. Measurement:	
Percentage of Trunk Blockage (Call Blockage)	
Definition:	
Percentage of calls blocked on outgoing traffic from Ameritech end office to CLEC end office and from Ameritech tandem to CLEC end office.	
Exclusions:	
• Weekends and Holidays • If CLECs have trunks busied-out for maintenance at their end, or if they have other network problems which are under their control. • Ameritech is ready for turn-up on Due Date and CLEC is not ready or not available for turn-up of trunks. • If CLEC does not take action upon receipt of Trunk Group Service Request (TGSR) or ASR within 3 days when a Call Blocking situation is identified by Ameritech or in the timeframe specified in the ICA. • If CLEC fails to provide a forecast. • If CLEC's actual trunk usage, as shown by Ameritech from traffic usage studies, is more than 25% above CLEC's most recent forecast, which must have been provided within the last six-months unless a different timeframe is specified in an interconnection agreement. The exclusions do not apply if Ameritech fails to timely provide CLEC with traffic utilization data reasonably required for CLEC to develop its forecast or if Ameritech refuses to accept CLEC trunk orders (ASRs or TGSRs) that are within the CLEC's reasonable forecast regardless of what the current usage data is.	
Business Rules:	
Blocked calls and total calls are gathered during 20 business days.	
Levels of Disaggregation:	
• Ameritech end office to CLEC end office. • Ameritech tandem to CLEC end office.	
Calculation:	**Report Structure:**
(# of blocked calls ÷ total calls offered) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier-1 High Tier-2 High	
Benchmark:	
Dedicated Trunk Groups not to exceed blocking standard of B.01.	

71. Measurement:	
Common Transport Trunk Blockage	
Definition:	
Percentage of local common transport trunk groups exceeding 2% blockage.	
Exclusions:	
• No data is collected on weekends.	
Business Rules:	
Blocked calls and total calls are gathered during the official 20 day study for intraLATA traffic month.	
Levels of Disaggregation:	
• Common trunk groups where CLECs share ILEC trunks • Common trunk groups for CLECs not shared by ILEC	
Calculation:	**Report Structure:**
(# of common transport trunk groups exceeding 2% blocking ÷ total common transport trunk groups) * 100.	Reported on local common transport trunk groups, and Ameritech Affiliate.
Measurement Type:	
Tier-1 None Tier-2 High	
Benchmark:	
State Standard of 3% or parity, whichever allows less blocking in a given month.	

72. Measurement	
Distribution Of Common Transport Trunk Groups > 2%	
Definition:	
A distribution of trunk groups exceeding 2% reflecting the various levels of blocking.	
Exclusions:	
None	
Business Rules:	
See Measurement No. 71.	
Levels of Disaggregation:	
• Levels of Blocking equal to 2-2.99% • Levels of Blocking equal to 3-3.99% • Levels of Blocking equal to 4-5.99% • Levels of Blocking equal to 6-9.99% • Levels of Blocking equal 10% or greater	
Calculation:	**Report Structure:**
# of trunk groups exceeding the threshold contained in the levels of Disaggregation.	Reported on local common transport trunk groups, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

73. Measurement	
Percentage Missed Due Dates – Interconnection Trunks	
Definition:	
Percentage of trunk order due dates missed on interconnection trunks.	
Exclusions:	
• CLEC Caused Misses.	
Business Rules:	
The Due Date starts the clock. The Completion Date is the day that Ameritech personnel complete the service order activity and it is accepted by the CLEC, which stops the clock. The source is WFA (Work Force Administration) and is at an item or circuit level.	
Levels of Disaggregation:	
• 911 • OS/DA • SS7 • Interconnection Trunks	
Calculation:	**Report Structure:**
(# of trunk circuits missed ÷ total trunk circuits installed) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
Parity with Ameritech Interoffice Facility Trunks.	

74. Measurement	
Average Delay Days For Missed Due Dates – Interconnection Trunks	
Definition:	
Average calendar days from due date to completion date on company missed interconnection trunk orders.	
Exclusions:	
• CLEC Caused Misses.	
Business Rules:	
The calculation is the difference in calendar days between the completion date (the date the CLEC accepts the circuit) and the due date. The source is WFA (Work Force Administration) and is at an item or circuit level.	
Levels of Disaggregation:	
• 911 • OS/DA • SS7 • Interconnection Trunks	
Calculation:	**Report Structure:**
∑ (Completion date – committed circuit due date) ÷ (Total completed trunk circuits with missed Due Dates)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity with Ameritech Interoffice Facility Trunks.	

75. Measurement:	
Percentage Ameritech Caused Missed Due Dates > 30 Days – Interconnection Trunks	
Definition:	
Percentage of Interconnection Trunk Circuits where installation was completed greater than 30 days following the due date.	
Exclusions:	
• CLEC Caused Misses.	
Business Rules:	
See Measurement No. 74	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of interconnection trunk circuits completed greater than 30 days following the due date, ÷ total installed interconnection trunk circuits) * 100.	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier-1 Low Tier-2 None	
Benchmark:	
No more than 2% interconnection trunk orders completed > 30 days.	

76. Measurement	
Average Trunk Restoration Interval – Interconnection Trunks	
Definition:	
Average time to repair interconnection trunks. This measure is based on calendar days.	
Exclusions:	
• Excludes non-measured tickets (CPE, Interexchange, or Information).	
Business Rules:	
The start time is when the report is received. The source is WFA (Work Force Administration) and is at an item or circuit level. The stop time is when the circuit is restored and the report cleared in WFA.	
Levels of Disaggregation:	
• 911 • OS/DA • SS7 • Interconnection Trunks	
Calculation:	**Report Structure:**
Σ[(Date and time trouble report is cleared) - (date and time trouble report is received)] ÷ total trunk trouble reports	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail.	

77. Measurement	
Average Trunk Restoration Interval for Service Affecting Trunk Groups	
Definition:	
The average time to restore service affecting trunk groups.	
Exclusions:	
None	
Business Rules:	
Service affecting is defined as 20% of a trunk group out-of-service that causes trunk group blockage. The clock starts on receipt of a trouble ticket from the CLEC that identifies a service affecting condition. The clock stops after completion of work by Ameritech.	
Levels of Disaggregation:	
• Tandem trunk groups. • Non-Tandem trunk groups. • 911 • OS/DA • SS7 • Interconnection Trunks	
Calculation:	**Report Structure:**
Σ[(Date and time trouble report is cleared) - (date and time trouble report is received)] / total service affecting trunk group trouble reports	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Tandem trunk groups – 1 hour / Non-Tandem – 2 hours.	

78. Measurement:	
Average Interconnection Trunk Installation Interval	
Definition:	
The average time from receipt of a complete and accurate ASR until the completion of the trunk order.	
Exclusions:	
• Customer requested due dates greater than 20 business days	
Business Rules:	
The clock starts on the receipt of a complete and accurate ASR and the clock stops on the date the work is completed.	
Levels of Disaggregation:	
• Interconnection Trunks • SS7 Links • OS/DA • 911 Trunks	
Calculation:	**Report Structure:**
∑(completion date of the trunk order - receipt date of complete and accurate ASR) ÷ total installed trunk orders	Reported for CLEC all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
20 Business days.	

DIRECTORY ASSISTANCE (DA) AND OPERATOR SERVICES (OS)

79. Measurement	
Directory Assistance Grade Of Service	
Definition:	
Percentage of directory assistance calls answered within "X" seconds.	
Exclusions:	
None	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when a Ameritech representative answers the call or the customer abandons the call. The length of each call is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the Ameritech call management system queue until the CLEC customer call is transferred to Ameritech personnel assigned to handling calls for assistance during hours of operation. Calls are categorized into the designated bands to determine the percentage of calls that were answered within "x" seconds.	
Levels of Disaggregation:	
• < 1.5 seconds • < 2.5 seconds • > 7.5 seconds • > 10.0 seconds • > 15.0 seconds • > 20.0 seconds • > 25.0 seconds	
Calculation:	**Report Structure:**
(Calls answered within "x" seconds ÷ total calls answered) * 100	Reported for the aggregate and all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

80. Measurement	
Directory Assistance Average Speed Of Answer	
Definition:	
The average time a customer is in queue.	
Exclusions:	
None	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when a Ameritech representative answers the call. The length of each call is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the Ameritech call management system queue until the CLEC customer call is transferred to Ameritech personnel assigned to handling calls for assistance during hours of operation.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Total queue time ÷ total calls answered	Reported for the aggregate of all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – Low	
Benchmark:	
10 seconds.	

81. Measurement	
Operator Services Grade Of Service	
Definition:	
Percentage of operator services calls answered within "X" seconds.	
Exclusions:	
None	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when a Ameritech representative answers the call or the customer abandons the call. The length of each call is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the Ameritech call management system queue until the CLEC customer call is transferred to Ameritech personnel assigned to handling calls for assistance during hours of operation. Calls are categorized into the designated bands to determine the percentage of calls that were answered within "x" seconds.	
Levels of Disaggregation:	
• < 1.5 seconds • < 2.5 seconds • > 7.5 seconds • > 10.0 seconds • > 15.0 seconds • > 20.0 seconds • > 25.0 seconds	
Calculation:	**Report Structure:**
(Calls answered within "x" seconds ÷ total calls answered) * 100	Reported for the aggregate all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

82. Measurement	
Operator Services Speed Of Answer	
Definition:	
The average time a customer is in queue.	
Exclusions:	
None	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when a Ameritech representative answers the call. The length of each call is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the Ameritech call management system queue until the CLEC customer call is transferred to Ameritech personnel assigned to handling calls for assistance during hours of operation.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Total queue time ÷ total calls answered.	Reported for the aggregate of all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – Low	
Benchmark:	
10 seconds.	

83. Measurement	
Percentage of Calls Abandoned	
Definition:	
The percentage of calls where the customer hangs up while the call is in queue.	
Exclusions:	
• Ameritech generated test calls.	
Business Rules:	
The clock runs on a 24 hour cycle starting at 6:00 a.m. and ending at 6:00 a.m. This measurement determines the amount of calls that were abandoned against the number of operator positions available during the reporting period in quarter hour intervals.	
Levels of Disaggregation:	
• OS • DA	
Calculation:	**Report Structure:**
(# of calls abandoned ÷ number of operator positions available) * 100	Reported for the aggregate of all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

84. Measurement - CLEC Requested Removal	
Percentage of Calls Deflected	
Definition:	
~~The percentage of calls that are received and are unable to be placed in queue~~	
~~Exclusions:~~	
• ~~Ameritech generated test calls.~~	
~~Business Rules:~~	
~~The clock runs on a 24 hour cycle starting at 6:00a.m. and ending at 6:00a.m. This measurement determines the amount of calls that are received and deflected to a recording rather than being placed in queue against the number of operator positions available during the reporting period in quarter hour intervals.~~	
~~Levels of Disaggregation:~~	
• ~~OS~~ • ~~DA~~	
~~Calculation:~~	**~~Report Structure:~~**
~~(# of calls deflected ÷ Total operator positions available) * 100~~	~~Reported for the aggregate of all CLECs, Ameritech, and Ameritech Affiliate.~~
~~Measurement Type:~~	
~~Tier 1 – None~~ ~~Tier 2 – None~~	
~~Benchmark:~~	
~~Aggregate measurement. No benchmark required.~~	

85. Measurement - CLEC Requested Removal	
Average Work Time	
~~Definition:~~	
~~The average number of seconds an operator spends handling a customer's request for assistance in obtaining a telephone number, placing a call at the customer's request or in a position busy state.~~	
~~Exclusions:~~	
• ~~Ameritech generated test calls.~~	
~~Business Rules:~~	
~~The clock starts when a customer connects to an operator position and stops when the operator position releases the customer after serving his/her request.~~	
~~Levels of Disaggregation:~~	
• ~~OS~~ • ~~DA~~	
~~Calculation:~~	**~~Report Structure:~~**
~~∑ (Time operator position releases customer – time customer connects to an operator position) ÷ total calls answered~~	~~Reported for the aggregate of all CLECs, Ameritech, and Ameritech Affiliate.~~
~~Measurement Type:~~	
~~Tier 1 – None~~ ~~Tier 2 – None~~	
~~Benchmark:~~	
~~Aggregate measurement. No benchmark required.~~	

86. Measurement - CLEC Requested Removal	
~~Non-Call Busy Work Volumes~~	
~~Definition:~~	
~~The amount of time that an operator has placed their position in make busy or in a position busy state.~~	
~~Exclusions:~~	
• ~~Ameritech generated test calls.~~ • ~~When an operator is talking to a customer and places the position in a busy state to gather information.~~	
~~Business Rules:~~	
~~The clock starts when the operator's last customer hangs up (position is placed in busy state) and the clock stops when a call is answered (position is removed from busy state).~~	
~~Levels of Disaggregation:~~	
~~None~~	
~~Calculation:~~	**~~Report Structure:~~**
~~Σ(Time operator removed position from busy state - Time operator placed position in busy state)~~	~~Reported for the aggregate of all CLECs, Ameritech, and Ameritech Affiliate.~~
~~Measurement Type:~~	
~~Tier 1 – None~~ ~~Tier 2 – None~~	
~~Benchmark:~~	
~~Aggregate measurement. No benchmark required.~~	

INTERIM NUMBER PORTABILITY (INP)

87. Measurement	
~~Percentage Installation Completed Within "X" (3, 7, 10) Days~~	
Definition:	
~~Percentage of installations completed within "x" (3, 7, 10) business days.~~	
Exclusions:	
~~• Excludes customer caused misses.~~ ~~• Excludes customer requested due dates greater than "x" (3, 7, 10) business days.~~ • ~~Excludes Weekends and Holidays.~~	
Business Rules:	
~~The Application Date is the day that the customer initiated the service request. The Completion Date is the day that Ameritech personnel complete the service order activity. The orders are flagged as INP by USOC codes on the order.~~	
Levels of Disaggregation:	
~~• 1-10 numbers~~ ~~• 11-20 numbers~~ • ~~> 20~~	
Calculation:	**Report Structure:**
~~Total INP orders installed within "x" (3, 7, 10) business days ÷ total INP orders within "x" (3, 7, 10) business days.~~	~~Reported for CLEC and all CLECs.~~
Measurement Type:	
~~Tier 1 – None~~ ~~Tier 2 – None~~	
Benchmark:	
~~90% within "X" business days~~ ~~• 1-10 numbers (3 days)~~ ~~• 11-20 numbers (7 days)~~ • ~~> 20 (10 days)~~	
Notes:	
This measure is not technically feasible to implement as Ameritech does not offer INP.	

88. Measurement	
~~Average INP Installation Interval~~	
Definition:	
~~Average business days from application date to completion date for INP orders.~~	
Exclusions:	
~~Excludes customer requested due dates greater than the Ameritech standard interval.~~	
Business Rules:	
~~See Measurement No. 87~~	
Levels of Disaggregation:	
~~See Measurement No. 87~~	
Calculation:	**Report Structure:**
~~(Total business days from application to completion date for INP orders ÷ total INP orders) * 100~~	~~Reported for CLEC and all CLECs.~~
Measurement Type:	
~~Tier 1 – Low~~ ~~Tier 2 – None~~	
Benchmark:	
~~For calculation of Tier 1 damages, see Measurement No. 87. The benchmark will be established during the 6 month review.~~	
Notes:	
This measure is not technically feasible to implement as Ameritech does not offer INP.	

89. Measurement	
~~Percentage INP Only I-Reports Within 30 Days~~	
Definition:	
~~Percentage of INP N, T, C orders that receive a network customer trouble report.~~	
Exclusions:	
• ~~Excludes customer provided equipment (CPE) or wiring within 30 calendar days of service order completion.~~ • ~~Excludes subsequent reports and all disposition "13" reports (excludable reports), with the exception of 1316, unless the trouble report is taken prior to completion of the service order.~~	
Business Rules:	
~~A trouble report is counted if it is mechanically flagged in LMOS as a trouble report that had a service completion within 30 days. The tickets are flagged as INP by matching the telephone number and order number against an order that is marked as INP based on the USOC codes on the order.~~	
Levels of Disaggregation:	
~~None~~	
Calculation:	**Report Structure:**
~~(Count of INP N, T, C orders that receive a network customer trouble report within 30 calendar days of service order completion ÷ total INP N, T, C orders (excludes trouble reports received on the due date)) * 100~~	~~Reported for CLEC and all CLECs.~~
Measurement Type:	
~~Tier 1 – Medium~~ ~~Tier 2 – None~~	
Benchmark:	
~~Parity with Ameritech POTS NFW I reports within 30 days.~~	
Notes:	
This measure is not technically feasible to implement as Ameritech does not offer INP.	

90. Measurement	
~~Percentage Missed Due Dates (INP Only)~~	
Definition:	
~~Percentage of INP N, T, and C orders where installations are not completed by the negotiated due date.~~	
Exclusions:	
~~Excludes customer caused misses.~~	
Business Rules:	
~~The Due Date starts the clock. The Completion Date is the day that Ameritech personnel complete the service order activity, which stops the clock.~~	
Levels of Disaggregation:	
~~None~~	
Calculation:	**Report Structure:**
~~(Count of INP N, T, C orders with missed due dates excluding customer caused misses ÷ total number of INP N, T, C orders) *100~~	~~Reported for CLEC and all CLECs.~~
Measurement Type:	
~~Tier 1 – Medium~~ ~~Tier 2 – None~~	
Benchmark:	
~~Parity with SWBT POTS – NFW percent missed due dates.~~	
Notes:	
This measure is not technically feasible to implement as Ameritech does not offer INP.	

LOCAL NUMBER PORTABILITY (LNP)

91. Measurement:

Percentage of LNP Only Due Dates within Industry Guidelines

Definition:

Percentage of LNP Due date interval that meets the industry standard established by the North American Numbering Council (NANC).

Exclusions:

- CLEC caused or requested delays.
- NPAC caused delays unless caused by Ameritech.
- CLEC requested Due Dates outside industry guidelines.

Business Rules:

Industry guidelines for due dates for LNP are as follows:

- For Offices in which NXXs are previously opened – 3 Business Days.
- New NXX – 5 Business days on LNP capable NXX.
- Day after new NXX is opened – 4 Business days.

The above-noted due dates are from the date of the FOC issuance.

For partial LNP conversions that require restructuring of a customer account:

- 1-30 TNs: The LNP due date intervals will continue to be three business days and five business days from the issuance of the FOC depending on whether the NXX has been previously opened or is new.
- >30 TNs, including entire NXX: The due dates are negotiated.

Levels of Disaggregation:

- NXXs Complete (1-30 TNs and greater than 30 TNs).
- NXXs Partial (1-30 TNs and greater than 30 TNs).

Calculation:	Report Structure:
(# of LNP TNs implemented within Industry guidelines ÷ total LNP TNs) *100	Reported for CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 – None
Tier 2 – None

Benchmark:

96.5%. The benchmark will be revised either up or down if industry guidelines are established that are different than the objective stated here.

92. Measurement:	
Percentage of Time the Old Service Provider Releases the Subscription Prior to the Expiration of the Second 9 Hour (T2) Timer	
Definition:	
Percentage of time the old service provider releases subscription(s) to NPAC within the first (T1) or the second (T2) 9-hour timers.	
Exclusions:	
• CLEC caused or requested delays. • NPAC caused delays unless caused by Ameritech. • Cases where Ameritech did the release but the New Service Provider did not respond prior to the expiration of the T2 timer. This sequence of events causes the NPAC to send a cancel of Ameritech's release request. In these cases, Ameritech may have to re-work to release the TN so it can be ported to meet the due date.	
Business Rules:	
Number of LNP TNs for which subscription to NPAC was released prior to the expiration of the second 9-hour (T2) timer.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of LNP TNs for which subscription to NPAC was released prior to the expiration of the second 9-hour (T2) timer ÷ total LNP TNs for which the subscription was released) *100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
96.5%. The benchmark will be revised either up or down if industry guidelines are established that are different than the objective stated here.	

93. Measurement:	
Percentage of Customer Accounts Restructured by the LNP Due Date	
Definition:	
Percentage of accounts restructured within the LNP order due date established in Measurement No. 91, and/or negotiated due date for orders that contain more than 30 TNs.	
Exclusions:	
None	
Business Rules:	
• See Measurement No. 91. • This measure is for partial LNPs only. Note: Ameritech restructures the account on the same order as the provisioning.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of LNP orders that were restructured by LNP due date) ÷ (total LNP orders that require customer accounts to be restructured) *100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type	
Tier 1 – Low Tier 2 – None	
Benchmark:	
96.5%	

94. Measurement:

Percentage FOCs Returned Within "X" Hours

Definition:

Percentage of FOCs returned within a specified time frame from receipt of complete and accurate LNP or LNP with Loop service request to return of confirmation to CLEC.

Exclusions:

- Rejected orders.
- Ameritech retail disconnect orders in conjunction with wholesale migrations.
- Orders involving major projects For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.
- Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's Performance shall not include Service Bureau Provider processing, availability or response time.

Business Rules:

See Business Rule for Measure 5.

Levels of Disaggregation:

Orders are measured according to how the Service Order was received via Ameritech (i.e., electronically or manually) and are included in these disaggregations regardless of how they are processed.

Manually Submitted:

- Simple Residence and Business LNP Only (1-19 Lines)< 24 Clock Hours
- LNP with Loop (1-19 Loops) < 24 Clock Hours
- Simple Residence and Business LNP Only (20+ lines) < 48 Clock Hours
- LNP with Loop (20+ Loops) < 48 Clock Hours
- LNP Complex Business (1-19 Lines) < 24 Clock Hours
- LNP Complex Business (20-50 Lines) < 48 Clock Hours
- LNP Complex Business (50+ Lines) < Negotiated with Notification of Timeframe within 24 Clock Hours

Electronically Submitted via EDI:

- Simple Residence and Business LNP Only (1-19 Lines) < 5 Business Hours
- LNP with Loop (1-19 Loops) < 5 Business Hours
- Simple Residence and Business LNP Only (20+ lines) < 48 Clock Hours
- LNP with Loop (20+ Loops) < 48 Clock Hours
- LNP Complex Business (1-19 Lines) < 24 Clock Hours
- LNP Complex Business (20-50 Lines) < 48 Clock Hours
- LNP Complex Business (50+ Lines) < Negotiated with Notification of Timeframe within 24 Clock Hours

Calculation:	Report Structure:
(# of FOCs returned within "x" hours ÷ total FOCs sent) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.)

Measurement Type:
Tier 1 – Low Tier 2 – Medium
Benchmark:
95%, and the average for the remainder of each measure disaggregated shall not exceed 20% of the established benchmark.

94.1 Measurement: (New Measure)
Average Time To Return FOC
Definition:

The average time to return FOC from receipt of complete and accurate service request to return of confirmation to CLEC.

Exclusions:

- Rejected Orders.
- Ameritech retail disconnect orders conjunction with wholesale migrations.
- Orders involving major projects. For Resale and CPO a project is defined as > 250 lines, trunks, circuits, and/or telephone numbers. For Loops, LNP, LSNP, a project is defined as > 100 lines, trunks, circuits, and/or telephone numbers.
- Where CLEC accesses Ameritech – LEC's systems using a Service Bureau Provider, the measurement of Ameritech – LEC's performance shall not include Service Bureau Provider processing, availability or response time.

Business Rules:

See Measurement No. 94.
Measurement is disaggregated according to product type and order size only, and includes orders submitted either electronically or manually.

Levels of Disaggregation:

Manually Submitted:

- Simple Residence and Business LNP Only (1-19 Lines)
- LNP with Loop (1-19 Loops)
- Simple Residence and Business LNP Only (20+ lines)
- LNP with Loop (20+ Loops)
- LNP Complex Business (1-19 Lines)
- LNP Complex Business (20-50 Lines)
- LNP Complex Business (50+ Lines)

Electronically Submitted via EDI:

- Simple Residence and Business LNP Only (1-19 Lines)
- LNP with Loop (1-19 Loops)
- Simple Residence and Business LNP Only (20+ lines)
- LNP with Loop (20+ Loops)
- LNP Complex Business (1-19 Lines)
- LNP Complex Business (20-50 Lines)
- LNP Complex Business (50+ Lines)

Calculation:	Report Structure:
Σ[(Date and Time of FOC) - (Date and Time of Order Acknowledgment)] / Total FOCs)	Reported for CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 – None
Tier 2 – None

Benchmark:

No Benchmark

95. Measurement:	
Average Response Time for Non-Mechanized Rejects Returned With Complete and Accurate Codes	
Definition:	
Average Response time for returning rejected non-mechanized LNP orders with complete and accurate identification of CLEC caused errors in the order.	
Exclusions:	
• None	
Business Rules:	
For each non-mechanized order, the start time is the receipt date/time of non-mechanized order, and the end time is the transmittal time of rejection notification of the order due to CLEC-caused errors. The difference between the two is the duration in hours.	
Levels of Disaggregation:	
• LNP only • LNP with Loop.	
Calculation:	**Report Structure:**
Σ(Date & Time of Order reject – Date and Time Order receipt) ÷ Total non-mechanized LNP Orders Rejected	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
5 Business Hours.	

96. Measurement:	
Percentage Pre-mature Disconnects for LNP Orders	
Definition:	
Percentage of LNP cutovers where Ameritech prematurely removes the translations, including the 10 digit trigger, prior to the scheduled conversion time.	
Exclusions:	
• Coordinated Conversions.	
Business Rules:	
The count of incidents, on a TN basis, where the translations are removed prior to the scheduled conversion. Count the number of cutovers that are prematurely disconnected (10 or more minutes before scheduled conversion time). This measure is based on a strict comparison between scheduled start time and actual start time.	
Levels of Disaggregation:	
• LNP only. • LNP with Loop.	
Calculation:	**Report Structure:**
# of premature disconnects ÷ total conversions * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
2% or Less premature disconnects starting 10 minutes before scheduled due time.	

97. Measurement:	
Percentage of Time Ameritech Applies the 10-digit Trigger Prior to the LNP Order Due Date	
Definition:	
Percentage of time Ameritech applies 10-digit trigger, where technically feasible, for LNP or LNP with loop TNs on the day prior to the due date.	
Exclusions:	
• Where not technically feasible.	
Business Rules:	
Obtain number of LNP or LNP with loop TNs where the 10-digit trigger was applied on the day prior to due date, and the total number of LNP or LNP with Loop TNs where the 10-digit trigger was applied, where technically feasible.	
Levels of Disaggregation:	
• LNP only • LNP with Loop	
Calculation:	**Report Structure:**
(# of LNP TNs for which 10-digit trigger was applied 24 hours prior to due date ÷ total LNP TNs for which 10-digit triggers were applied) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
96.5%	

98. Measurement:	
Percentage Trouble LNP (I-Reports) in 30 Days of Installation	
Definition:	
Percentage of LNP Orders that receive a network customer trouble report within 30 calendar days of service order completion.	
Exclusions:	
• Excluding subsequent reports and all disposition codes "11", "12", & "13" reports (excludable reports). • Trouble reports caused by CPE or inside wiring.	
Business Rules:	
Includes trouble reports received the day after Ameritech personnel complete the service order through 30 calendar days after completion. .	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of LNP Orders that receive a network customer trouble report within 30 calendar days of service order completion ÷ total LNP Orders) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with Ameritech Retail POTS – No Field Work.	

99. Measurement:	
Average Delay Days for Ameritech Missed Due Dates	
Definition:	
Average calendar days from due date to completion date on company missed orders.	
Exclusions:	
• On time or early completions.	
Business Rules:	
The clock starts on the due date and the clock ends on the completion date based on posted LNP orders. Retail comparison is installations, not disconnects.	
Levels of Disaggregation:	
• LNP Only.	
Calculation:	**Report Structure:**
Σ(LNP Completion Date– LNP Order due date) ÷ total LNP orders where there was a Ameritech caused missed due date * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Medium Tier 2 – Medium	
Benchmark:	
Parity with Ameritech Retail POTS – No Field Work.	

100. Measurement:	
Average Time of Out of Service for LNP Conversions	
Definition:	
Average time to facilitate the activation request in Ameritech's network.	
Exclusions:	
• CLEC-caused errors. • NPAC-caused errors unless caused by Ameritech. • Large ports greater than 500 ports.	
Business Rules:	
The Start time is the Receipt of NPAC broadcast activation message in Ameritech's LSMS; and the End time is when the Provisioning event is done in Ameritech's LSMS. Calculate the total difference between the start time and end time in minutes for LNP activations during the reporting period.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ(LNP stop time – LNP start time) ÷ total LNP activated TNs	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
60 Minutes	

101. Measurement:	
Percent Out of Service < 60 minutes	
Definition:	
The Number of LNP related conversions where the time required to facilitate the activation of the port in Ameritech's network is less than 60, expressed as a percentage of total number of activations that took place.	
Exclusions:	
• CLEC caused errors. • NPAC caused errors unless caused by Ameritech. • Large ports greater than 500 ports.	
Business Rules:	
The Start time is the Time that an "activate NPAC" broadcast is received in Ameritech's LSMS. The End time is the Time the provisioning event is complete in Ameritech's LSMS. Count the number of conversions that took place in less than 60 minutes. There is no difference between the denominator for this measure and the denominator in measure #100.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of activated TNs provisioned in less than 60 minutes) ÷ (total LNP activated TNs) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Medium Tier 2 – Medium	
Benchmark:	
96.5%	

911

102. Measurement	
Average Time To Clear Errors	
Definition:	
The average time it takes to clear an error after it is detected during the processing of the 911 database file. This is only on resale or UNE loop and port combination orders that Ameritech installs.	
Exclusions:	
None	
Business Rules:	
The clock starts upon the receipt of the error file and the clock stops when the error is corrected.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
[Σ(Date and time error detected – date and time error cleared)] ÷ total errors	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity	

103. Measurement	
Percent Accuracy for 911 Database Updates	
Definition:	
The percentage of 911 records that were updated by Ameritech in error.	
Exclusions:	
• CLEC Caused Errors.	
Business Rules:	
The data required to calculate this measurement will be provided by the CLEC based on the compare file. CLEC requests a compare file in writing through their assigned Ameritech Account Manager. This request should provide the requesting company's name (per CLEC interconnection or resale agreement), ACNA, requested geographic area (e.g., state, NPA, etc .), if the compare file is requested by email, diskette, CD-ROM, and the CLEC contact name, number, and e-mail address. Upon request, Ameritech will provide, within 14 business days of request receipt, an electronic compare file. CLEC will be provided a file that contains all customer information for the geographic area that they request (e.g., state, NPA, etc.). The file can be provided via CR-ROM, diskette, paper or as an electronic file (transmitted) The CLEC will provide the number of records transmitted and the errors found. Ameritech will verify the records determined to be in error to validate that the records were input by Ameritech incorrectly. An update is completed without error if the database completely and accurately reflects the activity specified on the order submitted by the CLEC.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of Ameritech caused update errors ÷ Total updates) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail.	

104. Measurement	
Average Time Required to Update 911 Database (Facility Based Providers)	
Definition:	
The average time it takes to update the 911 database file.	
Exclusions:	
None	
Business Rules:	
The clock starts on the date/time when the data processing starts and the clock stops on the date/time when the data processing is complete.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ(Date and time data processing begins - date and time data processing ends) ÷ total files	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity with Ameritech Retail.	

POLES, CONDUIT AND RIGHTS OF WAY

105. Measurement	
Percentage of requests processed within 35 Days	
Definition:	
The percentage of requests for access to poles, conduits, and right-of-ways processed within 35 days.	
Exclusions:	
None	
Business Rules:	
The clock starts upon the receipt date of the application for access to poles, conduits and right-of-ways and the clock stops upon response date of the application granting or denying access to poles, conduits and right-of-ways.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of requests processed within 35 days ÷ total requests) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
90% within 35 days.	

106. Measurement	
Average Days Required to Process a Request	
Definition:	
The average time it takes to process a request for access to poles, conduits, and right-of-ways.	
Exclusions:	
None	
Business Rules:	
See Measurement No. 105	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ(Date request returned to CLEC – date request received from CLEC) ÷ total requests	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
See Measurement No. 105. Revised benchmark will be established during the 6 month review.	

COLLOCATION

107. Measurement	
Percentage Missed Collocation Due Dates	
Definition:	
The percentage of Ameritech caused missed due dates for collocation projects.	
Exclusions:	
None	
Business Rules:	
The clock starts when Ameritech receives an accurate and complete application form for space from the CLEC and the clock stops when the collocation space is turned over to the CLEC for their occupancy at the walk-through. If the walk-through is scheduled after the due date, then the clock stops on the due date. Due Date Extensions will be extended when mutually agreed to by Ameritech and the CLEC. Ameritech will not be deemed to have completed work on a collocation cage until the cage is suitable for use by the CLEC and the cable assignment information necessary to use the facility has been provided to the CLEC.	
Levels of Disaggregation:	
• Physical, • Virtual • Cageless • Additions	
Calculation:	**Report Structure:**
(# of Ameritech met due dates for collocation facilities ÷ total collocation completions) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
95% within the due date. Damages and Assessments will be calculated based on the number of days late.	

108. Measurement	
Average Delay Days for Ameritech Missed Due Dates	
Definition:	
The average delay days caused by Ameritech to complete collocation facilities.	
Exclusions:	
None	
Business Rules:	
See Measurement No. 107.	
Levels of Disaggregation:	
• Physical. • Virtual • Cageless • Additions	
Calculation:	**Report Structure:**
Σ(Date collocation work completed - collocation due date) ÷ Ameritech caused missed collocation completions.	Reported for CLEC, all CLECs, and Ameritech Affiliate..
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
10% of tariffed intervals • Physical – 9 Business Days • Virtual – 6 Business Days • Cageless – 6 Business Days • Additions – 9 Business Days	

109. Measurement	
Percent of Requests Processed Within the Established Timelines	
Definition:	
The percent of requests for collocation facilities processed within the established timelines.	
Exclusions:	
• Weekends & Holidays.	
Business Rules:	
The clock starts when Ameritech receives the application. The clock stops when Ameritech responds back to the application request with a quote. Per FCC Order 99-48 (706 Collocations Requirements).	
Levels of Disaggregation:	
• Physical • Virtual • Cageless • Additions	
Calculation:	**Report Structure:**
(# of requests processed within the timeline ÷ total requests) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
90% within 10 Business Days.	

DIRECTORY ASSISTANCE DATABASE

110. Measurement	
Percentage of Updates Completed into the DA Database within 72 Hours for Facility Based CLECs	
Definition:	
The percentage of DA database updates completed within 72 hours of receipt of the update from the CLEC for directory changes.	
Exclusions:	
• Weekends and Holidays. • Rejected updates (e.g. missing a zip code, incomplete phone number)	
Business Rules:	
For manual updates, the date and time stamp on fax updates starts the clock and the date and time when the listing is updated stops the clock. For electronic updates, the clock starts at 4:00 p.m. on the date of arrival and stops when the listing is updated. The update clerk's work hours are 7:30 a.m. to 4:00 p.m. Monday through Friday in accordance with the time zone of the receiving center. On manual requests received after 4:00 p.m. the clock will start at 7:30 a.m. the following day. Electronic orders received after 4:00 p.m. will not be processed until the following workday.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of updates completed within 72 hours ÷ total updates completed) * 100	Reported for CLEC all CLECs for facility based providers, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
95% updated within 72 hours.	

111. Measurement	
Average Update Interval for DA Database for Facility Based CLECs	
Definition:	
The average update interval for DA database changes for facility based CLECs.	
Exclusions:	
• Weekends and holidays • Rejected updates (e.g. missing a zip code, incomplete phone number)	
Business Rules:	
See Measurement No. 110.	
Levels of Disaggregation:	
• None	
Calculation:	**Report Structure:**
[∑ (8:00 a.m. of the day following the input into the DL database – Time update received from CLEC)] ÷ total updates completed	Reported for CLEC all CLECs for facility based providers, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
48 Hours.	

112. Measurement	
Percentage DA Database Accuracy For Manual Updates	
Definition:	
The percentage of DA records that were updated by Ameritech correctly. The data required to calculate this measurement will be provided by the CLEC. The CLEC will provide the number of records transmitted and the errors found. Ameritech will verify the records determined to be in error to validate that the records were input by Ameritech incorrectly.	
Exclusions:	
• Errors not submitted within 10 days of order confirmation receipt. • CLEC caused errors	
Business Rules:	
See Measurement No. 110.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of manual updates without Ameritech caused errors ÷ Total updates processed) *100	Reported for CLEC all CLECs for facility based providers, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
97%	

113. Measurement	
Percentage of Electronic Updates that Flow Through the update process Without Manual Intervention	
Definition:	
Percentage of electronic updates from entry to distribution that progress through Ameritech ordering systems to ALPSS.	
Exclusions:	
• Rejected updates.	
Business Rules:	
The number of updates, that flow through Ameritech's ordering systems and are passed to ALPSS without manual intervention, divided by the total number of updates issued within the reporting period.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of updates of that flow through to ALPSS ÷ Total updates received in the month) * 100	Reported for CLEC all CLECs for facility based providers, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
97%.	

COORDINATED CONVERSIONS

114. Measurement	
Percentage of Premature Disconnects (Coordinated Cutovers)	
Definition:	
Percentage of coordinated cutovers where Ameritech prematurely disconnects the customer 10 minutes or more prior to the scheduled conversion.	
Exclusions:	
None	
Business Rules:	
A premature disconnect occurs any time Ameritech disconnects the CLEC customer 10 or more minutes prior to the CLEC being on line.	
Levels of Disaggregation:	
• LNP • LNP with UNE Loop	
Calculation:	**Report Structure:**
(# of prematurely disconnected orders ÷ total coordinated orders) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
2% or less premature disconnects starting 10 minutes before scheduled time.	

114.1 Measurement (New Measure)

CHC LNP with Loop Provisioning Interval.

Definition:

The % of CHC LNP with Loop Lines completed by Ameritech within the established provisioning intervals.

Exclusions:

- CHC LNP with Loop with greater than 24 loops (including multiple LSRs totaling 25 or more lines to the same customer premise on the due date).
- CLEC caused delays (e.g., no dial tone from CLEC: CLEC translations) that do not allow SWBT the opportunity to complete CHC LNP with Loop within the designated interval.
- IDLC (pair gain systems) identified on or before the due date.

Business Rules:

The start time is at the direction of the CLEC and based on a negotiated and scheduled time for coordinated hot cut orders (CHC). For CHC orders, the clock starts when the CLEC calls the SWBT LOC to start the conversion, and ends when the SWBT technician completes the cross connect to the CLEC facilities and has called the CLEC to notify that the cut-over has been completed. This measurement only includes Coordinated Hot Cuts with 1-24 loops. A conversion with 25 or more lines (including multiple orders totaling 25 or more lines to the same customer premise on the same due date) is considered a project and is negotiated with the CLEC at the time of conversion.

Levels of Disaggregation:

CHC
LNP with loop
- < 10 lines
- 10-24 lines

Calculation:	Report Structure:
Total CHC LNP with Loop Lines within the designated interval ÷ total CHC LNP with Loop lines.	Reported by CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 – Medium
Tier 2 – Medium

Benchmark:

CHC LNP with Loop for < 10 Lines 90 % within one hour.
CHC LNP with Loop for 10-24 Lines 90% within two hours.

115. Measurement	
Percentage of Ameritech caused delayed Coordinated Cutovers	
Definition:	
Percentage of Ameritech caused late coordinated cutovers in excess of "x" (30, 60 and 120) minutes.	
Exclusions:	
None	
Business Rules:	
A coordinated cutover is delayed if Ameritech is not ready within "x" (30, 60, and 120) minutes after the scheduled cut time.	
Levels of Disaggregation:	
• LNP • LNP with UNE Loop	
Calculation:	**Report Structure:**
(# of Ameritech caused late coordinated orders in excess of "x" (30, 60 and 120) minutes ÷ total coordinated orders) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
8% or less of Ameritech coordinated conversions beyond 30 minutes, 2% beyond 1 hour from scheduled time or 1% beyond 2 hours.	

115.1 Measurement (New Measure)	
Percent Provisioning Trouble Reports (PTR)	
Definition:	
Measures the percent of CHC circuits for which the CLEC submits a trouble report on the day of conversion.	
Exclusions:	
• Reports for which the trouble is attributable to the Ameritech network (unless SWBT had knowledge of the trouble prior to the due date • IDLC (pair gain systems) identified on or before the due date.	
Business Rules:	
The percent of CHC circuits for which the CLEC submits a trouble report on the day of conversion, or before noon on the next business day.	
Levels of Disaggregation:	
• CHC	
Calculation:	**Report Structure:**
(Count of CHC circuits for which the CLEC submits a trouble report on or before noon on the next business day after conversion ÷ total # of CHC circuits converted.	Reported by CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
No Benchmark. To be reviewed in 6 month review.	

115.2 Measurement (New Measure)	
Mean Time To Restore – Provisioning Trouble Report (PTR)	
Definition:	
Average duration of the outage from the receipt of the PTR to the time it is cleared.	
Exclusions:	
• Excludes Non-measured reports (CPE, Interexchange, and Information reports). • Excludes no access to the end user's location.	
Business Rules:	
The start time is when the report is received. The stop time is when the report is cleared.	
Levels of Disaggregation:	
• CHC	
Calculation:	**Report Structure:**
Σ[(Date and time PTR is closed with the customer) - (date and time PTR is received)] ÷ total PTRs.	Reported by CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
No Benchmark. To be reviewed in 6 month review.	

116. Measurement	
~~Percentage of Missed Mechanized INP Conversions~~	
Definition:	
~~Percentage of mechanized INP conversions not loaded in the switch within 10 minutes prior to or 30 minutes after the scheduled due time.~~	
Exclusions:	
~~None~~	
Business Rules:	
~~The clock starts on the Due Date and Frame Due Time and the clock stops on the Switch Date and Time.~~	
Levels of Disaggregation:	
~~None~~	
Calculation:	**Report Structure:**
~~(Count of mechanized INP conversions not loaded in the switch within 10 minutes prior to or 30 minutes after scheduled due time (Frame Due Time)) ÷ total mechanized INP conversions) * 100~~	~~Reported for CLEC and all CLECs.~~
Measurement Type:	
~~Tier 1 – Medium~~ ~~Tier 2 – None~~	
Benchmark:	
~~See Measurements No. 114 and No. 115~~	
Notes:	
This measure is not technically feasible to implement as Ameritech does not offer INP	

NXX

117. Measurement	
Percent NXXs loaded and tested prior to the LERG effective date	
Definition:	
The percent of NXXs loaded and tested prior to the LERG effective date.	
Exclusions:	
None	
Business Rules:	
Data for the initial NXX(s) in a local calling area will be based on the LERG effective date or completion of the initial interconnection trunk group(s), whichever is longer. Data for additional NXXs in the local calling area will be based on the LERG effective date.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of NXXs loaded and tested by LERG effective date ÷ total NXXs loaded and tested) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity	

118. Measurement	
Average Delay Days for NXX Loading and Testing	
Definition:	
Average calendar days from due date to completion date on company missed NXX orders**.**	
Exclusions:	
None	
Business Rules:	
See Measurement No. 117.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ(Completion Date – LERG effective date) ÷ Total Ameritech caused late orders	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity	

119. Measurement	
Mean Time to Repair	
Definition:	
Average duration of NXX trouble reports from the receipt of the customer trouble report to the time that the trouble report is cleared.	
Exclusions:	
None	
Business Rules:	
The start time is when the report is received. The stop time is when the trouble report is cleared. Ameritech will contact the CLEC to close the trouble	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ(Date and time trouble report is cleared with the customer – Date and time trouble report is received) ÷ (Total NXX trouble reports)	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity	

BONA FIDE REQUEST PROCESS (BFRs)

120. Measurement	
Percentage of Requests Processed Within 30 Business Days	
Definition:	
Percentage of Bona fide requests processed within 30 business days.	
Exclusions:	
• Weekends and Holidays.	
Business Rules:	
The clock starts when Ameritech receives the application. The clock stops when Ameritech completes application processing.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of number of requests processed within 30 days ÷ total requests) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
90% within 30 business days.	

121. Measurement	
Percentage of Quotes Provided for Authorized BFRs Within 45 Business Days	
Definition:	
Percentage of quotes provided in response to bona fide requests within 45 business days.	
Exclusions:	
• Weekends and Holidays.	
Business Rules:	
The clock starts when Ameritech receives the application. The clock stops when Ameritech responds back to the application request with a quote.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of requests processed within 45 days ÷ total # of requests) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
90% within 45 business days.	

MI 1. Measurement (MI Order Measure)

Percentage of Orders Given Jeopardy Notices

Definition:

Percentage of orders given jeopardy notices measures the number of 870s sent to customers as a percentage of the total number of orders completed in the period.

Exclusions:

- CLEC End User-Initiated Jeopardy Codes.

Business Rules:

An 870 is a jeopardy notice that is sent to the CLEC to notify them that an order's confirmed due date is in jeopardy of being missed. Unsolicited FOCs will be counted as Jeopardies.

Levels of Disaggregation:

POTS

- Business class of service
- Residence class of service
- Field Work (FW)
- Non-Field Work (NFW)

Resale Specials

- Field Work (FW)
- Non-Field Work (NFW)

Unbundled Loops

LNP with Loop

UNE Combos

Calculation:	Report Structure:
(# of orders receiving jeopardy notices) / (Total orders completed in the calendar month) *100	Reported for CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 - None
Tier 2 - None

Benchmark:

Diagnostic - Parity with Ameritech Retail:

1. Wholesale-POTS/ Retail-POTS
2. Unbundled Loops/ POTS with FW
3. UNE Combos/ Retail-POTS(ALL)

MI 2. Measurement (MI Order Measure)

Percentage of Orders Given Jeopardy Notices within 24 hours of the Due Date

Definition:

Percentage of Orders Given Jeopardy Notices within 24 hours of the Due Date measures the percentage of 870s sent less than 24 hours (1 day) prior to the due date.

Exclusions:

- CLEC/End User Initiated Jeopardy Codes.
- Weekends and Holidays.

Business Rules:

An 870 is a jeopardy notice that is sent to the CLEC to notify them that an order's due date is in jeopardy of being missed. Consider "24 hours" as 1 day. The measure is calculated using business days only (i.e., Monday-Friday). Unsolicited FOCs will be counted as Jeopardies.

Levels of Disaggregation:

POTS

- Business class of service
- Residence class of service
- Field Work (FW)
- Non-Field Work (NFW)

Resale Specials

- Field Work (FW)
- Non-Field Work (NFW)

Unbundled Loops

LNP with Loop

UNE Combos

Calculation:	Report Structure:
(# of orders receiving an 870 within 24 hours of the order due date) / (Total orders receiving an 870) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 - None
Tier 2 - None

Benchmark:

Diagnostic - Parity with Ameritech Retail

1. Wholesale-POTS/ Retail-POTS
2. Unbundled Loops/ POTS with FW
3. UNE Combos/ Retail-POTS(ALL)

MI 3. Measurement (MI Order Measure)	
Coordination Conversions Outside of Interval	
Definition:	
Coordinated Conversion outside of Interval measures the number of coordinated unbundled loop cutovers started within one hour of the start scheduled time as a percentage of all coordinated unbundled loops completed in the reporting period.	
Exclusions:	
• Orders for which the CLEC was not ready after the cutover was started. • Canceled orders.	
Business Rules:	
A coordinated loop is any unbundled loop requiring coordination. The start date and time is the date and time the central office/translations work begins. The scheduled time is the cutover date and time requested by the CLEC and found on the cutover schedule. The cutover is considered complete when the work is completed by Ameritech. The measure is counted in the period it is completed. The measure is counted on the first item of the first order (when related orders are involved) and then calculated by item based on the number of items on the order/orders.	
Levels of Disaggregation:	
• Unbundled Loops	
Calculation:	**Report Structure:**
# of cross connection started within one hour of the scheduled time / Total coordinated unbundled loops for reporting period	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 - None Tier 2 - None	
Benchmark:	
Diagnostic	

MI 4. Measurement (MI Order Measure)	
Average Time to Provide a Collocation Arrangement	
Definition:	
Average Time to Provide a Physical Collocation Arrangement measures the average elapsed time between the date a collocation COBO payment is received and the date the CLEC is notified that the physical node is completed, for the total number of physical nodes completed in the reporting period.	
Exclusions:	
• Cancelled orders. • Orders where the customer requested a due date beyond the contractual date. • CLEC-caused delays such as arranging final walk-through or accepting collocation space.	
Business Rules:	
The measure is calculated using calendar days. The receipt of a collocation COBO payment is indicative of a firm order. The clock is restarted if the CLEC modifies its request. Time between completion and node final walkthrough is not included in the completion interval calculation. Ameritech will not be deemed to have completed work on a collocation cage until the cage is suitable for use by the CLEC and the cable assignment information necessary to use the facility has been provided to the CLEC.	
Levels of Disaggregation:	
• Physical Collocation	
Calculation:	**Report Structure:**
[∑[(Date Physical Node Is Complete) - (Date Collocation COBO Payment Is Received)]] / Total Physical Nodes Completed	Reported for CLEC, all CLECs, and Ameritech Affiliate
Measurement Type:	
Tier 1 - None Tier 2 - None	
Benchmark:	
Diagnostic	

MI 5.Measurement (MI Order Measure)	
Structure Requests Completed Outside of Interval	
Definition:	
Structure Requests Completed Outside of Interval measures the number of requests to view Ameritech structure records that are not completed within the standard time interval as a percentage of requests completed in the reporting period.	
Exclusions:	
• Requests for Ameritech to perform record checks.	
Business Rules:	
Structure includes poles, ducts, conduit and rights-of-way that are owned or controlled by Ameritech. The request is counted in the period in which the request is completed. Changes to the request will be deemed to be a new request and will result in a new date being established for the priority queue. Requests received after 12:00 noon Eastern Standard Time are considered received the following business day. Interval calculation is based on business days. Information Access includes requests for viewing (or copies). A field survey is a physical check of manholes and/or poles to determine availability of space for placing the attaching Party's facilities. Make Ready is any construction work necessary to prepare Ameritech structure for attachment or occupancy by an attaching Party.	
Levels of Disaggregation:	
• Information Access • Field Survey • Make Ready	
Calculation:	**Report Structure:**
(# of Structure Requests Completed Outside of the Standard Time Interval/ Total Structure Requests Completed) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 - None Tier 2 - None	
Benchmark:	
Diagnostic	

MI 9. Measurement (New Measure)	
Percentage Missing FOCs	
Definition:	
Percentage of FOCs that are not sent as compared to the total number of orders processed.	
Exclusions:	
None	
Business Rules:	
Total number of responses not sent as compared to the total number of orders processed. FOC responses not sent are identified by using a report that compares to completed orders that do not show FOC response in MorTel.	
Levels of Disaggregation:	
• Resale • UNE (Loops, LNP, and LSNP) • UNE-P	
Calculation:	**Report Structure:**
(# of missing FOC responses ÷ total orders processed) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Diagnostic	

MI 10. Measurement (New Measure)	
% Time-out Transactions	
Definition:	
Percentage of Time-out messages received as compared to valid system responses	
Exclusions:	
None	
Business Rules:	
A count of the time-out messages, by interface, as compared to total system responses (time-outs and valid responses).	
Levels of Disaggregation:	
• Address Verification • Request for Telephone Number • Request for Customer Service Record • Service Availability • Dispatch Required (and Service Appointment Scheduling (Due Date) • PIC • FAC/SAV • DSL Loop Qualification • NC/NCI • CFA Availability	
Calculation:	**Report Structure:**
(# of Time Out Transactions ÷ Total Valid System Responses) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Diagnostic – No Benchmark	

MI 11. Measurement (New Measure)	
Average Interface Outage Notification	
Definition:	
The average time from the initial identification of an interface outage, to the notification of CLECs.	
Exclusions:	
None	
Business Rules:	
The time from initial identification of network outages to the time that email notification (to email distribution list) is sent by Ameritech.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Sum of (time interface outage is identified – time notification is given)/total interface outages in a period	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Diagnostic – No Benchmark	

MI 12. Measurement (New Measure)	
Average Time to Clear Service Order Errors	
Definition:	
The average time to clear service order errors (3E)	
Exclusions:	
None	
Business Rules:	
The average number of days to 3E service order errors is calculated by the total number of days for all required for all 3E. This is calculated by totaling the duration from the date that an order went into the error condition to the date that the error was cleared.	
Levels of Disaggregation:	
• Resale • UNE P	
Calculation:	**Report Structure:**
(date that an order went into error condition – the date that the error was cleared)/total number of errors cleared	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity	

MI 13. Measurement (New Measure)	
Percent Loss Notification within one hour of service order completion	
Definition:	
Percent notifications sent to the losing carrier (who lost the customer) within one hour of the completion notice sent to the new carrier.	
Exclusions:	

• Customers who switch between segments owned by the same carrier such as:
  • Resale to UNE same carrier
  • UNE to Resale, same carrier	

Business Rules:	
The percentage of customer loss notifications sent to carriers where the elapsed time from the time that the completion notice (EDI 865 message) is transmitted to the new carrier to the time that the loss notification (EDI 836 message) is transmitted to the new carrier is more than one hour.	
Levels of Disaggregation:	
• Resale • UNE Loops • LNP • UNE-P	
Calculation:	**Report Structure:**
(# of Loss Notification transactions sent within one hour ÷ total Loss Notifications sent) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
95% within one hour	

MI 14. Measurement (New Measure)

Percent Completion Notifications Returned Within "X" hours of completion of Maintenance Trouble Ticket.

Definition:

Percent mechanized completions returned within "X" hours of completion of the trouble tickets.

Exclusions:

None

Business Rules:

The elapsed time for a completion notice to be sent to the CLEC from the time that the trouble ticket is closed in the Ameritech Work and Force Management System.

For trouble reports that are submitted electronically – the time from the close of the trouble in WFA or LMOS to the time that the completion status is made available to the CLEC (via EBTA).

For orders, which are submitted manually – the time from the close in the WFA or LMOS systems to the time, that completion notice report is faxed to the CLEC. This is based on a process whereby previous day troubles are faxed to CLECs. The CLEC must provide a FAX number to Ameritech.

Levels of Disaggregation:

- Resale Manual - <24 hours
- Resale Electronic < 1 hour
- UNE Loops Manual < 24 hours
- UNE Loops Electronic <1 hour
- UNE P Manual < 24 hours
- UNE P Electronic <1 hour

Calculation:	Report Structure:
(# of completions returned to CLEC within X hours ÷ total completions) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 – None
Tier 2 – None

Benchmark:

95% w/in the specified interval.

MI 15. Measurement (New Measure)

Change Management

Definition:

Change management measures timeliness of change notifications for final requirements to implementation.

Exclusions:

- Clarification Notes.
- Any Approved Exceptions.
- Emergency Situations
- Regulatory Mandated Changes
- Transition Items – Interface changes, introductions, and/or retirements underway previous to the implementation of this measure, where notification can not be provided to the CLECs by required timeframes.

Business Rules:

Calendar Days is to be used in the calculation of this measure. Notification is received when the Final Release Requirements are noticed via an Accessible Letter.

Levels of Disaggregation:

Changes to Existing Interfaces

- Category 1- Gateway >110 days
- Category 2- GUI >14 days

Introductions of New Interfaces

- Category 1- Gateway >110 days
- Category 2- GUI > 14 days

Retirements of Existing Interfaces

- Group A- Retail Interfaces >12 months
- Group B- Wholesale Interfaces
  - Category 1- Gateway >24 months
  - Category 2- GUI >12 months

Calculation:	Report Structure:
[(Number of Notifications issued on time) / (Number of Changes Implemented in the reporting period)] X 100	Reported for all CLECs, and Ameritech Affiliate.

Measurement Type:

Tier 1 – None
Tier 2 – None

Benchmark:

>95% notices should be on-time based on group and category
This measurement is DRAFT and subject to finalization of the regional (13-state) change management process.

MI 16 Measurement (New Measure)	
Percentage Rejected Query Notices	
Definition:	
Percentage of queries requested that are returned as rejected for reasons other than that the input data is incorrect or inaccurate. These rejected query notices indicate a problem with the interface other than timed out transactions (measured separately).	
Exclusions:	
None	
Business Rules:	
Total number of Rejected Query Notices sent as compared to the total number of Queries processed.	
Levels of Disaggregation:	
• Address Verification • Request for Telephone Number • Request for Customer Service Record • Service Availability • Dispatch Required (and Service Appointment Scheduling (Due Date) • PIC • FAC/SAV • DSL Loop Qualification • NC/NCI • CFA Availability	
Calculation:	**Report Structure:**
(# rejected query notices ÷ total number of queries processed) * 100	Reported for CLEC, all CLECs, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Diagnostic	

WI#1. Measurement	
Percent No Access – UNE Loops Provisioning	
Definition:	
Percent of Field Work (FW) orders with a status of "No Access."	
Exclusions:	
• CLEC caused misses. (SL – customer requests later date, SO – other customer reasons, SR - customer not ready). • All orders that are not N, T, or C. • No Field Work.	
Business Rules:	
Ameritech personnel set the "No Access" flag when access cannot be obtained to the customer's premises. Order must be Completed.	
Levels of Disaggregation:	
Geographic, per State Agreements	
Calculation:	**Report Structure:**
(# of orders that are No Access ÷ Total Field Work orders) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
UNE Field Work Parity compared to Ameritech Field Work (N, T, and C order types - Res and Bus Combined).	

WI#2. Measurement	
Percent No Access (Percent of Trouble Reports with No Access) – UNE Loops	
Definition:	
Percentage of dispatched customer trouble reports with a status of "No Access."	
Exclusions:	
• Subsequent reports. A subsequent report is one that is received while an existing repair report is open. • Reports caused by customer provided equipment (CPE) or wiring. • Reports that are not dispatched.	
Business Rules:	
Ameritech personnel set the "No Access" flag when access cannot be obtained at the customer's premises. Reports are counted the month they are closed.	
Levels of Disaggregation:	
Geographic, per State Agreements	
Calculation:	**Report Structure:**
(# of trouble reports with a status of "No Access" ÷ Total dispatched customer trouble reports) * 100	Reported for CLEC, all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
UNE Field Work Parity compared to Ameritech Field Work (N, T, and C order types - Res and Bus Combined).	

WI#3. Measurement	
Percent Trouble Reports for Field Visit Orders to Move NID	
Definition:	
Percent of N, T, and C orders by circuit that receive a network customer trouble report, resolved by moving the NID, within 30 calendar days of service order completion.	
Exclusions:	
• UNE and Interconnection Trunks. • Orders that are not N, T, or C. • Trouble report received on the due date before service order completion.	
Business Rules:	
A trouble report is counted if it is flagged in WFA (Work Force Administration) as a trouble report that had a service order completion within 30 days. It cannot be a repeat report and must be a measured report. The order flagged against must be an addition in order for the trouble report to be counted. Specials are selected based on a specific service code off of the circuit ID. Only troubles counted are those which are coded specifically to move NID. (Code XXX)	
Levels of Disaggregation:	
UNE Loops	
Calculation:	**Report Structure:**
[# of circuits that receive a network customer trouble report within 30 calendar days of service order completion to move the NID÷ total trouble reports] * 100	Reported for CLEC all CLECs, Ameritech, and Ameritech Affiliate.
Measurement Type:	
Tier 1 – TBD Tier 2 – TBD	
Benchmark:	
TBD.	

WI#4 Measurement	
Percent Initial Complex Facility Modification Notifications within specified timeframe	
Definition:	
Percentage of orders requiring Facility Modification Notification where the notification is within the specified time frame from the initial FOC.	
Exclusions:	
▪ Orders not requiring Facility modification notification.	
Business Rules:	
The total number of orders requiring facility modification notification within the specified timelines as compared to the total of orders requiring facility modification. This time frame is measured from the FOC notice.	
Levels of Disaggregation:	
▪ 8.0 dB Loop with Test Access and ▪ 8.0 dB Loop without Test Access The Ameritech comparable to the 8db loop with test access is the basic 2-wire POTS loop. Acceptable db level varies by state. ▪ 5.0 dB Loop with Test Access and ▪ 5.0 dB Loop without Test Access ▪ BRI Loop with Test Access ▪ DS1 Loop with Test Access ▪ DS1 Dedicated Transport ▪ DS3 Dedicated Transport ▪ Dark Fiber ▪ DSL Loops w/ Line Sharing ▪ DSL Loops w/out Line Sharing	
Calculation:	**Report Structure:**
(# of orders where the notification occurred within the specified period/ total # orders requiring Facility Modification notification -) * 100	Reported for CLEC, all CLECs, Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
90% (TBD) within specified timeframes	

WI#5 Measurement	
Percent Complex Modification Classification, Requirements, and Revised Due Date within the specified timeframe	
Definition:	
Percentage of orders requiring Facility Modification Classification, Requirements, and Revised Due Date where the notification is within the specified timeframe from the initial notification.	
Exclusions:	
Orders not requiring Facility modification notification.	
Business Rules:	
The total number of orders requiring facility modification notification within the specified timelines as compared to the total of orders requiring facility modification. This time period is measured from the initial Facility Modification Notice.	
Levels of Disaggregation:	
▪ 8.0 dB Loop with Test Access and ▪ 8.0 dB Loop without Test Access The Ameritech comparable to the 8db loop with test access is the basic 2-wire POTS loop. Acceptable db level varies by state. ▪ 5.0 dB Loop with Test Access and ▪ 5.0 dB Loop without Test Access ▪ BRI Loop with Test Access ▪ DS1 Loop with Test Access ▪ DS1 Dedicated Transport ▪ DS3 Dedicated Transport ▪ Dark Fiber ▪ DSL Loops w/ Line Sharing ▪ DSL Loops w/out Line Sharing	
Calculation:	**Report Structure:**
(# of orders where the notification occurred within the specified period/ total # orders requiring Facility Modification notification -) * 100	Reported for CLEC, all CLECs, Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
90% (TBD) within specified timeframes	

WI#6 Measurement	
Percent New Build Notifications within specified timeframe	
Definition:	
Percentage of orders requiring new build notification where the notification is within the specified timeframe.	
Exclusions:	
Orders not requiring Facility modification notification.	
Business Rules:	
The total number of orders requiring new build notification within the specified timelines as compared to the total of orders requiring new build. This time period is measured from the initial Facility Modification Notice.	
Levels of Disaggregation:	
▪ 8.0 dB Loop with Test Access and ▪ 8.0 dB Loop without Test Access The Ameritech comparable to the 8db loop with test access is the basic 2-wire POTS loop. Acceptable db level varies by state. ▪ 5.0 dB Loop with Test Access and ▪ 5.0 dB Loop without Test Access ▪ BRI Loop with Test Access ▪ DS1 Loop with Test Access ▪ DS1 Dedicated Transport ▪ DS3 Dedicated Transport ▪ Dark Fiber ▪ DSL Loops w/ Line Sharing ▪ DSL Loops w/out Line Sharing	
Calculation:	**Report Structure:**
(# of orders where the notification occurred within the specified period/ total # orders requiring Facility Modification notification -) * 100	Reported for CLEC, all CLECs, Ameritech Affiliates.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
90% (TBD) within specified timeframes	

WI#7 Measurement	
Percent Good News Notice within specified timeframe	
Definition:	
Percentage of orders requiring Good News Notice where the notification is within the specified timeframe.	
Exclusions:	
Orders not requiring Facility modification notification.	
Business Rules:	
The total number of orders requiring Good News notification within the specified timelines as compared to the total of orders requiring facility modification. This time period is measured from the initial Facility Modification Notice.	
Levels of Disaggregation:	
▪ 8.0 dB Loop with Test Access and ▪ 8.0 dB Loop without Test Access The Ameritech comparable to the 8db loop with test access is the basic 2-wire POTS loop. Acceptable db level varies by state. ▪ 5.0 dB Loop with Test Access and ▪ 5.0 dB Loop without Test Access ▪ BRI Loop with Test Access ▪ DS1 Loop with Test Access ▪ DS1 Dedicated Transport ▪ DS3 Dedicated Transport ▪ Dark Fiber ▪ DSL Loops w/ Line Sharing ▪ DSL Loops w/out Line Sharing	
Calculation:	**Report Structure:**
(# of orders where the notification occurred within the specified period/ total # orders requiring Facility Modification notification -) * 100	Reported for CLEC, all CLECs, Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
90% (TBD) within specified timeframes	

WI#8 Measurement	
Percent Facility Modification Orders with Ameritech Caused Missed Due Dates	
Definition:	
Percentage of orders requiring Facility Modification, which are not completed by the due date quoted on the Complex Facility Modification Notice.	
Exclusions:	
▪ Orders not requiring Facility modification notification. ▪ Orders that are not N, T, and C ▪ CLEC caused misses	
Business Rules:	
The total number of orders requiring facility modification completed after the due date, due to an Ameritech reason as compared to the total number of orders requiring facility modification completed on time.	
Levels of Disaggregation:	
▪ 8.0 dB Loop with Test Access and ▪ 8.0 dB Loop without Test Access The Ameritech comparable to the 8db loop with test access is the basic 2-wire POTS loop. Acceptable db level varies by state. ▪ 5.0 dB Loop with Test Access and ▪ 5.0 dB Loop without Test Access ▪ BRI Loop with Test Access ▪ DS1 Loop with Test Access ▪ DS1 Dedicated Transport ▪ DS3 Dedicated Transport ▪ Dark Fiber ▪ DSL Loops w/ Line Sharing ▪ DSL Loops w/out Line Sharing	
Calculation:	**Report Structure:**
(# of FMOD UNEs with missed due dates ÷ total FMOD UNEs installed) *100	Reported for CLEC, all CLECs, , and Ameritech Affiliate.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	

Wisconsin

Parity:	Retail Comparison: (Same as PM#58)
1. 8.0 dB Loop with Test Access and 8.0 dB Loop without Test Access	POTS (Res/Bus and FW)
The Ameritech comparable to the 8db loop with test access is the basic 2-wire POTS loop. Acceptable db level varies by state.	
2. 5.0 dB Loop with Test Access and 5.0 dB Loop without Test Access	VGPL
3. BRI Loop with Test Access	ISDN BRI
4. ISDN BRI Port	ISDN BRI
5. DS1 Loop with Test Access	DS1 & ISDN PRI
6. DS1 Dedicated Transport	DS1
7. Subtending Channel (23B)	DDS
8. Subtending Channel (1D)	DDS
9. Analog Trunk Port	VGPL
10. Subtending Digital Direct Combination Trunks	VGPL
11. DS3 Dedicated Transport	DS3
12. Dark Fiber	DS3
13. DSL Loops w/ Line Sharing	Ameritech Affiliate
14. DSL Loops w/out Line Sharing	Ameritech Affiliate

WI#9 Measurement	
Percent Facility Modification Orders	
Definition:	
Percentage of orders requiring Facility Modification	
Exclusions:	
▪ Orders not requiring Facility modification notification.	
Business Rules:	
The total number of orders requiring facility modification reflected as a percentage of all orders completed in the period.	
Levels of Disaggregation:	
▪ 8.0 dB Loop with Test Access and ▪ 8.0 dB Loop without Test Access The Ameritech comparable to the 8db loop with test access is the basic 2-wire POTS loop. Acceptable db level varies by state. ▪ 5.0 dB Loop with Test Access and ▪ 5.0 dB Loop without Test Access ▪ BRI Loop with Test Access ▪ DS1 Loop with Test Access ▪ DS1 Dedicated Transport ▪ DS3 Dedicated Transport ▪ Dark Fiber ▪ DSL Loops w/ Line Sharing ▪ DSL Loops w/out Line Sharing	
Calculation:	**Report Structure:**
(# of FMOD UNEs ÷ total UNEs installed) *100	Reported for CLEC, all CLECs, , and Ameritech Affiliate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Diagnostic	

PERFORMANCE MEASUREMENTS
Appendix One

Subsequent Due Date Indicator	
Added to the service order whenever the due date is changed. Order can carry multiple codes. Company delay code overrides subscriber delay code.	
Subscriber (customer) Reasons:	
SA	No Access
SL	Subscriber requests later date
SP	Subscriber requests earlier date
SR	Subscriber not ready
Company (Ameritech) Reasons:	
CA	Assignment office
CB	Residence/Business office
CF	Lack of Facilities (outside plant or buried service wires)
CL	Work Load
CN	Not Coded
CR	Translations
CS	Switching
CX	Other Company Reasons

PERFORMANCE MEASUREMENTS
Appendix Two

Disposition Codes
The following is a list of excluded (11) disposition codes.
110* Public Utility: Applies when trouble reports are entered and/or closed in LMOS due to a Public Utility Commission mandate. 111* Service Order: Applies when a trouble report is received up to and including the due date of the service order. 112* Business Office Referrals: Applies when a customer is referred to the Business Office for resolution. Reasons for referrals are billing complaints, customer not paying for feature, wire reroutes requiring service order. 113* Customer Requests: Applies when a customer requests directories, information for party line codes, verify busy, verify PIC, miscellaneous information, etc. 114* Other: Applies when a customer reports wires down and poles down/broken, etc., that are not the property of AOC. It includes requests for cable locates, disconnect drop temporarily, and trouble reports received on disconnected lines, denied lines or after investigation the wrong number was reported. 115* Preventative Maintenance: Applies when trouble reports are closed out in accordance with the Preventative Maintenance Procedure. 119* Receipt to Screen sales. Applies when a customer calls repair for information on a product, feature or service that is provided by Ameritech, and the MA makes the sale.

Disposition Codes

The following is a list of excluded (12) disposition codes.

120* Suppresser (Noise) – Billable: Applies when the technician places a suppresser on the customer's side of the Network Interface Device. The customer is billed.

121* Non-Regulated Premises Wire/Jack – Billable: Applies when the technician sectionalizes, and/or isolates, and/or repairs non-regulated trouble found in the premises wire or jack. Includes all wire/equipment past the Network Interface Device. Also, includes malicious damage billing that is not covered under a maintenance contract and charges for replacing nonstandard wire not covered under a maintenance contract. Billing is levied.

122* Non-Regulated CPE – Billable: Applies when the technician isolates the trouble into CPE, such as telephone set, answering set, P-Phone/ISDN console, power plants. Includes receiver off hook conditions. The customer does not participate in a maintenance contract. Billing is levied.

123* Return Visit – Billable: Applies when a customer covered under a maintenance plan requests a return visit for a circumstance not covered by the plan.

124* Customer Not Home – Trouble to Customer Side of NI/DEMARC – Billable: Applies when the technician sectionalizes the trouble to the customer's side of the Network Interface Device (NID) or demarcation point and the customer is not home. The customer does not have a maintenance contract. Billing is levied.

125* Customer Cancels Dispatch Technician On Premises – Billable: Applies when the trouble report is canceled by the customer when the technician arrives at the premises and the purpose of the visit was non-regulated. The customer does not participate in a maintenance contract. Billing is levied.

126* Other – Billable: Applies when the trouble report is of a miscellaneous nature and does not apply to other categories. The customer does not participate in a maintenance contract. Billing is levied.

128* Premises Work Charge – Billable: Applies when the technician repairs non-regulated trouble found in premises wire and/or jacks. Customer has a Linebacker plan but does not have a wire maintenance plan (Indiana only). Also applies in states that have multiple types of contracts that are not covered for non-regulated work (Ohio). The customer is billed.

129* Non-Complex Business CPE – Billable: Applies when the technician

	isolates the trouble into Non-Complex Business CPE, such as telephone set, answering set, etc. Includes receiver off hook conditions and cord sales/ replacement. The customer does not participate in a maintenance contract. Non-Complex RVC billed.

Disposition Codes

The following is a list of excluded (13) disposition codes.

130* Suppresser (Noise) – Non-Billable: Applies when the technician places a suppresser on the customer's side of the Network Interface Device (NID). The customer is not billed.

131* Non-Regulated Premises Wire/Jack – Non-Billable: Applies when the technician sectionalizes, and/or isolates, and/or repairs non-regulated trouble found in the premises wire or jack. The customer participates in maintenance contract.

132* Non-Regulated CPE – Non-Billable: Applies when the technician isolates the trouble into CPE, such as telephone set, answering set, P-Phone/ISDN console, power plants. Includes receiver off hook conditions. The customer participates in a maintenance contract. Can also apply for loaner sets, set deliveries or trouble that is found to be in Ameritech branded CPE (no dispatch).

133* Company Reason – Non-Billable: Applies when the trouble is isolated in the customer's facilities and customer does not have a Network Interface Device.

134* Customer Not Home – Trouble to Customer's Side of NI/DEMARC – Non-Billable; Applies when the technician sectionalizes the trouble to the customer's side of the Network Interface Device or demarcation point and the customer is not home. Customer participates in a maintenance contract.

135* Customer Cancels Dispatch Technician On Premises – Non-Billable: Applies when the trouble report is canceled by the customer when the technician arrives at the premises and the purpose of the visit was non-regulated. The customer participates in a maintenance contract.

136* Other – Non-Billable: Applies when the trouble report is of a miscellaneous nature and does not apply to other categories. The customer participates in a maintenance contract.

137* Customer Action, No Dispatch – Non-Billable: Applies when the trouble report is the result of customer error or misuse of equipment, prior to dispatch. Trouble report is not dispatched. It also includes trouble report tested and indicates vendor or inter-exchange carrier trouble. Also includes when the customer cancels the report when trouble is still on the line.

139* 2PIC: Applies when the customer is provided information related to 2PIC.

Change Management Process for Performance Measurements

The Ameritech Performance Measurement system (comprised of measures, business rules, standards, benchmarks, etc.) is undergoing continuous change due to the requirements for measures that reflect Ameritech's performance in meeting obligations to CLECs, responding to regulatory requirements, the introduction of new products and services, and requirements for disaggregations that reflect products, services and service delivery methods.

Each performance measure requires Ameritech to program its systems to capture/collect transaction data as transactions are being processed in its systems, both electronically and manually. The data to be collected is determined by the definitions of the performance measures – elapsed time, number of days, types of customers, request types, service categories, etc., as defined in the performance measurement business rule document.

Specific processes are utilized to report the results of operations using the performance measure data, including, business rules, exclusions, disaggregations and reporting intervals. These processes are programmed into the Ameritech systems once the definitions are finalized and detailed implementation plans are put in place.

The performance measurement reports themselves are provided to both CLECs and state regulatory agencies via a performance measurement web site (https://clec.sbc.com/), which allows for the download of specific performance measure data. Several options are provided

which allow users to extract performance measurement data and associated information (business rules) in the manner most fitting their need.

CLECs use the performance reports to evaluate Ameritech's performance and can compare the reported results to internal data. Regulators use the performance reports to monitor compliance with agreed-upon standards and to enable remedies in cases of failures on the part of Ameritech. Consistency in the form, format and content of the performance measurement system is key to the reliability of the data.

Modifications to the performance measurements and the associated business rules are proposed through performance measure collaboratives, facilitated by state commissions. Once the initial set of measurements is agreed to, modifications will primarily be a product of periodic reviews. Due to these factors, a method that guides the implementation of changes is necessary. Such a method will ensure that changes are introduced in an open framework that assures that new measures and changes to existing measures are implemented timely, orderly, and accurately.

Periodic reviews are to be held at six-month intervals between Ameritech, the CLECs, and Commission representatives to review the performance measures to determine whether measurements should be added, deleted, or modified; whether the applicable benchmark standards should be modified or replaced; and whether to move a classification of a measure from to High, Medium, Low, Diagnostic, Tier-1 or Tier-2. One criterion for reclassification of a measure (High, Medium, Low) shall be whether the actual volume of data points was lesser or greater than anticipated. Criteria for review of performance measures, other than for possible

reclassification, shall be whether there exists an omission or failure to capture intended performance, and whether there is duplication of another measurement. The first six-month period will begin in a timeframe as recommended by the Performance Measure Collaborative and approved by the Commission.

A standing agenda item for the six-month review will be a review of products and/or interfaces pending introduction. The OSS Change Management Process twelve-month view will be a primary source for discussion in order to assess the pending modifications to OSS's that might affect performance reporting. Either CLECs or Ameritech may propose modifications to the performance measures during these sessions. Upon agreement of the collaborative, Ameritech will post draft business rules on the CLEC online web-site. Ameritech will schedule and implement these measurements within eight weeks of the implementation of the product or interface in a diagnostic mode. CLECs and Ameritech will review the measures at the next subsequent six-month review and agree on the final measures to be introduced. At that time Ameritech will make any agreed-upon modifications to the business rules and measurements and petition the state commission for implementation. Upon concurrence from the commission, the performance measures will schedule implementation of the measures.

Ameritech's performance measurements change management process requires that Ameritech notify the industry in advance of planned modifications via an implementation schedule posted to the performance measurement web site. Additionally, modifications to the web site itself will be communicated via an Accessible Letter, which is the standard communication vehicle used in SBC for communication to CLECs and regulatory agencies. Commission staff representatives

and CLEC contact personnel receive the Accessible Letters via e-mail and the Accessible Letters are posted to the SBC/Ameritech web site. These vehicles will ensure that CLECs receive the appropriate information and notices, as well as Ameritech's account managers, who are then better able to support the necessary information exchanges.

Advance notices of changes in the performance measurement processes will provide CLECs and regulators opportunity to review the nature of the changes and to prepare for implementation of the changes. Notice periods differ based on the nature of the change. Pre-notification summary descriptions describe the change that Ameritech intends to make and will identify the performance measures that are scheduled for modification. They will identify the source (specific state collaborative) for the change that is to be made and will also identify the implementation and effective dates of the change.

Suggested notification intervals for the changes to performance measurements are:

Type of Change	**Minimum Notice Interval**
New Measurement	30 days prior to implementation via implementation schedule posted on the PM website.
Changed Business Rules	30 days prior to implementation via implementation schedule posted on the PM website.
Changed Report Format (Electronic)	30 days prior to implementation via Accessible Letter.
Change Requiring Restatement of Previously Reported Results	As Soon as Identified (Ameritech is required to re-state data as soon as possible after the discovery of misstated results) – via web page notification. This notification will include a short description of the reason and areas modified.

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation Into Ameritech Wisconsin Operational Support Systems	6720-TI-160

PROPOSED DECISION

In the context of performance measures under consideration in this proceeding, Ameritech Wisconsin (Ameritech) has proposed parity measures for several aspects of its operations affecting competitive local exchange companies' (CLECs') ability to provide adequate service to their customers. Related performance measures include call answer times for service and repair, service installation intervals, missed due dates for service installations, trouble report rates, missed repair commitments, and time to restore out-of-service troubles. A list of the specific performance measures to which this ruling applies is attached. Ameritech contends that, under § 271 of the federal Telecommunications Act of 1996, its performance obligation to CLECs in these aspects is limited to parity with its retail performance. CLECs contend that, if Ameritech's retail performance is inadequate, parity treatment by Ameritech translates, in turn, to inadequate service to the CLECs' customers.

Based on parties' discussion of this disputed issue raised by the CLECs in pre-hearing conferences subsequent to this Commission's order issued July 19, 2000, in this proceeding, it is the ruling of the temporary administrative law judge that performance measures covering the above-identified aspects should include absolute benchmarks defining adequate performance so that CLECs have a reasonable opportunity to provide adequate retail service to their own

customers. (This ruling does not constitute a determination that Ameritech's services are, in fact, inadequate.) Ameritech's performance with respect to its business operations with CLECs should be in parity with its retail performance as long as its retail performance is above an appropriate absolute benchmark, but its performance should at least meet the absolute benchmark. Definition of the magnitude of the associated absolute benchmarks should be an issue for the hearing in this proceeding tentatively scheduled for November 2000.

This ruling is issued under the authority delegated to the temporary administrative law judge pursuant to Paragraph 5 of the Commission's Order of July 19, 2000, in this proceeding.

Dated at Madison, Wisconsin, _____

_____
Scot Cullen
Temporary Administrative Law Judge

RSC: L:\staff\rsc\6720-TI-160taljruling

Attachment

Performance Measures Requiring Absolute Benchmarks

(Based upon draft Wisconsin Performance Measures, Version 1.6, dated 9/20/00)

- PM#21 Local Service Center (LSC) Average Speed of Answer
- PM#22 Local Service Center (LSC) Grade Of Service (GOS)
- PM#24 Local Operations Center (LOC) Average Speed Of Answer
- PM#25 Local Operations Center (LOC) Grade Of Service (GOS)
- PM# 27 Mean Installation Interval
- PM# 28 Percent Installations Completed within X Days
- PM# 29 Ameritech Caused Missed Due Dates
- PM# 37 Trouble Report Rate
- PM#38 Percent Missed Repair Commitments
- PM#39 Receipt to Clear Duration
- PM# 40 Percent Out of Service Intervals < 24 Hours
- PM# 41 Percent Repeat Trouble Reports

Open Performance Measure Issues – Wisconsin

From Wisconsin A-AA:

1. Facility Modification
    - Percent Accuracy Measure – Not yet agreed to, Ameritech has not determined how we would report this. Manually reported data from CLECs in a historical fashion will not provide accurate and consistent results. Ameritech's position is that we do not measure this function, as the measure entitled Percentage of Facility Modification Orders will give CLECs an indication as to whether there is a problem in this area or not.
    - Comparison to Retail – Ameritech does not currently have the ability to accurately measure retail orders that require facility modification at the same level of detail that can be reported for wholesale orders (due to the formal facility modification notification process for wholesale). Ameritech's position is to compare to the same parity comparisons as are being reported for PM#58 – Ameritech Caused Missed Due Dates (UNE).
2. Directory Publishing Review
    - CLECs proposed two measures (1) Accuracy of processing CLEC corrections based on review of Directory Information and Timeliness of submission of directories for review (Issue L). Ameritech has not yet addressed these issues but may have something to offer after the submission of the initial report on October 1.
3. Branded Operator Services – Ameritech has verified that Operator Services calls are handled in a parity fashion and does not believe that a disaggregation of the measurement is required for branded services. Branded are included in the aggregate result reported for both wholesale and retail service.
4. Processes yet undefined or agreed upon for which performance measures may (or may not) apply:
    - Procedures for Requesting and Receiving Central Office DLC Loop Percentages (Issue A).
    - Sub Loops – Ameritech will propose appropriate PMs as process issues are resolved (Issue D).
    - Enhanced Extended Links (EELS) - Ameritech will propose appropriate PMs as outstanding issues are resolved (Issue V).

From other state PM collaboratives:

1. PM#5 Percent FOC returned within "X" hours – In response to closing an open issue in Illinois, CLECs and Ameritech have tentatively agreed to modify the disaggregations for FOC to include FOC for electronically submitted and electronically processed orders. This should be resolved within thirty days.
2. PM# 55.2 Average Installation Interval – LNP with Loop – CLECs and Ameritech currently working through issues regarding intervals agreed to in Wisconsin Hot Cuts collaborative. Expect resolution shortly (this week?)
3. PM#58 – Percent Ameritech Caused Missed Due Dates – CLECs have requested an additional disaggregation (FW vs. NFW) that Ameritech has not yet agreed to. Expect resolution shortly (this week?).
4. PM#70 – Percent of Trunk Blockage (Call Blockage) – CLECs and Ameritech are working through a proposal for a new measure. Agreement exists in concept, specific business rules not yet agreed on. Expect resolution shortly (next week?)
5. MI#15 – Percent of timely OSS Change Management Notices – CLECs and Ameritech agree on the business rules, however implementation cannot proceed until the 13 state change management process is implemented.
6. TX#124 – Timely resolution of Software Failures related with Releases – CLECs proposed measure recently, Ameritech believes this measure is subjective and will be difficult to implement. The measure was ordered in TX, not voluntarily agreed to and may not be practical.

Attachment J

Master Test Plan, Version 2.0

Public Service Commission of Wisconsin

Ameritech
OSS Evaluation Project
Master Test Plan

Version 2.0

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KPMG Consulting, LLC
September 28, 2000

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I. Document Control

Table I-1: Version Control

Version	Date	Reason
Draft 1.0	August 25, 2000	Draft Release
Draft 1.1	September 15, 2000	Updated Draft Release
Draft 1.2	September 22, 2000	Updated Draft Release
Version 2.0	September 28, 2000	First Release

II. Introduction

A. Background

The Telecommunications Act of 1996 (the Act) requires Ameritech in Wisconsin to meet numerous objectives, including:

- Provision of just, reasonable and nondiscriminatory access to its operations support systems (OSS);
- Provision of the documentation and support necessary for competitive local exchange carriers (CLECs) to access and use these systems; and
- Demonstration that Ameritech's systems are operationally ready and meet prescribed performance standards.

Pursuant to Orders in docket numbers 6720-TI-120, 6720-TI-160, 7825-TI-100, 6720-TI-154, the Public Service Commission of Wisconsin (the Commission[1]) has ordered a comprehensive test of Ameritech-Wisconsin's OSS and its CLEC-facing operations to assist the Commission in assessing whether Ameritech is meeting these and other requirements of the Act. The Commission and Ameritech have retained KPMG Consulting, LLC to design this Master Test Plan and manage the test.

Some Ameritech-Wisconsin systems and processes may not be available for evaluation at the start of the test (Appendix F outlines these systems and processes). The test is not expected to conclude until such systems and processes have been implemented and evaluated.

B. Objective

The overall objective of this Master Test Plan is to describe an approach for testing Ameritech-Wisconsin's OSS systems, interfaces, and processes to determine whether Ameritech's provision of access to OSS functionality enables and supports CLEC entry in the local market. To meet these objectives, KPMG Consulting developed a test plan to evaluate the entire CLEC/ILEC relationship under real world conditions. KPMG Consulting, Ameritech, or the CLECs may propose modifications to the test plan, subject to Commission approval, to assure adequate breadth and depth of testing. In developing the test plan, all stages of the CLEC-ILEC relationship were considered. These include the following:

- Establishing the CLEC-ILEC relationship
- Performing daily CLEC-ILEC operations
- Maintaining the CLEC-ILEC relationship

A broad range of products and service delivery methods are included within the scope of the test. Furthermore, key business functions and transactions such as ordering, provisioning, billing, maintenance and repair, and account management are included in the scope of the review. Other key aspects of the test include the following:

[1] The Commission refers to the Public Service Commission of Wisconsin or its designees.

- The test will be conducted using the most current Ameritech pre-ordering, ordering, maintenance & repair, and billing interfaces in production and the most current published Ameritech business rules;
- The following interfaces will be tested: pre-order (GUI/machine-to -machine), order (GUI/EDI/ASR), maintenance & repair (GUI/machine-to-machine), and billing (usage and invoice feeds);
- An evaluation of Ameritech's Local Service Ordering Guide version 4 (LSOG 4) pre-ordering and ordering interface releases will be conducted;
- The test will include certain service delivery methods, such as Enhanced Extended Links (EELs), sub-loop unbundling, and Digital Subscriber Line (DSL).
- During the production transaction tests, transactions will be sent to the Ameritech production environment.

The SBC Texas performance measures will be used as a baseline for the purposes of the test. Any new performance measures or further modifications to existing measures that occur during the course of the test will also be evaluated.

C. Plan Overview

The test plan is organized into three test families:

- Performance Metrics Reviews (PMR)
- Policies and Procedures Reviews (PPR)
- Transaction Validations and Verifications (TVV)

Within each of the test families, the methods and processes to be applied to measure Ameritech's performance are described along with the specific points in the systems and processes where Ameritech's performance will be evaluated. The results of the test will be compared against measures and criteria identified by the Commission and other measures and criteria as deemed appropriate by the Commission.

This plan also describes the scenarios to be used for evaluating Ameritech's OSS and related support services. The scenarios were designed to depict real-world pre-ordering, ordering, provisioning, maintenance and repair, and billing situations that CLECs currently face or may face in the near future. During testing, the scenarios will be used to develop test cases that provide a detailed description of the transactions and introduce additional variables such as errors and supplements to further simulate real world transactions.

D. Audience and Test Roles

The audience for this document falls into two main categories:

1. Readers using this document during the testing process;
2. Interested parties who have some stake in the result of the Ameritech OSS evaluation and wish to have insight into the evaluation effort.

The primary users of this document are the Commission and KPMG Consulting. Others are the Wisconsin Attorney General's Office, CLECs, Ameritech, the Department of Justice (DOJ), and the Federal Communications Commission (FCC).

Table II-1: Participant Roles

Participant	Role Description
Public Service Commission of Wisconsin	The Public Service Commission of Wisconsin (the Commission) is responsible for directing the overall testing effort. KPMG Consulting will provide results and preliminary evaluation of the results to the Commission. The Commission is responsible for the final evaluation of the test results.
KPMG Consulting, LCC	KPMG Consulting will be the Test Manager. The Test Manager has overall responsibility for the preparation of the master test plan and the management and execution of the test. This role includes preparing for and conducting the test, providing change control throughout the testing cycle, and reporting results to the Commission.
Hewlett Packard	A vendor will be retained to establish and operate an EDI gateway system which interfaces the Test Manager's OSS with Ameritech's OSS for pre-ordering and ordering. The Commission has directed Ameritech to retain Hewlett Packard for this purpose.
Ameritech Wisconsin	Ameritech will be the test subject. In addition, Ameritech will participate in test administration activities and make available its subject matter resources to facilitate the conduct of the test.
CLECs	CLECs have been engaged in providing input to the test design and will participate in several aspects of testing. For example, KPMG Consulting will work with CLECs to develop test parameters, create test specifications, determine transaction mixes for the markets being tested in terms of volumes by transaction type, and determine reasonably expected demand levels for transaction volume tests.
Department of Justice	The Department of Justice may observe the process of developing, conducting, and evaluating the tests.
The Federal Communications Commission	The Federal Communications Commission may observe the process of developing, conducting, and evaluating the tests.

The Web addresses http://www.psc.state.wi.us/ and http://www.osstesting.com/Wisconsin%20OSS%20Test%20Home.htm contain information on Wisconsin's third party testing of Ameritech's OSS.

E. CLEC Simulation for Test Purposes

Several tests within this Master Test Plan require the simulation of real world business situations. To this end, numerous transactions and operations will be conducted using the systems and procedures developed by Ameritech for CLEC use. For example, during the test a wholesale account relationship will be established and system interfaces will be built to Ameritech's OSS, in accordance with Ameritech's published documentation. After setting up for "business," "customers" will be acquired and serviced by submission of orders, receipt of bills, and conduct of maintenance and repair activities. These experiences will be recorded and analyzed by KPMG Consulting.

During the test, numerous steps will be taken to ensure that the information and level of assistance provided by Ameritech is available to all CLECs and is not enhanced solely for the testing organization. To help ensure the validity of data gathered during the CLEC simulation, the following steps will be taken:

- The Test Manager will assign personnel to conduct CLEC simulation activities so that such personnel are not known as testers to Ameritech operations personnel;
- Test beds will be specified and configured to avoid detection of test transactions and situations by Ameritech operations personnel;
- The Test Manager will require testing personnel involved in CLEC simulation activities to utilize only publicly available Ameritech documents and processes;
- When dealing with Ameritech employees during CLEC simulation activities, testing personnel will behave as though they are working on a real business situation -- personnel will avoid indicating that they are conducting a test;
- Test transactions and interactions conducted under production situations are not to be announced to Ameritech beforehand;
- During testing, results from CLEC simulation testing will be compared periodically with other test data to detect differences which may suggest that the simulation data do not reflect real world situations or performance;
- A detailed record of simulation activities and results will be kept, including lists of Ameritech documents, systems, processes, and procedures used;
- To the maximum extent possible, people working for KPMG Consulting on the Process and Procedures Review will not be the same people as those that work on the Transaction Verification and Validation Tests.

A significant portion of the CLEC simulation effort involves pre-ordering and ordering transactions. To facilitate these CLEC simulation activities, a vendor working at the direction of the test manager will be retained to establish and operate a gateway system which interfaces the test manager's OSS with Ameritech's OSS. This vendor will also abide by the aforementioned rules of engagement established for CLEC simulation.

F. Test Until Pass Approach

The test is expected to be conducted using a "test until pass" approach. This is believed to be in the best interest of all parties seeking an open, competitive market for local telephone services in Wisconsin. The process is expected to work as follows:

- If an issue or problem is encountered during the test, KPMG Consulting will inform the Commission and Ameritech by documenting an Observation or Exception describing the situation and providing an assessment:
  - An Observation will be created if KPMG Consulting determines that a test reveals one of Ameritech's practices, policies, or system characteristics might result in a negative finding in the final report;
  - An Exception will be created if KPMG Consulting, LCC determines that a test reveals one of Ameritech's practices, policies, or system characteristics is not expected to satisfy one or more of the evaluation criteria defined for the test.

- Observation and Exception status will be discussed weekly by the Commission, KPMG Consulting, and Ameritech. CLECs will be able to listen to the calls as observers and ask clarifying questions.
- CLECs will be able to view Exceptions on the Commission web site as well as provide input about them to the Commission.
- Observations may or may not become Exceptions. Some Exceptions will not have been identified previously as Observations.
- Ameritech will respond to Observations verbally and to Exceptions in writing. These responses will describe either a clarification of the issue or Ameritech's intended fix(es) to the problem. The responses will be posted on the Commission website.
- If Ameritech has made a change to a process, system, document, or performance measure in response to an Exception, KPMG Consulting will retest as appropriate unless otherwise directed by the Commission.
- KPMG Consulting and the Commission will be responsible for determining when to close an Exception. If the issue raised by the Exception is not resolved, the cycle will continue to iterate until closure is reached, no further action is warranted, or the Commission specifically exempts the Exception from further testing.
- If KPMG Consulting determines that an element of Ameritech's OSS fails to perform as it is documented in materials used by CLECs (e.g., on TC Online, in handbooks, specifications and other such documentation), the documentation in question will be noted.

At the conclusion of this test, there may be some issues raised by Exceptions that remain open. The Commission will decide how to proceed with such Exceptions.

G. Assumptions

This section describes the assumptions made in the development of this Test Plan.

- Ameritech will provide suitable resources in sufficient numbers to assist KPMG Consulting with the evaluation effort.
- Ameritech will provide access to appropriate documentation in the same manner as it makes such documentation available to CLECs.
- Ameritech will provide the necessary resources, facilities, and support to enable the testing organization to establish connectivity with its systems and to create the test bed required to execute the tests (e.g., secure, non-Ameritech office space; equipment; security access; customer accounts and addresses; and appropriate company codes).
- Ameritech will process test transactions as part of normal processing including the provisioning of some scenarios/test cases.
- Ameritech and, where appropriate, CLECs will provide the facilities required to execute the live scenarios.

- Ameritech and, where appropriate, CLECs will allow KPMG Consulting to observe retail and wholesale processes on-site during the evaluation effort.
- Ameritech and the CLECs will give KPMG Consulting access to historical data and current operational reports, as needed, to complete the evaluation.
- CLECs will be afforded numerous opportunities to be informed about the status of testing and to provide input to KPMG Consulting throughout the testing process. In certain situations, CLECs may also be able to monitor test personnel interaction with Ameritech during CLEC simulation activities.
- Ameritech will allow KPMG Consulting to inspect algorithms that may have a bearing on parity access, such as the algorithm used to manage trouble reports.
- Regulatory, legal, and confidentiality issues or concerns can be resolved without significant impact to either the intent of the tests, the ability to execute the tests, or the schedules for their execution.
- KPMG Consulting will hold an informational workshop to discuss the statistical methodologies, approaches, and issues (e.g., alternative hypothesis, sample sizes, alpha and beta levels, permutation testings, etc.) relevant to the test. This workshop will include participation from CLECs, Ameritech, Commission, and other interested parties.
- To the extent the certain non-tariffed products and services are included in the test, reasonable steps will be taken to make available documents which describe the basis on which these products and services are offered by Ameritech to KPMG Consulting.

H. Limitations

The purpose of this section is to describe some limitations of the testing effort. These limitations will be described in terms of what is to be tested and what conclusions can be drawn from the results.

- The philosophy employed throughout the conduct of the OSS Evaluation is to execute a broad test that mirrors a real-world commercial market. The Test Manager is expected to make every reasonable effort to test all technically feasible recommended test scenarios. There are some cases in which certain order types, troubles, and processes cannot be tested directly by KPMG Consulting or Hewlett Packard. Examples include orders with very long interval periods (such as the establishment of collocation arrangements) or high volumes of test provisioning transactions. There are scenarios where in-progress live transactions cannot be obtained or are not practical to execute in a test environment. Also, it is not practical or desirable to execute certain live tests that would disrupt service to Ameritech or CLEC customers, such as a maintenance and repair test that requires an equipment failure. Accordingly, historical information may be used where the process in question has been stable for a sufficient length of time and where data supplied by CLECs and/or Ameritech can be validated by the Test Manager. Likewise, tests may utilize interviews, inspections, live order review, review of performance or operational reports, or other methods that capture the performance of Ameritech with respect to the order types and processes in question.

- Some of the transaction types submitted through the interfaces being tested can only be properly executed with direct involvement from the CLECs. One category of such tests are those that include complex transactions involving physical CLEC facilities. For example, UNE orders involving LNP require a physical switch and a real CLEC in order to be fully completed. Another category would be those tests requiring realistic customer data, such as address validation and directory listing inquiries.
- Operational, time and resource constraints make it impossible to construct a completely, exhaustive test suite. Significant effort has been expended to clearly portray the scope of the proposed test suite, and it is believed that this suite does provide both extensive and sufficient coverage. Provision has been made in the plan to amend or extend the test coverage if, in the judgment of the Commission, an amendment or extension is deemed justified.

I. CLEC Involvement in Testing

CLECs operating in Wisconsin will be asked to volunteer to participate in certain portions of the process and transaction tests. For example, CLECs may be asked to complete a "CLEC Feedback Survey" for use in the POP Work Center Support Evaluation. CLEC participation will also be solicited to provide test cases for the POP Functional Evaluation.

In addition, the inclusion of selected CLEC live transactions provides an alternative test method for transactions that may not be practical to provide through the interfaces being tested, and further facilitates a more realistic depiction of real world production. Use of CLEC live transactions also provides a means to help control for test bias, and allows for an element of blind testing and tracking performance in a "real-world" environment.

The successful execution of those portions of the test requiring CLEC participation is dependent on the extent of that participation. The Test Manager will meet those CLECs who volunteer to participate to mutually agree on the nature and extent of the participation. It is anticipated that agreement on the following issues will be reached: (a) what commitments are needed in terms of people, time, physical resources, access to facilities and work centers, etc. (b) when the commitments need to be delivered and (c) what lead times will be provided in order to arrange to meet the commitments.

Use of CLEC transactions for test purposes will require extensive participation by the Test Manager either to observe the execution of the transactions in order to measure, audit, inspect and monitor progress and report results or otherwise verify and validate the observed results.

J. Communication Forums

The Test Manager will work with the Commission to provide numerous informational forums during the test. For example, the Test Manager will schedule periodic meetings with the Commission, the CLECs, and Ameritech as necessary to address testing status, issues, and proposed resolutions and keep CLECs apprised of all relevant aspects of the project. The Test Manager will also host weekly CLEC status meetings (which will not involve Ameritech staff).

K. Document Structure

This section describes the structure of the document. It includes a table that lists each major section number along with a brief description.

Table II-2: Document Overview

Sect. No.	Section	Content
I	Document Control	Identifies document distribution and necessary approvals.
II	Introduction	Documents project background, scope, and objectives, assumptions, and limitations. Includes who should read the document, and how it is structured.
III	Test Plan Framework	Describes the methodologies for testing Ameritech's systems, interfaces and processes. Includes how testing is segmented and organized, testing components, entrance and exit criteria, data acquistion, and traceability.
IV	Performance Metrics Audit Test Section	Describes the methods and procedures for evaluating Ameritech's data collection, transfer, and processing into its performance metrics.
V	Policies and Procedures Review Test Section	Describes the methods and procedures for evaluating the Ameritech Wholesale's business rules.
VI	Transaction Verification and Validation Test Section	Describes the methods and procedures for verifying and validating Ameritech's core systems through a series of transaction tests.
Appendix A	Test Scenarios	Describes the scenarios to be used in this test.
Appendix B	Normal and Peak Volumes Test Section	Describes the volumes to be used in testing.
Appendix C	Statistical Approach	Describes the statistical methods and tests used to determine whether parity exists.
Appendix D	Performance Metrics and Standards	Lists metrics for process areas gathered from sources such as the Interim Guidelines.
Appendix E	Glossary	Testing terms and definitions used in this document.
Appendix F	PSCW Case No. 6720-TI-160	Modifications and enhancements have been negotiated and continue to be negotiated between Ameritech and CLECs to be included in the test.

III. Test Plan Framework

The overall test of Ameritech's OSS is designed to be multi-faceted and provide end-to-end coverage of the systems, interfaces, and processes that fall within the scope of the testing effort. In constructing a master test plan, many factors were considered, including the systems and processes to be tested, the measurement points and respective evaluation criteria, and the necessary conditions required to stage a successful, efficient, and objective test. The Test Manager is expected to execute all tests listed in this plan.

To present a comprehensive, complete, and thorough test of Ameritech's OSS systems, interfaces, and processes, the master test plan framework has five key dimensions:

- Test Scenarios
- Test Families
- Test Domains
- Test Processes
- Evaluation Criteria

The test scenarios and the test domains define **what is to be tested** *Test scenarios* provide the contextual basis for testing by defining the transactions, products, volumes, data elements, and other variables that must be considered and included during testing. The *test families* organize the systems and processes to be tested. The *test domains* define the systems and processes to be tested.

Test processes and evaluation criteria define **how testing will be conducted** *Test processes* define the techniques, measures, inputs, activities, and outputs of each component test. *Evaluation criteria* serve as the basis for evaluation by defining the norms against which test results are compared.

These concepts are discussed in more detail in the following sections.

A. Test Scenarios

Based on KPMG Consulting's industry experience, the knowledge gained from the New York Public Service Commission Test, the Pennsylvania Public Utility Commission Test, the Florida Public Utility Commission third party test, a review of the available offerings in Wisconsin, the scenarios developed for the Michigan MTP, and contributions from Wisconsin CLECs, KPMG Consulting has developed a representative set of test scenarios.

The test scenarios describe at a high level realistic situations in which CLECs purchase wholesale services and network elements from Ameritech to be resold or repackaged to the CLEC's end-user customer on a retail basis, as well as situations in which CLECs access repair, maintenance, and billing services. The key principles applied in generating the scenarios included: (1) emulating real world coverage, mix, and types of transactions while (2) balancing the requirement for practical and reasonably executable transactions which would not unduly

disrupt normal production or negatively affect customer service. In general, each test scenario describes a real-world situation that will be used to create test cases.

1.0 Scenario Purpose

Scenarios serve several key purposes. Scenarios help define the products, services, and transactions that should be included for transaction testing. In this regard, test scenarios provide the guidance and framework for developing "real world" test cases to simulate live production in a controlled test environment. The test cases provide the actual detailed instructions required to build individual transaction test instances.

These scenarios will be used to test functionality, performance, and other attributes associated with the ability of CLECs to access information from Ameritech business processes and associated systems. Scenarios provide a way to bridge across test domains and families, thereby facilitating both point-specific and end-to-end testing of various systems and processes and providing the breadth and depth of coverage of products and services to be tested.

2.0 Scenario Use

A list of the scenarios is provided in table form in Appendix A. In general, these scenarios specify a high-level description of a transaction situation. For example, one scenario is to change features for an existing CLEC Resale business Plain Old Telephone Service (POTS) customer. These scenarios will be used to generate specific test cases during testing.

The test cases represent variations on the basic scenario. For example, from the scenario mentioned above, there could be several test cases. One such test case might be to delete Call Waiting and add Caller ID to each line of a ten-line business customer with sequential hunting among the lines. Another case might be to add hunting to a five-line business customer account and then cancel the order after two days. Yet another case might be to remove hunting from a seven-line business customer and then supplement the order three days later to remove Call Waiting from the auxiliary lines. A further case might be to introduce a specific intentional error in this order and then submit an order supplement to correct the error.

Each of these test cases drive the definition of detailed test instances for various components of the total test. These test instances correspond to the test case for a specific customer account. The Test Manager is expected to transmit numerous test instances for each test case. To help ensure the blindness and objectivity of the test, only the high-level scenarios, and not the more detailed test cases or instances are listed in this document. CLECs are expected to contribute to the development of the test case requirements during the course of the test.

For functionality testing, volumes of test instances will be assigned to each of the test cases based, in part, on a determination of the sufficiency of sample sizes to determine compliance with appropriate performance metrics. The method for determining the appropriate performance metrics that will be used in this test is described in Appendix D. Other considerations that will be taken into account by the Test Manager in determining test volumes will be assurance of sufficient samples by customer type (residence vs. business), as well as by service delivery method. In addition, the Test Manager may determine based on experience in other jurisdictions and further analysis of CLEC experience in Wisconsin to add additional volumes to certain scenarios.

For volume testing, normal expected volumes will then be assigned to a selected set of the test cases based on projections of expected real world production. In order to derive the "normal volume" estimate, the Test Manager will solicit forecasts by product type from both Ameritech and CLECs offering service or planning to offer service in the Ameritech footprint. Individual test instances that match the test cases will be generated based on the volume that has been assigned.

In addition, a stress volume test will be conducted to test the capacity and identify potential choke points of the interfaces. Stress volumes will be assigned to a subset of the test case types based on some multiplier of the normal expected volumes.

B. Test Domains

The areas subject to testing exist in four domains that mirror the major business functions performed by a telecommunications carrier:

- Pre-Order, Order, and Provisioning (POP)
- Maintenance and Repair (M&R)
- Billing (BLG)
- Relationship Management and Infrastructure (RM&I)

These four domains are useful in defining the areas to be tested and the specific tests to be conducted.

1.0 Pre-Order, Order, and Provisioning Domain

This domain is comprised of the systems, processes, and other operational elements associated with Ameritech's support for Pre-Ordering, Ordering, and Provisioning activities for wholesale services and unbundled network elements. The purpose of the specified tests is to evaluate functionality, to evaluate compliance with prescribed measurements, and to provide a basis for comparing this operational area to parallel systems and processes supporting Ameritech's retail operations.

2.0 Maintenance and Repair Domain

This domain is comprised of the systems, processes, and other operational elements associated with Ameritech's support for wholesale maintenance and repair activities. Tests associated with this domain will evaluate functionality and provide a basis for comparing this operational area to parallel systems and processes supporting Ameritech's retail operations and applicable industry standards. Tests will also evaluate Ameritech's compliance with maintenance and repair performance measurements.

3.0 Billing Domain

This domain is comprised of the systems, processes and other operational elements associated with Ameritech's support for wholesale billing. Tests associated with this domain are designed to evaluate Ameritech's compliance with measurement agreements and to ensure adherence to sound management practices.

4.0 Relationship Management & Infrastructure Domain

This domain is comprised of the systems, processes and other operational elements associated with Ameritech's establishment and maintenance of business and technical relationships with the CLECs.

C. Test Families

The areas subject to testing have been organized into three test families that are composed of tests that require similar methods of evaluation. The three test families are:

- Transaction Verification and Validation
- Processes and Procedures Review
- Performance Metrics Review

These three test families are useful in organizing the areas to be tested and the specific tests to be conducted. The Transaction Verification and Validation (TVV) test family is comprised of transaction-based tests, while the Processes and Procedures Review (PPR) test family is comprised of reviews of Ameritech's wholesale business processes and management practices. The third test family, Performance Metrics Review (PMR), is comprised of reviews Ameritech's service quality measurement data collection, calculation, and reporting functions.

Within each of these test families, specific test targets have been identified for testing. The POP, Billing, and M&R domains are addressed in each of the test families. RM&I is addressed completely within the PPR test family. The relationship between the test families and test domains is shown below.

Table III-1: Domain/Test Family Matrix

	POP	Billing	M&R	RM&I
PMR	X	X	X	
PPR	X	X	X	X
TVV	X	X	X	

D. Test Processes

Within each of the three test families, specific test processes to be executed have been defined. In general, two kinds of tests have been developed:

- Transaction-Driven System Analysis
- Operational Analysis

1.0 Transaction-Driven System Analysis

Tests utilizing transaction-driven system analysis rely on initiation of transactions, tracking of transaction progress, and analysis of transaction completion results to evaluate a system under test. Transaction-driven system analysis requires defining several key facets of testing, including the data sources (e.g., CLEC live data, Ameritech historical data), the system

components under test (e.g., machine-to-machine interfaces, graphical user interfaces), and volumes (e.g., normal, stress).

The transactions, or test instances, to be used in each transaction-driven system analysis test will be derived from higher level sets of one or more transactions called test cases, which in turn have been developed from test scenarios. See the Scenario section above for additional discussion.

2.0 Operational Analysis

Tests utilizing operational analysis focus on the form, structure, and content of the business process under study. This test method will be used to evaluate day-to-day operations and operational management practices, including policy development, procedural development, and procedural change management. Operational analysis validates and verifies the results of a process to determine that the process functions correctly and according to documentation and expectations. Operational analysis also tests compliance by reviewing management practices and operating procedures against legal, statutory, and other requirements.

E. Evaluation Criteria

Measures and their corresponding evaluation criteria provide the basis for conducting tests. Evaluation criteria are the norms, benchmarks, standards, and guidelines used to evaluate measures identified for testing. Evaluation criteria provide a framework for the scope of tests, the types of measures that must be taken during testing, and the approach necessary for analyzing results.

There are four types of evaluation criteria, as shown in the table below.

Table III-2: Evaluation Criteria

Evaluation Criteria Type	Description	Examples
Quantitative	These criteria set a threshold for performance where a numerical range of values is possible, such as response time.	System response time is four seconds or less.
Qualitative	These criteria set a threshold for performance where a range of quality values is possible, such as level of customer satisfaction.	Documentation defining daily usage feeds is adequate.
Parity	Parity measures can be of three types: 1) Quantitative: These are criteria that require two measurements to be developed and compared, such as whether external response time is at least as good as internal response time. 2) Functionality: These criteria require that both wholesale and retail systems offer the same set of functions. 3) Process: These criteria require that the processes used for both wholesale and retail offer similar controls and outcomes.	CLEC transaction time no greater than Ameritech Retail transaction time.

Evaluation Criteria Type	Description	Examples
Existence	These are criteria where only two possible test results can exist (e.g., true/false, presence/absence), such as whether a document exists or not.	Documentation defining daily usage feeds exists.

The evaluation criteria to be applied in the overall test effort are based largely on the legal and regulatory requirements for functionality and performance applicable to Ameritech's OSS. Overall, evaluation criteria are derived from three types of sources, as shown below.

Table III-3: Sources of Evaluation Criteria

Evaluation Criteria Source Types	Description
Legal and Regulatory Requirements	Requirements specified by statute and regulation, such as FCC orders, court orders, Commission statutes, orders, rules, and regulations, federal and state statutes, and other binding requirements such as interconnect aggrements and others resulting from judicial or governmental proceedings. (State and federal proceedings that the Test Manager uses in evaluation of legal and regulatory requirements will be cited in the final report.)
Consensus Requirements	Norms, benchmarks and standards developed by formal consensus proceedings.
Good Management Practices (GMP)	Widely recognized standards and guidelines promulgated by sanctioned industry and governmental organizations and other bodies (e.g., Association for Telecommunications Industry Solutions (ATIS), Ordering and Billing Forum (OBF), Telecommunications Industry Forum (TCIF)); also includes benchmarks, performance goals, and guidelines derived from industry and topic area experts, Ameritech and CLEC performance targets, publications, academic journals and other sources.

F. Test Process Elements

For every test defined within each test family, the test process includes a description of the test, its objectives, the targets and scope of the test, the measures to be used, the test scenarios which apply to the test, the test's inputs, activities, and outputs, as well as entrance and exit criteria. Several key test process elements are described in the following sections. Each test process specifies the evaluation techniques used to capture and analyze information developed during testing and the evaluation measures used to conduct testing.

The general presumption of this test plan is that all facets of this test plan, including but not limited to the A-AA issues, will be tested specifically for Wisconsin. KPMG Consulting will review OSS testing in other states in the Ameritech region to determine whether the results of those tests may be applicable to any specific portion of this Master Test Plan. KPMG Consulting, after notice to and reasonable opportunity for input by the pre-hearing participants, may recommend to the Commission to utilize the results of those tests rather than conducting duplicative testing, where KPMG Consulting can attest that the testing done in other states is independent and reliable and can be used as a basis for evaluation acceptable to the Commission or its representatives. To be considered duplicative, a test must meet the specifications listed in the Wisconsin MTP.

1.0 Global Entrance Criteria

Entrance criteria are those requirements that must be met before individual tests can commence. Global entrance criteria, which apply to every individual test (except where noted otherwise), include the following:

1. **The Master Test Plan has been approved.**

   The Test Plan must be approved by the Commission.

2. **All relevant legal dependencies have been resolved.**

   Any pending legal and regulatory proceedings that impact the ability to perform the test must be concluded in a manner, which allow testing to proceed. Any necessary legal or regulatory approvals must be secured. This includes compliance with all applicable orders in Docket number 6720-TI-160.

3. **The performance measurements to be used in the test are determined.**

   The performance metrics to be used in the test must be determined by the Commission and fully defined. Fully functional Ameritech measurements are required to support collection of test results and to ensure a method exists to monitor on-going compliance. With assistance from the Test Manager, Commission will assess the operational readiness of all required Ameritech measurements and verify that all requirements have been met.

4. **All Ameritech interface capabilities subject to testing at the onset of the evaluation must be operationally ready.**

   Electronic interfaces to OSS access functions of pre-ordering, ordering, provisioning, maintenance and repair, and billing must be operational and in production in order to be tested. (During the test period, additional functionality to be tested may become operational. For these systems and processes, Ameritech will indicate via the CLEC Change Control process when such functionality is operational and in production.)

5. **For transaction tests to begin, construction of the transaction testing systems (including the gateway systems and Test Manager's OSS) must be complete.**

   The Test Manager's interfaces to Ameritech's OSS will be built based on specifications and documentation provided by Ameritech to all CLECs. Acceptance testing by the Test Manager will be necessary to verify that the test systems are capable of communicating with Ameritech's systems. The Test Manager will indicate to Commission when construction of these systems is complete.

Table III-4: Global Entrance Criteria

Criteria	Responsible Party
The Test Plan has been approved.	The Commission
All relevant legal dependencies have been resolved.	Ameritech, The Commission
The performance measurements to be used in the test are determined.	The Commission
All Ameritech interface capabilities subject to testing at the onset of the evaluation must be operationally ready.	Ameritech
For transaction tests to begin, construction of the transaction testing systems (including the gateway systems and Test Manager's OSS) must be complete.	Test Manager, Ameritech

2.0 Global Exit Criteria

Exit criteria are the requirements that must be met before the tests defined in the Test Plan can be concluded. The Exit Criteria must be met prior to KPMG Consulting providing its report to the Commission as described in this MTP.

1. **All test activities required by the MTP must be completed.**

   For each test, all fact finding and analysis activities must be completed. All results and test methodologies have been documented. Any exceptions must be resolved or retesting completed, unless specifically exempted by the Commission.

2. **All change control, verification, and confirmation steps have been completed.**

   The results of test activities must be documented and reviewed for accuracy. Any results that require clarification or follow-up are confirmed.

3. **All negotiated modifications and enhancements are tested.**

   The test will not be considered complete until Ameritech has implemented a series of modifications and enhancements to its OSS (as described in the table below and in Appendix F), and those modifications and enhancements have been tested in the state of Wisconsin. These modifications and enhancements have been negotiated[2] between Ameritech and CLECs in pre-hearing work sessions conducted under the auspices of several state regulatory agencies and at the Federal Communications Commission (Memorandum Opinion and Order, Applications of Ameritech Corp., Transferor, and SBC Communications Inc.,

[2] At this point, Ameritech and the CLECs have agreed that these modifications and enhancements should be implemented, and they have further agreed that the third-party test cannot be deemed complete until these modifications and enhancements have been tested. However, the pre-hearing parties have not yet come to final agreement concerning the specifics of each and every modification and enhancement. Pre-hearing discussions regarding these specifics are ongoing. Per the Order in Docket number 6720-TI-160 dated July 19, 2000, if resolution of these issues cannot be reached, the parties will provide a statement of such issues for inclusion into the temporary Administrative Law Judge's report scheduled to be presented to the Commission by October 2, 2000. The Commission may then take action on the items contained within the report.

Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95 and 101 of the Commission's Rules, CC Dkt. No. 98-141, FCC 99-279, 1999 WL 809551 (rel. Oct. 8, 1999), app. pend. ,sub. nom. Telecommunications Resellers Ass'n v. FCC, Case No. 99-1441 (D.C. Cir.) (*The Merger Order*).

Table III-5: Modifications and Enhancements to be Tested[3]

Type of Modification and Enhancement	Brief Description
Functionalities, processes and procedures to be deployed (Note that letters in parentheses refer to the issue as described in Appendix F)	– Facilities Availability Process (A) – PPR9, TVV4 – Improved Escalation Process Concerning Facility Assignment (A) – PPR9 – Procedures for Requesting and Receiving by Central Office DLC Loop Percentages (A) – N/A – Facility Problem Notification Within 24 Hours of FOC (A) – PPR9, TVV1, TVV4 – Loop Assignment for DSL (C) – PPR9, TVV1, TVV4 – New Firm Order Confirmation (FOC) and Facility Modification Process – Documentation Available (F) – PPR9, TVV4 – New Facility Modification Process – Identify Facility Problems and Notify CLEC of modification or build options (F) – PPR9, TVV4 – New Firm Order Confirmation Process – Incorporate version numbers and reason codes on revised FOCs (F) – TVV1 – Hot Cut Procedures (G) - PPR9, TVV4 – Hot Cut Procedures – Integrated Services Digital Network (ISDN)-xDSL (G) – PPR9, TVV4 – Street Address Guide (SAG) to CSR Conversion (abbreviated validation) (H) – TVV1 – Directory Assistance/Directory Publishing (L) – TVV1 – Provide current SBC documentation on its " Retain Current Listing" process (L) – TVV1 – Provide current AAS documentation on its Order and Query Process via website (L) – N/A – Implement a process to allow CLECs the option to retain current listings, except on partials (L) – TVV1 – Provide interface (or work-around) for integrated directory listings ordering ability (L) – TVV1, TVV4 – E911 Database Management (confirm parity between Ameritech and CLECs regarding use of SAG) (M) – N/A – Customer Premise Access -- Provide Copies of Policy (N) – PPR9 – Replacement of Internal Network Interface Devices (NIDs) (O) – N/A – TC/Net Change Process (P) – PPR1 – LEC Protection (Q) – TVV1 (if offered) – LEC Protection – LOA Policy (Q) – TVV1 (if offered) – Flow Through (S) – TVV3 – Branded Operator Services (W) – PPR9 – Partial Migrations (X) – TVV1 – Account Management Process – Edited Ameritech Handbook (Y) – PPR2 – Account Management Process – Coordination Between Account Team and

[3] To the extent that the processes listed in Table III-5 involve manual pre-ordering or ordering, they will be evaluated as part of PPR7, POP Manual Order Processing Evaluation.

Type of Modification and Enhancement	Brief Description
	Directory Listing and Directory Assistance (Y) - PPR2 - Collocation Ordering, Rates, Auditing and Record Keeping Processes (Z) - PPR6 - LNP 10-Digit Trigger Ordering (AA) - TVV 1
Products and services made available for ordering and provisioning in commercial quantities	- UNE-P (B) - TVV1, TVV4 - Line Sharing (C) - TVV1, TVV4 - Line Splitting (C) - TVV1, TVV4 - Digital Subscriber Line (DSL) (C) - TVV1, TVV4 - Sub-Loops (D) - TVV1, TVV4 - Dark Fiber (E) - TVV1, TVV4 - Enhanced Extended Links (EELS) (V) - TVV1, TVV4
Modifications to Ameritech's OSS and interfaces to provide functionality in conformance with industry standards for Ameritech's machine-to-machine interface and its graphical user interface providing such functionality	- Graphical User Interface (GUI) for Ordering (A, B, C, D) - TVV1, TVV2, TVV3 - Parsed (Fielded) Customer Service Record (CSR) (I) - TVV1 - Service Order Completion Notices (R) - TVV1, TVV4 - Conform To ATIS Standards For Pre-Ordering And Ordering At The Local Service Ordering Guideline, Version 4.0 Level (J & K) - N/A - Accept Full Refresh Supplemental Orders (or mutually agreed upon work around) (T) - TVV1 - Synchronized Pre-Order And Order Data Elements (U) - TVV1 - Enable CLEC Use Of Frame Due Time Specification On UNE Loop Orders (G) - TVV1 - Retain Current Listing On All Order Types (L) - TVV1

4. All negotiated performance measures are tested.

The set of performance measures to be used in the test are being negotiated between Ameritech and CLECs in pre-hearing work sessions conducted under the auspices of the Commission. The measures to be used for this test will include: 1) the baseline measures used in Texas for SBC, 2) measures for any new processes, policies, products or services, and 3) remedy measures currently under discussion in pre-hearing work sessions. The Wisconsin pre-hearing members have set a target date of October 1, 2000 for performance metrics and remedy measures to be raised to the Commission but changes or additions can be made to the set of performance and remedy measures to be tested after October 1 subject to agreement by the pre-hearing and by Commission order. The test will not conclude until (1) Ameritech has implemented the modifications, deletions, and additions to the baseline measures resulting from the pre-hearing (either by agreement of the pre-hearing parties or as otherwise ordered by the Commission) and (2) those modifications, deletions, and additions are encompassed as part of the third-party test and audited. In addition to these global exit criteria, test-specific exit criteria, where applicable, are defined within each test.

Table III-6: Global Exit Criteria

Criteria	Responsible Party
All required test activities must be completed.	Test Manager
All change control, verification, release management and confirmation steps have been completed.	Test Manager
All negotiated modifications and enhancements are tested.	Test Manager, Ameritech, the Commission

Criteria	Responsible Party
All negotiated performance measures are tested.	Test Manager, Ameritech, the Commission

3.0 Evaluation Techniques

Each test relies on one or more techniques to collect and record measurements and analyze the results. The five types of techniques defined for this test are described in the chart below.

Table III-7: Evaluation Techniques

Technique	Description
Transaction Generation	Transaction generation is the use of live, historical, and/or generated data which is executed through the system under review. The results of this test are evaluated for quality.
Report Review	Review and analysis of historical data, reports, metrics, and other information in order to assess the effectiveness of a particular system or business function. This includes performance measurement reports and other management reports.
Inspection	Physical review of process activities and products, including site visits, walk-throughs, read-throughs, and work center observations.
Logging	Monitoring activities and collecting information by logging process events and products as they happen. Logging can be mechanized or manual.
Document Review	Compilation and review of books, manuals, and other publications related to the process and system under study.
Calculation	Verification of company calculations to evaluate accuracy and reconciliation to assure completeness of the data.
Interviews	Examination of processes or results through questioning ILEC or CLEC management and staff.

IV. Performance Metrics Audit Test Section

A. Purpose

The purpose of this section is to define the specific tests to be undertaken in evaluating the systems, processes, and other operational elements associated with Ameritech's support for Performance Metrics (Service Quality Measurements). This will constitute the first annual audit but does not prescribe the scope of any future audits. The performance metrics audit will be initiated as soon as possible. The performance measurements audit will determine if Ameritech has properly implemented the Commission required parity and performance standards measurements, and the reliability of the data. This section defines the specific tests to be undertaken in the audit of performance metrics.

The performance metrics audit test will be conducted using the United States General Accounting Office Government Auditing Standards related to issues of performance audits as applicable to public utilities, as determined by KPMG Consulting in the exercise of its reasonable professional judgment in consultation with the Commission.

B. Organization

The Performance Metrics Review is organized into three test target areas, which represent the key focus areas for testing in this domain. The Performance Metrics scope section contains a series of tables that identify the specific tests to be associated with each target test area. The tables are organized based upon subject test matter.

The subsequent section, Performance Metrics Review "Test Process," provides additional information and tables that further define the testing approach, inputs, outputs, as well as entrance and exit criteria.

C. Scope

The Performance Metrics Review test family is comprised of three test target areas, representing important and generally distinct areas of effort undertaken by Ameritech. The three test target areas are:

- Standards & Definitions
- Data Processing
- Data Retention

Each target test area is further broken down into a number of increasingly discrete Process and Sub Process Areas that serve to identify the test details and procedures.

D. Test Process

Five tests have been designed to address the three test target areas. The organization of the subject test processes is as follows:

PMR1: Data Collection and Storage Verification and Validation Review

PMR2: Metrics Definitions and Standards Development and Documentation Verification and Validation Review

PMR3: Metrics Change Management Verification and Validation Review

PMR4: Metrics Data Integrity Verification and Validation Review

PMR5: Metrics Calculations and Reporting Verification and Validation Review

The three test target areas and five metrics tests will review all of the service quality measures that Ameritech is currently reporting, in part based on requirements of state and federal regulators. The metrics to be used in the test will be determined by the Commission before the test commences. This determination will be based on input from a Work Group consisting of representatives from CLECs active in Wisconsin, Ameritech, and the Commission. When these metrics have been determined, they will be listed in Appendix D.

The metrics tests will involve an examination of both live industry data and, where applicable, data from the test transactions performed by the Test Manager. The tests will involve an investigation of the processes both for developing the metrics and for deriving the standards derived from retail analogs. That is, both CLEC and Retail data will be included in the test.

1.0 Test PMR1: Data Collection and Storage Verification and Validation Review

1.1 Description

This test evaluates key policies and practices for collecting and storing raw and target data necessary for the creation of performance metrics. The procedures both for data used in the calculation of the metrics and data required for the calculation of retail analogs will be included. This test will rely on checklists, document reviews, and inspections.

1.2 Objectives

The objectives of this test are to determine the adequacy and completeness of key policies and procedures for collecting and storing performance data. This test will also evaluate the extent to which Ameritech's operations are consistent with the policies and procedures - i.e., are the policies and procedures being followed consistently.

1.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager

1.4 Test Scope

Table IV-1 Test Target: Data Collection and Storage Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Collection of Data	Collection policies & procedures for CLEC and retail data	Adequacy and completeness of collection policies and procedures	Inspection Document review Report review	Qualitative
	Identification of collection points	Applicability of and measurability from control points	Inspection	Qualitative
	Existence of collection tools	Adequacy and scalability of data collection tools	Inspection	Qualitative
	Internal Controls	Adequacy and completeness of the internal control process	Inspection Document review Report Review	Qualitative
Storage of Data	Storage policies & procedures for CLEC and retail data	Adequacy and completeness of storage policies and procedures	Inspection Document review Report review	Qualitative
	Identification of storage sites	Applicability of and measurability from control points	Inspection	Qualitative

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
	Existence of storage tools	Adequacy and scalability of data storage tools	Inspection	Qualitative
	Internal Controls	Adequacy and completeness of the internal control process	Inspection Document review Report Review	Qualitative

1.5 Scenarios

This test does not rely on scenarios.

1.6 Test Approach

Inputs	Activities	Outputs
– Ameritech Metrics Policies and Processes Documentation – Ameritech Metrics Definition Documentation – Other procedural and technical documentation – Evaluation checklists – Interview guides	– Gather information – Review collection and storage policies and procedures for both CLEC data and data used in calculations of retail analogs – Perform walkthroughs of Ameritech facilities that are relevant to the production of performance measurements – Perform interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

1.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

2.0 Test PMR2: Metrics Definitions and Standards Development and Documentation Verification and Validation Review

2.1 Description

This test evaluates the overall policies and practices for developing and documenting metrics definitions and standards. This would include policies and practices associated with both CLEC and, for standards that are retail analogs, retail measurements. This test will rely on checklists, document reviews and inspections.

2.2 Objectives

The objectives of this test are to determine the adequacy and completeness of key procedures for developing, documenting, and publicizing standards and definitions for performance metrics.

2.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Process evaluation checklist	Test Manager
Interview guides	

2.4 Test Scope

Table IV-2 Test Target: Metrics Definition and Standards Development and, Documentation Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Metrics Definitions	Documentation of Metrics Definitions	Adequacy and completeness of Metrics Definitions	Inspection Document review Report review	Qualitative
	Distribution of Metrics Definitions	Adequacy and completeness of the distribution of the Metrics Definitions	Inspection Document review Report review	Qualitative Qualitative
Standards Definitions	Documentation of Standards Definitions	Adequacy completeness of Standards Definitions	Inspection Document review Report review	Qualitative Qualitative
	Distribution of Standards Definitions	Adequacy and completeness of the distribution of the Standards Definitions	Inspection Document review Report review	Qualitative Qualitative

2.5 Scenarios

This test does not rely on scenarios.

2.6 Test Approach

Inputs	Activities	Outputs
– Ameritech Metrics Development Documentation – Ameritech Metrics Definitions Documentation – Other procedural and technical documentation that may be appropriate – Evaluation checklists – Interview guides	– Gather information – Perform interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

2.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

3.0 Test PMR3: Metrics Change Management Verification and Validation Review

3.1 Description

This test evaluates the overall policies and practices for managing the change of the standards and definitions in the Ameritech metrics and the calculation of the metrics, and the communication of these changes to the Commission and the CLECs. This would include policies and practices associated with both CLEC and, where the standards are retail analogs, retail measurements. This test will rely on checklists, document reviews and inspections.

3.2 Objectives

The objectives of this test are to determine the adequacy and completeness of key procedures for developing, conducting, monitoring, and publicizing change management of the performance metrics. This test will also evaluate the extent to which Ameritech's practices and procedures used to effect change in the performance metrics systems conform to the documented Ameritech change management process for performance metrics.

3.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager
Ameritech's written Change Management Process for performance metrics	Ameritech

3.4 Test Scope

Table IV-3 Test Target: Metrics Change Management Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Change Management	Developing Change Proposals	Completeness and consistency of change development process	Inspection Document review Report review	Qualitative
	Evaluating Change Proposals	Completeness and consistency of change evaluation process	Inspection Document review Report review	Qualitative
	Implementing Change	Completeness and consistency of change implementation process	Inspection Document review Report review	Qualitative
	Intervals	Reasonableness of change interval	Inspection Document review Report review	Qualitative
	Documentation	Timeliness of documentation updates	Inspection Document review Report review	Qualitative
	Tracking Change Proposals	Adequacy and completeness of change management tracking process	Inspection Document review Report review	Qualitative

3.5 Scenarios

This test does not rely on scenarios.

3.6 Test Approach

Inputs	Activities	Outputs
– Ameritech Metrics Policies and Processes Documentation – Other procedural and technical documentation – Evaluation checklists – Interview guides	– Gather information – Perform interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

3.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

4.0 Test PMR4: Metrics Data Integrity Verification and Validation Review

4.1 Description

This test evaluates the overall policies and practices for processing the data used by Ameritech in the production of the reported performance metrics and standards. This test will rely on document reviews, inspections, and sampling of partially converted data. Both CLEC and retail data will be included in the test. In addition, both retrospective data and data derived from the transactions submitted by the Test Manager will be included.

4.2 Objectives

The objective of this test is to determine the integrity of key procedures for processing the data necessary for the production of performance metrics.

4.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager
Preliminary analysis of PMR 5	Test Manager

4.4 Test Scope

Table IV-4 Test Target: Metrics Data Integrity Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Data Integrity	Transfer of data from point(s) of collection	Accuracy, adequacy and completeness of the data transfer process	Inspection Document review Report review Calculation	Qualitative Quantitative
	Conversion of data from raw to processed form	Accuracy, adequacy and completeness of the conversion policies and procedures	Inspection Document review Report review Calculation	Qualitative Quantitative
	Internal Controls	Adequacy completeness of the internal control process	Inspection Document review Report review	Qualitative

4.5 Scenarios

This test does not rely on scenarios.

4.6 Test Approach

Inputs	Activities	Outputs
– Ameritech Metrics Definitions Documentation – Ameritech Metrics Definition Documentation	– Gather information – Perform interviews and documentation reviews – Complete evaluation	– Completed evaluation checklists and interview summaries – Summary report

– Other procedural and technical documentation – Evaluation checklists – Interview guides	checklists and interview summaries – Gather sample of data – Analyze data – Develop and document findings	

4.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

5.0 Test PMR5: Metrics Calculations and Reporting Verification and Validation Review

5.1 Description

This test evaluates the processes used to calculate performance metrics and retail analogs. The test will rely on re-calculating metrics and retail analogs and reconciling any discrepancies to verify and validate the reporting of the metrics. The test will use both retrospective data and data collected by Ameritech from the execution of transactions. This test will also analyze the documentation published by Ameritech about metrics and the consistency between the documentation and the procedures used for calculating metrics. The test will rely on checklists, document reviews, inspections, and standard statistical techniques.

5.2 Objectives

The objectives of this test are to determine the accuracy of recent metrics calculations and to verify that the metrics as produced by Ameritech are consistent with its documentation and stated objectives.

5.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4

5.4 Test Scope

Table IV-5 Test Target: Metrics Calculations and Reporting Review Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Metrics Calculations and Reporting	Accuracy of metrics calculations	Ability to recreate calcuations of metrics values and retail analogs	Calculation	Quantitative

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
	Documentation	Consistency between definitions and metrics calculations programs	Document review	Qualitative

5.5 Scenarios

This test does not rely on scenarios.

5.6 Test Approach

Inputs	Activities	Outputs
– Ameritech definitions and standards as verified by PMR2 – Ameritech's target database as verified and validated by PMR1 – Ameritech Metrics Definition Documentation – Other procedural and technical documentation – Evaluation checklists – Interview guides	– Gather information – Perform interviews and documentation reviews – Complete evaluation checklists and interview summaries – Gather data – Recreate performance metrics from target data – Develop and document findings	– Completed evaluation checklists and interview summaries – Completed performance metrics calculations – Summary report

5.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

V. Processes and Procedures Review Test Section

A. Purpose

The purpose of this section is to define the specific tests to be undertaken in evaluating the systems, processes and other operational elements associated with Ameritech's establishment and maintenance of business relationships with the CLECs. Areas to be evaluated include the provisioning of on-going operational support to CLECs in a manner both adequate to CLEC business needs and comparable to that provided to Ameritech retail operations.

B. Organization

The Processes and Procedures Review "Scope" section contains a series of tables that identify the types of tests to be associated with each Target Test Area and are organized based upon test subject matter.

The subsequent section, Processes and Procedures Review "Test Process," provides additional information and tables that further define the testing approach, inputs (including those from CLECs), outputs, as well as entrance and exit criteria. The tests are grouped to enable an efficient overall test procedure.

C. Scope

The Process and Procedures Review Test family is comprised of Target Test Areas representing important and generally distinct areas of effort undertaken by Ameritech to establish and subsequently support CLECs. These Target Test Areas include:

- Change Management, including ongoing development of CLEC interfaces with Ameritech's OSS, and Ameritech interface testing facilities made available to CLECs
- Release Management
- CLEC Training
- Account Establishment & Management
- Forecasting
- Interface Development
- Network Design, Collocation and Interconnection Planning
- Domain Specific Process Reviews

Each Target Test Area is further broken down into a number of increasingly discrete Process and Sub Process Areas that serve to identify the particular area of interest under test.

Due to the nature of certain manual processes, the evaluations will be conducted in order to achieve a representative sampling. Factors that will be included are:

- Reviews conducted over multiple days
- Reviews conducted at multiple locations, where appropriate
- Reviews conducted with multiple individuals

D. Test Process

Sixteen test processes have been designed to address the seven Test Target areas. The organization of the subject test processes is as follows:

PPR1	Change Management Practices Verification and Validation Review
PPR2	Account Establishment & Management Verification and Validation Review
PPR3	OSS Interface Help Desk Functional Review
PPR4	CLEC Training Verification and Validation Review
PPR5	OSS Interface Development Verification and Validation Review
PPR6	Collocation and Network Design Verification and Validation Review
PPR7	POP Manual Order Processing Evaluation
PPR8	POP Work Center/Help Desk Support
PPR9	Provisioning Process Evaluation
PPR10	Billing Work Center/Help Desk Support Evaluation
PPR11	Daily Usage Feed Returns – Process Evaluation
PPR12	Daily Usage Production and Distribution – Process Evaluation
PPR13	Billing Production and Distribution – Process Evaluation
PPR14	End-to-End M&R Process Evaluation
PPR15	M&R Work Center Support Evaluation
PPR16	Network Surveillance Support Evaluation

1.0 Test PPR1: Change Management Practices Verification and Validation Review

1.1 Description

This test evaluates Ameritech's policies and procedures for managing changes to the OSS interfaces and business processes utilized by CLECs. The change management practices for Ameritech-initiated and CLEC-initiated changes shall be considered. Additionally, data will be reviewed to evaluate change management of a major software release, LSOG 4, from initiation through implementation. Adherence to change management procedures will be monitored, analyzed, and reported throughout the life of the test.

1.2 Objectives

The objectives of this test are to determine the adequacy and completeness of procedures for developing, publicizing, conducting, and monitoring change management.

1.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager

1.4 Test Scope

Table V-1 Test Target: Change Management Practices Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Change Management	Developing Change Proposals	Completeness and consistency of change development process	Inspection Document review Report review	Qualitative
	Evaluating Change Proposals	Completeness and consistency of change evaluation process	Inspection Document review Report review	Qualitative
	Implementing Change	Completeness and consistency of change implementation process	Inspection Document review Report review	Qualitative
	Intervals	Reasonableness of change interval	Inspection Document review Report review	Qualitative
	Documentation	Timeliness of documentation and notification updates.	Inspection Document review Report review	Qualitative
	Tracking Change Proposals	Adequacy and completeness of change management tracking process	Inspection Document review Report review Logging	Qualitative

1.5 Scenarios

This test does not rely on scenarios.

1.6 Test Approach

Inputs	Activities	Outputs
– Ameritech change management process documentation – Other procedural and technical documentation – Ameritech instructions to CLECs for interacting with change management functions and interpreting change management activities – Evaluation checklists – Interview guides – CLEC data and interviews – Change management process artifacts, such as change management meeting notes, change management notifications and updated specifications – CLEC Forum and CLEC User Forum artifacts such as notices of meeting, documents provided by Ameritech to CLECs that outline changes that are to be implemented, specifications and issues for resolution	– Gather documentation and other relevant data – Perform interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

1.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

2.0 Test PPR2: Account Establishment & Management Verification and Validation Review

2.1 Description

This test evaluates Ameritech's policies and practices for establishing and managing CLEC account relationships. Account establishment and management activities such as requests for account manager assistance are included in the scope of this test.

2.2 Objectives

The objectives of this test are to determine the adequacy, completeness, and compliance with procedures for developing, publicizing, conducting, and monitoring account management.

2.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager
Retail analogs	Test Manager/The Commission
Interval standards for account management responsiveness to CLEC requests	The Commission

2.4 Test Scope

Table V-2 Test Target: Account Establishment & Management Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Establishing an Account Relationship	Staffing	Appropriateness of roles and responsibilities	Inspection Document review	Qualitative Parity
		Capacity, coverage, and account allocation	Inspection Document review	Qualitative Parity
Maintaining an Account Relationship	Customer contact	Adequacy and completeness of procedures for responding to customer requests	Interviews Logging Report Review	Qualitative Parity
	Intervals	Responsiveness to customer contacts relative to established interval standards	Inspection Document review	Quantitative
	Escalation	Adequacy, completeness and effectiveness of escalation procedures	Inspection Document review Interviews	Qualitative Parity
	Routine and urgent customer communications	Adequacy and completeness of communication and notification procedures	Inspection Document review Interviews	Qualitative Parity
	Customer documentation	Adequacy and completeness of procedures for developing, distributing, and maintaining customer documentation	Inspection Document review Interviews	Qualitative Parity

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Account Management Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

2.5 Scenarios

This test does not rely on scenarios.

2.6 Test Approach

Inputs	Activities	Outputs
– Ameritech account management procedural documentation – Ameritech instructions to CLECs for interacting with account managers, including escalation policies and procedures – Other procedural, technical and customer documentation – Evaluation checklists – Interview guides – CLEC data (such as documented, independently verifiable account management contacts) – Retail analogs (as applicable)	– Gather documentation and other relevant data – Perform Ameritech and CLEC interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

2.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

3.0 Test PPR3: OSS Interface Help Desk Functional Review

3.1 Description

This test is an evaluation of the Ameritech's help desk functions, which provide technical and system administration support for its OSS interfaces.

3.2 Objectives

The objectives of this test are to:

- Determine adequacy, completeness and consistency of help desk processes
- Ensure help desk functions have effective management oversight
- Determine whether help desk escalation procedures are correctly maintained, documented and published
- Determine the existence and functionality of procedures for measuring, tracking, projecting and maintaining help desk performance
- Ensure existence of reasonable security measures to ensure integrity of help desk data and the ability to restrict access to parties with specific access permissions

3.3 Entrance Criteria

Criteria	Responsible Party
Limited to Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager

3.4 Test Scope

Table V-3 Test Target: OSS Interface Help Desk Functional Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Process Help Desk Call	Resolution of user question, problem or issue	Completeness and consistency of process	Inspection Document review	Qualitative
Close Help Desk Call	Closure posting	Completeness and consistency of process	Inspection Document review	Qualitative
Status Tracking and Reporting	Status tracking and reporting	Completeness and consistency of reporting process	Inspection Document review	Qualitative
Problem Escalation	User and Ameritech initiated escalation	Completeness and consistency of process	Inspection Document review	Qualitative
Capacity Management	Capacity planning process	Completeness and consistency of process	Inspection Document review	Qualitative
Security and Integrity	Data access controls	Security of process	Inspection Document review	Qualitative
Process Management	General management practices	Completeness and consistency of operating management practices	Inspection Document review	Qualitative
	Performance measurement process	Controllability, efficiency and reliability of process	Inspection Document review	Qualitative

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
	Process improvement	Completeness of process improvement practices	Inspection Document review	Qualitative

3.5 Scenarios

This test does not rely on scenarios.

3.6 Test Approach

Inputs	Activities	Outputs
– Procedural documentation (such as internal help desk procedure manuals) – Ameritech instructions to CLECs for interacting with help desk functions – Evaluation checklists – Interview guides	– Gather information – Perform walk-through and documentation reviews – Complete evaluation checklists – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

3.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

4.0 Test PPR4: CLEC Training Verification and Validation Review

4.1 Description

This test evaluates key aspects of Ameritech's training program for CLECs. Activities undertaken while conducting the CLEC Training Verification and Validation Review include conducting interviews, reviewing documentation, and attending a sample of CLEC training classes.

4.2 Objectives

The objectives of this test are to:

- Determine the existence and functionality of procedures for developing, publicizing, conducting, and monitoring CLEC training
- Ensure the CLEC training effort has effective management oversight

4.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4

Criteria	Responsible Party
Process evaluation checklist and interview guides	Test Manager
Retail analogs	Test Manager/The Commission

4.4 Test Scope

Table V-4 Test Target: CLEC Training Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Training Program Development	Develop curriculum	Completeness of training curriculum and forums	Document review Inspection	Qualitative Parity
		Adequacy of procedures to respond to information about training quality and utilization	Document review Inspection	Qualitative Parity
		Adequacy of procedures to accept CLEC input regarding training curriculum	Document review Inspection	Qualitative Parity
	Publicize training opportunities	Availability of information about training opportunities	Document review Inspection	Qualitative Parity
Training Program Quality Assurance	Attendance/ utilization tracking	Adequacy of process to track utilization and attendance of various training tools and forums	Document review Inspection	Qualitative Parity
	Session effectiveness tracking	Adequacy of process to survey training recipients on effectiveness of training	Document review Inspection	Qualitative Parity
	Instructor oversight	Adequacy of procedures to monitor instructor performance	Document review Inspection	Qualitative Parity
Process Management	Performance measurement process	Controllability, efficiency and reliability of process	Inspection Document review	Qualitative Parity
	Process improvement	Completeness of process improvement practices	Inspection Document review	Qualitative Parity

4.5 Scenarios

This test does not rely on scenarios.

4.6 Test Approach

Inputs	Activities	Outputs
– Procedural documentation (such as training manuals) – Ameritech instructions to CLECs for accessing Ameriteh training – Evaluation checklists – Interview guides – Retail analogs (as applicable)	– Gather information – Perform interviews and documentation reviews – Attend CLEC training classes – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

4.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

5.0 Test PPR5: OSS Interface Development Verification and Validation Review

5.1 Description

This test evaluates Ameritech's methods and procedures for developing, providing, and maintaining OSS interfaces for pre-ordering, ordering, maintenance & repair, and billing.

5.2 Objectives

The objectives of this test are to determine the adequacy, consistency and completeness of Ameritech's methods and procedures for developing, providing and maintaining OSS interfaces. The test shall also evaluate the capacity management practices used by Ameritech for its OSS interfaces and gateway systems.

5.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager

5.4 Test Scope

Table V-5 Test Target: OSS Interface Development Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Developing Interfaces	Interface development methodology	Adequacy and completeness of interface development methodology	Inspection Document review Report review	Qualitative

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
	Provision of interface specifications and related documentation	Adequacy and completeness of interface documentation distribution procedures	Inspection Document review Report review	Qualitative
Enabling and Testing Interfaces	Interface enabling and testing methodology	Adequacy and completeness of carrier-to-carrier interface enabling and testing procedures	Inspection Document review Report review	Qualitative
	Availability of test environments and technical support to CLECs	Availability and adequacy of functioning test environments, testing protocols, production cutover protocols and technical support for all supported interfaces	Inspection Document review Report review	Qualitative
	Interface enabling and testing support	Adequacy and completeness of interface enabling and testing procedural documentation	Inspection Document review Report review	Qualitative
Maintaining Interfaces	Release management	Adequacy and completeness of interface enhancement and software release management protocols	Inspection Document review Report review	Qualitative
OSS Interface Capacity Management	Capacity management	Adequacy and completeness of capacity management practices for OSS interfaces and gateway systems	Inspection Document review Report review	Qualitative

5.5 Scenarios

This test does not rely on scenarios.

5.6 Test Approach

Inputs	Activities	Outputs
– Procedural and technical documentation – Ameritech instructions to CLECs for enabling, testing, and maintaining compatibility with	– Gather information – Perform Ameritech and CLEC interviews and documentation reviews – Complete evaluation checklists and interview	– Completed evaluation checklists and interview summaries – Summary report

interfaces – Evaluation checklists – Interview guides – CLEC data and interviews	summaries – Develop and document findings	

5.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

6.0 Test PPR6: Collocation and Network Design Verification and Validation Review

6.1 Description

This test evaluates Ameritech's policies and practices for collocation and network design related to establishing and maintaining CLEC ability to access unbundled network elements. This test also evaluates Ameritech's trunk forecasting process. (This test is not intended to examine interconnection for other purposes, such as an interexchange carrier's network-to-network level interconnection.)

6.2 Objectives

The objectives of this test are to:

- Determine whether CLECs have sufficient information and Ameritech technical support to adequately prepare for and implement network designs and collocations
- Determine whether collocation and network design processes are well structured and managed to produce intended results
- Determine the existence and functionality of procedures for developing, publicizing, conducting, and monitoring trunk forecasting efforts with CLECs
- Verify integration of trunk forecasting procedures with Ameritech facilities planning procedures
- Ensure the trunk forecasting effort has effective management oversight

6.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager

6.4 Test Scope

Table V-6 Test Target: Collocation and Network Design Verification and Validation

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Network design and collocation	Planning	Adequacy and completeness network design and collocation planning processes	Document review Inspection	Qualitative
	Project management	Adequacy and completeness of collocation project management procedures	Document review Report review Inspection	Qualitative
	Resources	Availability and adequacy of resources and qualified technical support to facilitate collocation activities	Document review Report review Inspection	Qualitative
	Testing and implementation	Adequacy and completeness of network design and collocation testing processes	Document review Report review Inspection	Qualitative
Trunk Forecasting	Forecast Development	Adequacy and completeness of trunk forecasting procedures	Document review Inspection	Qualitative
	Forecast Security	Adequacy and completeness of procedures for ensuring confidentiality of CLEC-provided forecast information	Document review Inspection	Qualitative
	Forecast usage	Availability and integration of published trunk forecasts in Ameritech facilities planning process	Document review Inspection	Qualitative
Collocation Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

6.5 Scenarios

This test does not rely on scenarios.

6.6 Test Approach

Inputs	Activities	Outputs
– Procedural and technical – Ameritech instructions to CLECs for planning and implementing network designs and collocations – Evaluation checklists – Interview guides – CLEC data	– Gather information – Perform Ameritech and CLEC interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

6.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

7.0 Test PPR7: POP Manual Order Processing Evaluation

7.1 Description

The POP Manual Order Processing Evaluation is a comprehensive review of the methods and procedures used to handle orders that have been manually submitted or require manual intervention by Ameritech during order processing. Testing will also consider manual processing of CLEC pre-order requests that Ameritech has not mechanized. Operational analysis techniques will be used to conduct this test. It will rely on the development of various checklists to facilitate a structured walk through of the order handling process. Additionally, practices related to the manual processing of orders will be compared with retail practices for parity, to the extent that specific retail analogs are identified.

7.2 Objective

The objective of this test is to validate the processes and procedures used to support manual submission of orders for service and manual processing of electronically submitted pre-order and order transactions.

7.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
Manual Orders Procedures	Test Manager
Interview checklist	Test Manager
Process review checklist	Test Manager
Interview list	Ameritech, Test Manager
Retail analogs	Test Manager/The Commission

7.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating the timeliness, consistency, and accuracy of manual processing of orders.

Table V-7 Test Target: Manual Order Processes

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Receive Orders for Manual Processing	Order Receipt and Logging	Completeness and consistency of process	Inspection Document review	Qualitative Parity
Process Orders Manually	Entry of Order into AMERITECH SERVICE ORDERING SYSTEMS	Completeness and consistency of process	Inspection	Qualitative Parity
Send Order Response	Delivery of error messages and queries	Completeness and consistency of reporting process	Inspection Document Review	Qualitative Parity
	Delivery of confirmations and completions	Completeness and consistency of reporting process	Inspection Document Review	Qualitative Parity
Status Tracking and Reporting	Status tracking and reporting	Completeness and consistency of reporting process	Inspection Document review	Qualitative Parity
Problem Escalation	User-initiated escalation	Completeness and consistency of process	Inspection Document review	Qualitative Parity
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity
Process Management	General management practices	Adequacy and completeness of processing management practices	Inspection Document review	Qualitative Parity
	Performance measurement process	Adequacy and completeness of manual order processing performance management practices	Inspection	Qualitative Parity

7.5 Scenarios

Not Applicable

7.6 Test Approach

Input	Activities	Outputs
– Order handling methods and procedures – Retail analogs (as applicable) – Ameritech listing of order types that are designed to	– Review procedure documents – Interview Ameritech personnel – Monitor / walk through process	– Completed evaluation checklists and interview summaries – Summary report

flow through and the exceptions that would cause the orders to require manual processing – Ameritech listing of pre-order transactions that require manual processing – Evaluation checklists – Interview guides – CLEC data and interviews	– Observe management oversight system – Complete evaluation checklists and interview summaries – Develop and document findings	

7.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

8.0 Test PPR8: POP Work Center Support Evaluation

8.1 Description

The POP Work Center Support Evaluation is a comprehensive operational analysis of the work center/help desk processes developed by Ameritech to support Resellers and CLECs with OSS questions, escalations, problems, and issues related to pre-ordering, ordering, and provisioning. Basic functionality, performance and escalation procedures will be evaluated.

8.2 Objectives

The objectives of this evaluation are to:

- Determine completeness and consistency of work center/help desk processes and responses
- Determine whether the escalation procedure is documented and known to work center agents and management
- Determine the accuracy and completeness of procedures for measuring work center/help desk performance

8.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
Work Center/Help Desk Evaluation Checklist completed	Test Manager
CLEC Feedback Survey completed	Test Manager
POP Problem Response Survey with standard questions completed	Test Manager

8.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating the timeliness, consistency, and accuracy of handling work center and help desk activities related to pre-ordering, ordering, and provisioning performed by Ameritech.

Table V-8 Test Target: POP Work Center/Help Desk Support

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Rasbond to Help Des	nswer call	Completeness and consistency of process	Inspection	Qualitative
	Interface with user	Availability of user interface	Inspection	Qualitative
	Log call	Completeness of logged information Log is kept in appropriate media for appropriate interval	Document Review Inspection	Qualitative
Process Help Desk Call	Access to systems to observe user problems	Ability to access user records and transactions	Inspection	Qualitative
	Resolve user question, problem or issue	Completeness and consistency of process	Documentation Review	Qualitative
Close Help Desk Call	Log closure information	Completeness, consistency, and timeliness of process	Inspection	Qualitative
Monitor Status	Track status	Accuracy and completeness of status tracking capability Availability of jeopardy notification	Inspection Document Review	Qualitative
	Report status	Completeness and consistency of reporting process Accessibility of status report	Inspection Document Review	Qualitative
Request Escalation	Manage escalations	Consistency and completeness of procedure	Document Review Inspection	Qualitative
Manage the Help Desk Process	Provide management oversight	Completeness and consistency of operating management practices	Inspection	Qualitative
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

8.5 Scenarios

Not applicable

8.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation	– Gather information	– Completed evaluation

– Evaluation checklists – Interview guides – Data from the TVV1 test (this data will be the source for the help desk calls) – CLEC data – Retail analogs (as applicable)	– Perform walk-through documentation reviews – Place and log Help Desk calls – Complete evaluation checklists and interview summaries – Develop and document findings	checklists and interview summaries – Summary report

8.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

9.0 Test PPR9: Provisioning Process Evaluation

9.1 Description

The Provisioning Process Evaluation is a parity and evaluative review of the processes, systems, and interfaces that provide provisioning for CLEC and Reseller orders. The test will also review the procedures, processes, and operational environment used to support coordinated provisioning with CLECs. The review will focus on these areas:

- Order interfaces
- Workflow definitions
- Workforce scheduling
- Memory administration
- Service activation
- Test and acceptance
- Exception handling
- Completion notices
- Coordinated provisioning

The focus of the evaluation will be "downstream" interfaces from manual processing and the gateway system that serves as the interface to all order processing.

As appropriate, provisioning processes for different products and services will be evaluated separately. This will be required in those cases where the process and/or systems used for provisioning are different by product.

The evaluation will address products and situations that require coordinated provisioning to minimize customer disruption. The requirement for coordination may come from either Ameritech policy or a CLEC request.

It is assumed that many of Ameritech's provisioning processes and systems for Wholesale and Retail are the same. The Test Manager will verify that equivalent processes and systems are used to provision orders to the extent that parity in these systems is required or asserted by Ameritech. An operational analysis test approach will be used to evaluate Ameritech's coordinated provisioning processes. It will consist of targeted interviews of key development personnel along with structured reviews of process documentation facilitated by an evaluation checklist. Case studies of actual coordination processes will be created or selected from live CLEC situations. Case studies will be selected and tracked to determine the ways in which the processes are carried out.

9.2 Objective

The objectives of this evaluation are to:

- Determine completeness and consistency of provisioning processes and to verify that the processes and systems utilized to provision retail and wholesale orders are in parity
- Determine whether the provisioning processes are correctly documented, maintained and published. For provisioning documents describing processes to be used by CLECS, determine that those documents are made publicly available.
- Determine the accuracy, completeness, and functionality of procedures for measuring, tracking, projecting, and maintaining provisioning processes performance
- Ensure the provisioning coordination processes have effective management oversight, including efforts to avoid problems
- Ensure responsibilities for provisioning coordination processes performance improvement are defined and assigned

9.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
Detailed Provisioning Process Parity Evaluation Checklist developed	Test Manager
Required system documentation available	Ameritech
Provisioning process documentation available	Ameritech
Technical platforms specifications available	Ameritech
Databases specifications available	Ameritech
Data communications and interfaces specifications available	Ameritech
Interview guide/questionnaire developed	Test Manager
CLEC Case Study Request completed	Test Manager
CLEC Case Study Monitoring Form completed	Test Manager
Detailed Provisioning Coordination Process Checklist developed	Test Manager
Interviewees identified and schedule developed	Ameritech, Test Manager
Retail analogs	Test Manager/The Commission

9.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating Ameritech's provisioning systems and processes to the CLECs and resellers.

Table V-9 Test Target: Provisioning Process

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Provisioning Process Parity	Order entry process (Ameritech internal)	Consistency and repeatability as compared to Retail	Inspection	Parity
	Workflow management	Consistency and repeatability as compared to Retail	Inspection	Parity
	Workforce management	Consistency and repeatability as compared to Retail	Inspection	Parity
	Service activation process	Consistency and repeatability as compared to Retail	Inspection	Parity
	Service design process	Consistency and repeatability as compared to Retail	Inspection	Parity
	Assignment process	Consistency and repeatability as compared to Retail	Inspection	Parity
	Service activation/ installation intervals	Consistency with Retail	Inspection	Parity
Support Provisioning Coordination Process	Provision orders requiring coordination with CLECs	Availability of personnel, procedures and methods Completeness and consistency of processes	Document Review Document Review, Inspection	Existence Qualitative
	Request coordination	Completeness and consistency of processes	Document Review, Inspection	Qualitative
	Notification of provisioning schedule	Completeness and consistency of processes Timeliness of notification	Document Review, Inspection Document Review, Inspection	Qualitative Qualitative
	Coordinate provisioning	Completeness and consistency of operating management practice Controllability, efficiency and reliability of process Completeness of process improvement practices	Inspection Inspection Inspection	Qualitative Qualitative Qualitative
Provisioning Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

9.5 Scenarios

Not Applicable

9.6 Test Approach

Inputs	Activities	Outputs

– Procedural and system documentation
– Ameritech product and service ordering and provisioning process flow for complex and simple (i.e. POTS) services
– Interviewees (per process area)
  – Provisioning process owners
  – Provisioning process staff
  – User requirements project leader
– Evaluation checklists
– Interview guides
– Interview schedule
– Appropriate methods and procedures (determined via interviews)
– CLEC case studies
– Retail analogs (as applicable)
	– Gather information
	– Perform Ameritech interviews and documentation reviews
	– Compare and contrast systems used for Wholesale and Retail
	– Review CLEC case study input suggestions
	– Select and record case studies to monitor
	– Inspect physical systems and communications environments
	– Review case studies
	– Complete evaluation checklists and interview summaries
	– Develop and document findings
		– Completed evaluation checklists and interview summaries
		– CLEC case study submission and selection matrix
		– Summary report

9.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6
Ameritech's revised Loop Assignment process	Ameritech
Ameritech's revised Facilities Modification notificaiton process	Ameritech
Ameritech's revised Hot Cut process	Ameritech
Ameritech's revised Firm Order Confirmation (FOC) process	Ameritech

10.0 Test PPR10: Billing Work Center/Help Desk Support Evaluation

10.1 Description

The Billing Work Center/Help Desk Support Evaluation is an operational analysis of the work center/help desk processes and documentation developed by Ameritech to provide support to Resellers and CLECs with usage (Daily Usage Feed) and/or billing related claims, questions, problems and issues. Basic functionality, performance, escalation procedures, and security will be evaluated.

10.2 Objectives

The objectives of this evaluation are to:

- Determine completeness and consistency of work center/help desk processes, documentation and responses.
- Determine whether the escalation procedure is correctly documented, maintained, published and followed.
- Determine the accuracy, completeness, and functionality of procedures for measuring and tracking work center/help desk performance. Determine the accuracy, completeness, and functionality of procedures for projecting resource needs and maintaining work center/help desk performance.
- Ensure accuracy and completeness of reasonable security measures to ensure integrity of work center/help desk data and the ability to restrict access to parties with specific access permissions.
- Ensure the work center/help desk effort has effective management oversight.
- Ensure responsibilities for performance improvement are defined and assigned.

10.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
Ameritech Billing Process and System specialists available for observation and interviews	Ameritech
Work Center/Help Desk documentation identified and available	Test Manager
Retail analogs	Test Manager/The Commission

10.4 Test Scope

The scope of this test includes all processes, sub-processes, and measurements of the Billing Work Center test target, as shown in Table V-12 below.

Table V-10 Test Target: Billing Work Center/Help Desk Support

Process Area	Sub-Process	Evaluation Measur	Evaluation Technique	Criteria Type
Receive Help Desk Call	Answer call	Timeliness of call	Inspections	Quantitative Parity
	Interface with user	Usability of user interface	Inspections	Qualitative Parity
		Availability of user interface	Inspections	Quantitative Parity
	Log call	Existence of call logging	Document Review	Qualitative Parity
		Accuracy of call logging	Inspections	Quantitative Parity

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
	Record severity code	Compliance of call logging - severity coding	Inspections	Qualitative Parity
Process Help Desk Call	Resolve user question, problem or issue	Completeness and consistency of process	Documentation Review, inspections	Qualitative Parity
		Accuracy of response	Inspections	Quantitative Parity
Receive Claim	File claim	Completeness and consistency of process	Documentation Review, inspections	Qualitative Parity
		Accuracy of response	Inspections	Quantitative Parity
	Process claim	Completeness, consistency, and timeliness of process	Inspections, report review	Qualitative Parity
	Issue adjustment when necessary	Completeness and consistency of process	Documentation review, inspection	Qualitative Parity
	Disposition claim	Accuracy, completeness and reliability of disposition report	Inspections, report review	Quantitative Qualitative Parity
Close Help Desk Call	Post closure information	Completeness, consistency, and timeliness of process	Inspections	Qualitative Parity
		Accuracy of posting	Inspections, report review	Quantitative Parity
Monitor Status	Track Status	Existence of status tracking capability	Inspections	Existence Parity
		Consistency and frequency of follow-up activities	Document Review	Qualitative Parity
		Availability of jeopardy notification	Document Review	Quantitative Parity
	Report Status	**Completeness and consistency of reporting process**	Inspections, report review	Qualitative Parity
		Accuracy and timeliness of report	Inspections, report review	Quantitative Parity
		Accessibility of status report	Inspections	Quantitative Parity
Request Escalation	Identify escalation procedure	Existence of procedure	Document Review	Existence Parity

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
	Evaluate escalation procedure	Completeness of the procedure	Document Review	Qualitative Parity
		Consistency of the process	Inspection	Qualitative Parity
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity
Provide Security and Integrity	Provide secured access	Completeness and applicability of security procedures, profiles, and restrictions	Document Review, Inspections	Qualitative Parity
		Controllability of intra-company access	Document Review, Inspections	Qualitative Parity
Manage the Help Desk Process	Provide management oversight	Completeness and consistency of operating management practices	Inspections	Qualitative Parity
		Controllability, efficiency and reliability of process	Inspections	Qualitative Parity
		Completeness of process improvement practices	Inspections	Qualitative Parity

10.5 Scenarios

Not applicable.

10.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – Data from the TVV8 and TVV9 tests (this data will be the source for the help desk calls) – CLEC data – Retail analogs (as applicable)	– Gather information – Perform walk-through documentation reviews – Place and log Help Desk calls – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

10.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

11.0 Test PPR11: Daily Usage Feed Returns – Process Evaluation

11.1 Description

The Daily Usage Feed Returns Process Evaluation is an operational analysis of the usage return process and related documentation used by Ameritech to accept, investigate and where necessary, correct Daily Usage Feed return requests from CLECs.

11.2 Objectives

The objective of this evaluation is to determine the accuracy (usage is complete and correctly identified), completeness and timeliness of the processes and documentation used to process and respond to Daily Usage Feed Return requests.

11.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
Documentation on Daily Usage Feed Returns Process available	Ameritech
Interview and walk-through arrangements finalized	Ameritech
Retail analogs	Test Manager/The Commission

11.4 Test Scope

The scope of this test includes the processes, sub-processes and measurements listed in the Table V-11 below.

Table V-11 Test Target: Daily Usage Feed Returns – Process Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Process Daily Usage Feed Returns Requests	Returned usage receipt	Completeness and accuracy of documentation and processes for creating, submitting and receiving returned usage	Inspections	Qualitative Parity
	Returned usage processing	Accuracy, completeness and timeliness of corrections	Inspections	Qualitative Parity
	Provision of status for all returned records	Accuracy, completeness and timeliness of status report	Inspections, report review	Qualitative Parity
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

11.5 Scenarios

Not applicable.

11.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – CLEC data – Availability of CLEC to initiate a DUF return – Retail analogs (as applicable)	– Gather information – Perform Ameritech and CLEC interviews and documentation reviews – Arrange and conduct CLEC DUF returns (if available) – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

11.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

12.0 Test PPR12: Daily Usage Production and Distribution - Process Evaluation

12.1 Description

The Daily Usage Production and Distribution Process Evaluation is an operational analysis of the processes and documentation used by Ameritech to create and transmit the Daily Usage Feed (DUF).

12.2 Objectives

The objective of this test is to determine the accuracy, completeness and timeliness of processes used to produce and distribute the DUF.

12.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
Documentation on subject processes available	Ameritech
Interview and walk-through arrangements finalized	Ameritech
Retail analogs	Test Manager/The Commission

12.4 Test Scope

The scope of this test includes the processes, sub-processes and measurements listed in the Table V-12 below.

Table V-12 Test Target: Daily Usage Production and Distribution – Process Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Produce Daily Usage Feed	Balancing and reconciliation of Daily Usage feed.	Completeness of balancing and reconciliation procedures	Inspections	Qualitative Parity
	Route Daily Usage	Controllability of usage	Inspections	Qualitative Parity
Transmit Daily Usage Feed	Data transmission and cartridge tape delivery to CLEC	Completeness, consistency and timeliness of the process	Inspections	Qualitative Parity
Maintain and Re-transmit Usage History	Create Daily Usage backup	Reliability of repeatable process	Inspections	Qualitative Parity
	Retrieve and re-transmit Daily Usage backup data	Availability and timeliness of prior period usage data to CLEC	Inspection	Qualitative Parity
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

12.5 Scenarios

Not applicable.

12.6 Test Approach

	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – CLEC data – Availability of CLEC to request re-transmission of DUF data – Retail analogs (as applicable)	– Gather information – Perform Ameritech and CLEC interviews and documentation reviews – Arrange and conduct DUF data re-transmissions (if available) – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

12.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

13.0 Test PPR13: Bill Production and Distribution - Process Evaluation

13.1 Description

The Bill Production Process Evaluation is an operational analysis of the processes employed by Ameritech to produce and distribute carrier bills.

13.2 Objectives

The objective of this test is to determine whether the processes employed by Ameritech to produce and distribute carrier bills ensure that those bills are accurate (charges are complete and correctly identified on the bill) and are distributed to CLECs on a timely basis. The processes that enable a CLEC to request and obtain copies of previously received bills are also tested. Additionally, the bill production and distribution processes will be compared with retail practices for parity, to the extent that specific retail analogs are identified.

13.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
Documentation on subject processes available	Ameritech
Interview and walk-through arrangements finalized	Ameritech
Retail analogs	Test Manager/The Commission

13.4 Test Scope

The scope of this test includes the processes, sub-processes and measurements listed in the Table V-13 below.

Table V-13 Test Target: Bill Production and Distribution - Process Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Balance Cycle	Define balancing and reconciliation procedures	Completeness and effectiveness of bill balancing and reconciliation procedures	Inspections	Qualitative Parity
	Produce Control Reports	Completeness and accuracy in generation of control elements	Inspections	Qualitative Parity
	Release cycle	Compliance to balancing and reconciliation procedures	Inspections	Qualitative Parity
Deliver Bill	Delivery of bill media	Timeliness and controls of media delivery	Inspections	Qualitative Parity
Maintain Bill History	Maintain billing information	Timeliness and controllability of billing information	Inspections	Qualitative Parity
	Access billing information	Accessibility and availability of billing information	Inspections	Qualitative Parity

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Request Resend		Timeliness and accuracy of the delivery	Inspections	Qualitative Parity
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

13.5 Scenarios

Not applicable.

13.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – Retail analogs (as applicable)	– Gather information – Perform Ameritech and CLECobservations, interviews and documentation reviews – Conduct process observations and interviews. Daily Usage Feed Return testing should include tracing transactions back to the CLEC bill. Ameritech should produce a summary detail bill that will allow the CLEC to reconcile credits for usage returned. – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

13.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

14.0 Test PPR14: End-to-End M&R Process Evaluation

14.1 Description

This test will evaluate the functional equivalence of M&R processing for wholesale and retail trouble reports, by reviewing and evaluating the wholesale and retail process flow, including both manual and automated processes.

14.2 Objective

The objectives of this test are to evaluate Ameritech's wholesale M&R process, and the equivalence of Ameritech's end-to-end processes for trouble reporting and repair of retail and wholesale services. The end-to-end maintenance and repair process also will be compared with retail practices for parity, to the extent that specific retail analogs are identified.

14.3 Entrance Criteria

Criteria	Responsible Party
Global entrance criteria have been satisfied	See Table III-4
Wholesale & Retail M&R process flow documentation	Ameritech
Process Evaluation Checklists	Test Manager
Interview Guides	Test Manager
Retail analogs	Test Manager/The Commission

14.4 Test Scope

Table V-14 Test Target: End-to-End M&R Process Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
End-to-End M&R Process: Resale	Process Flow Documentation	Comparison with Retail	Inspection	Parity
	Trouble Ticket Entry	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity
	Trouble Ticket Assignment	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity
	Trouble Handling Methods & Procedures	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity
End-to-End M&R Process: UNE/UNE Combinations	Process Flow Documentation	Comparison with Retail	Inspection	Parity
	Trouble Ticket Entry	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity
	Trouble Ticket Assignment	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity
	Trouble Handling Methods & Procedures	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

14.5 Scenarios

This test does not rely on scenarios.

14.6 Test Approach

	Activities	Outputs
– Retail and wholesale M&R process flow documentation – Other applicable documentation – Evaluation checklists – Interview guides – Retail analogs (as applicable)	– Gather information – Review and compare wholesale and retail process flows – Indentify differences between the two processes – Analyze the process – Assess the potential impact of each difference if possible – Document process flow analysis results – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

14.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

15.0 Test PPR15: M&R Work Center Support Evaluation

15.1 Description

The M&R work center support evaluation is an operational analysis of the work center/help desk processes developed by Ameritech to provide support to CLECs with questions, problems, and issues related to wholesale trouble reporting and repair operations.

15.2 Objective

The objective of this test is to evaluate the effectiveness of M&R work center support operations and adherence to common support center/help desk procedures. An additional objective is to analyze the nature and frequency of problems referred to the work center to determine if they indicate potential problems in other M&R Domain areas.

Specifically, this evaluation is designed to:

- Determine adequacy, completeness and consistency of work center/help desk processes and procedures
- Determine whether expedite and escalation procedures are correctly documented and work effectively
- Ensure existence of reasonable security measures to ensure integrity of work center/help desk data and the ability to restrict access to parties with specific access permissions
- Determine the timeliness and accuracy in identifying and resolving problems
- Determine the existence and functionality of procedures for measuring, tracking, projecting and maintaining work center/help desk performance
- Determine the existence of Maintenance and Repair coordination processes and procedures, and other operational elements associated with M&R coordination activities between Ameritech and CLEC operations organizations

15.3 Entrance Criteria

Criteria	Responsible Party
Global entrance criteria have been satisfied	See Table III-4
Process Evaluation Checklist	Test Manager
Interview Guides	Test Manager
Required data and documentation provided	Ameritech

15.4 Test Scope

Table V-15 Test Target: Work Center Support Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Call Processing	Call Answer	Timeliness	Inspections Logging Interviews	Qualitative
	Call Logging	Accuracy Completeness Consistency	Inspections Logging Interviews	Qualitative
	Prioritization	Existence Effectiveness	Inspections Logging Interviews	Qualitative
Problem Tracking and Resolution	Documentation	Clarity Accuracy	Document Review Interviews	Qualitative
	Identify and Resolve	Timeliness Accuracy Completeness Consistency	Inspections Logging Interviews	Qualitative
	Track Problem	Existence Accuracy	Inspections Logging Interviews	Qualitative

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
	Log Status and Close	Accuracy Completeness Consistency	Inspections Logging Interviews	Qualitative
	Notify Customer	Timeliness	Inspections Logging Interviews	Qualitative
Expedite/ Escalation Procedures	Documentation	Existence Adequacy Accuracy	Document Review Interviews	Qualitative
	Call Answer	Accessability Timeliness	Inspections Logging Interviews	Qualitative
	Escalation Logging	Accuracy	Inspections Logging Interviews	Qualitative
	Identify and Resolve	Timeliness	Inspections Logging Interviews	Qualitative
	Log Status and Close	Accuracy	Inspections Logging Interviews	Qualitative
	Notify Customer	Timeliness	Inspections Logging Interviews	Qualitative
Work Center Procedures		Accuracy Completeness	Inspections Logging Interviews	Qualitative
Joint Meet Procedures	Process Documentation	Accuracy Completeness	Interviews Document Review	Qualitative
	Notification Procedures	Timeliness Accuracy	Interviews	Qualitative
Coordinated Testing	Process Documentation	Accuracy Completeness	Interviews Document Review	Qualitative
	Notification Procedures	Timeliness Accuracy	Interviews	Qualitative
Manual Handling – Resale		Accuracy Timeliness Consistency	Observation Logging Interviews	Qualitative
Manual Handling – UNE/UNE Combinations		Accuracy Timeliness Consistency	Observation Logging Interviews	Qualitative
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

15.5 Scenarios

This test does not rely on scenarios.

15.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – Workcenter contact logs – Ameritech notification procedures for coordinated repair meetings and coordinated repair testing	– Gather information – Conduct Maintenance and Repair center visits – Conduct work center/help desk evaluations – Establish work center contact logs – Analyze and collate contacts by type – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Contact analysis results report – Summary report

15.7 Exit Criteria

Criteria	Responsible Party
Global exit criteria have been satisfied	See Table III-6

16.0 Test PPR16: Network Surveillance Support Evaluation

16.1 Description

The network surveillance support evaluation is a review of the processes and other operational elements associated with Ameritech's network surveillance and network outage notification processes and procedures as they relate to wholesale operations.

16.2 Objective

The objective of this test is to determine the functionality of network surveillance and network outage notification procedures and to assess the performance capabilities of network outage notification procedures for wholesale operations.

16.3 Entrance Criteria

Criteria	Responsible Party
Global entrance criteria have been met	See Table III-4

16.4 Test Scope

Table V-16 Test Target: Network Surveillance Support Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Network Surveillance	IOF Surveillance	Existence Reliability	Inspection	Existence Qualitative

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
	AIN Interconnect Surveillance	Existence Reliability	Inspection	Existence Qualitative
	SS7 Interconnect Surveillance	Existence Reliability	Inspection	Existence Qualitative
Outage Notification	Process Documentation	Accuracy Completeness	Inspection	Qualitative
	Notification Procedures	Timeliness Accuracy Completeness	Inspection	Qualitative

16.5 Scenarios

This test does not rely on scenarios.

16.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – Workcenter contact logs – Documentation of all notification and network surveillance procedures for wholesale	– Gather information – Conduct documentation review and procedure interviews – Conduct process analysis – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Contact analysis results report – Summary report

16.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria have been satisfied	See Table III-6

VI. Transaction Verification and Validation Test Section

A. Purpose

The purpose of this section is to describe the specific tests to be undertaken in evaluating the systems, and other operational elements associated with Ameritech's support for machine-to-machine, manual, and GUI (graphical user interface) transactions. The tests are designed to evaluate Ameritech's compliance to measurement agreements, ensure documented functionality exists and works properly, and provide a basis for comparing the operational areas to Ameritech's Retail Operations.

B. Organization

The Transaction Verification and Validation (TVV) test family is organized into three sections that represent the key focus areas for testing in this domain. These three sections are:

- Pre-Ordering, Ordering, Provisioning (POP) Transactions
- Maintenance and Repair (M&R) Transactions
- Billing Transactions

The test targets are further defined in the 'scope' section. The test processes are further defined in the 'test processes' section.

C. Scope

As identified above, the Transaction Verification and Validation test family is comprised of three test sections, representing important and generally distinct areas of effort undertaken by Ameritech. The three test target sections will verify and validate Ameritech's ability to support systems and processes that enable transaction processing.

Each test section is broken down into a number of increasingly discrete Tests, Processes, and Sub-Process Areas that serve a particular area of interest within the test section.

D. Test Processes

Nine tests have been designed to address the three test sections. The organization of the subject test processes is as follows:

TVV1: POP Functional Evaluation

TVV2: POP Volume Performance Tests

TVV3: Order Flow-Through Evaluation

TVV4: Provisioning Verification and Validation

TVV5: M&R Functional Evaluation

TVV6: M&R Performance Evaluation

TVV7: End-to-End Trouble Report Processing

TVV8: Billing Functional Usage Evaluation

TVV9: Functional Carrier Bill Evaluation

1.0 Test TVV1: POP Functional Evaluation

1.1 Description

The POP Functional Evaluation is a comprehensive review of all of the functional elements of Pre-Ordering, Ordering, and Provisioning; the achievement of the prescribed measures; and an analysis of performance in comparison to Ameritech's Retail systems. The Test Manager will examine Ameritech's conformance with its documented specifications, and an analysis of its functional comparison to Ameritech's Wholesale and Retail systems. The test has two phases, a basic functional evaluation, and a comparative functional evaluation.

The test will include the submission of live transactions over three types of Ameritech-supported interfaces: 1) interactively via all available forms of graphical user interfaces (GUIs), 2) machine-machine interfaces (such as EDI and Common Object Request Broker Architecture (CORBA)), and 3) manually.

The following table depicts examples of systems with which each interface is expected to be tested.

Table VI-1 Interfaces to be Tested

	Pre-Order			Order		
System	**GUI**	**Machine-Machine**	**Manual**	**GUI**	**Machine-Machine**	**Manual**
GUI (TCNet and Web Toolbar for Pre-Order; Web Toolbar, Telis PC (ASR), Telis UNIX (ASR) for Order)	X			X		
Machine-Machine (Corba to Datagate, EDI to AEMS for Pre-Order; EDI to MOR, Direct:Connect (ASR) for Order)		X			X	
Manual			X			X

The machine-machine interfaces will be tested using interfaces built by/for the Test Manager according to specifications and processes provided to CLECs by Ameritech. The GUI will be tested through transactions entered directly into the TC Online interface. Manual transactions will be submitted as well.

Data on all of the POP processes will be collected and analyzed and used to produce the output reports. The POP Functional Evaluation will look at an end-to-end view of the pre-ordering through provisioning process. It will include a mix of stand-alone pre-ordering and ordering transactions, along with pre-order transactions followed by orders, supplements, and cancels. The Test Manager will collect data on transaction submissions and responses, and on provisioning activities. Where possible and appropriate, this information will be collected and maintained electronically. Both ASR and LSR orders will be tested. Erred as well as error free transactions will be tested. Not all orders will go through the physical provisioning process.

Some will be future dated, and others will be canceled before provisioning activities commence. The verification and validation of the provisioning activities will be performed in TVV4.

As part of the POP Functional Evaluation, the Test Manager will also seek qualitative input and quantitative data on the "real world" experience of CLECs operating in Wisconsin. CLECs willing to participate in this test will be interviewed and their experiences will be incorporated into the test results after validation by the Test Manager. In addition, for some types of transactions, involvement will be sought from willing CLECs to participate in some aspects of the live transaction testing. CLEC participation will be important for complex orders that cannot be simulated adequately in the test environment. Examples include complex facilities-based orders, and orders like those for unbundled loops with LNP which require an actual CLEC switch to fully complete. Since it is important to attempt to incorporate information to help control for "experiment bias" of the results, the Test Manager will ask CLECs for data that can be validated on live orders that replicate those sent over the test systems. As appropriate, some test orders may be sent over CLEC systems.

1.2 Objective

The objective of this test is to validate the existence, functionality, and behavior of the interfaces and processes required by Ameritech for pre-ordering, ordering, and provisioning transaction requests and responses. The test will evaluate the performance of the Ameritech interfaces and systems according to the performance metrics that are relevant for the pre-order and order transactions.

1.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
Interfaces are built and tested	Test Manager
Ameritech Interfaces are "certified" by Ameritech	Ameritech
Initial Ameritech measurement evaluation completed	Test Manager, The Commission
Ameritech measurements available at the CLEC level	Ameritech
Measurement collection process is defined	Test Manager
Dial-up connectivity to GUI interface established	Test Manager, Ameritech
Product descriptions and business rules for all transactions to be tested are available.	Ameritech
Test bed databases and facilities in place	Ameritech
CLEC test volunteers identified	Test Manager
Test Scenarios developed	Test Manager
Test Cases developed	Test Manager
Specific Test Cases to test in conjunction with CLEC volunteers identified	Test Manager
Functional Checklist created	Test Manager
Specific Evaluation techniques developed	Test Manager
Evaluation Criteria defined and approved	Test Manager
Detailed "Go/No Go" checklist created	Test Manager
Help Desk log and contact checklists created	Test Manager

1.4 Test Scope

Ordering transactions consists of three distinct, but related, processes:

- Pre-Order Processing—submission of requests for information required to complete orders;
- Order Processing—submission of orders required to add/delete/change a customer's service; and
- Provisioning—physical work performed by Ameritech as a result of the submitted orders.

The Ordering Transactions test suite will be comprised of "real-life", end-to-end test cases that cover the entire spectrum of pre-order, order, and provisioning. The following order types will be tested:

- Migrate "as is"
- Migrate "as specified"
- New customer
- Feature Change
- Directory Change
- Number Change
- Add lines
- Suspend/Restore
- Disconnect (full/partial)
- Move (inside/outside)
- Number Portability (LNP)
- Line reclassification
- Change to New Local Service Provider
- UNE Loop Cut Over

The order types identified above will be ordered using the available and applicable Ameritech service delivery methods. The following service delivery methods will be tested:

- Resale
- Unbundled Loops
- UNE Platform
- EELs
- Other Unbundled Network Elements, including xDSL capable Loops
- Any other service delivery methods that may become available at the time of the test

The orders will be placed using Ameritech's existing interfaces: GUI, machine-machine, and manual. The following assumptions pertain to ordering interfaces:

- Orders and pre-orders will be sent over every applicable in-scope interface,
- Orders will be issued using both the ASR and LSR format, as appropriate, and
- The GUI will be tested from multiple terminals at the same time.

Other important aspects of ordering will be tested:

- "Flow through" order types, as stated and agreed-to by Ameritech, will be tested to ensure that they do not require manual handling,
- Supplemental orders (changes to orders in process), including cancels, will be tested,
- Multiple products and features will be tested; the tests will cover a broad range of the options available to CLECs and resellers,
- Multiple switch-types, end-offices and cities will be included in the test,
- A portion of the orders sent will be physically provisioned. Some orders will be future dated, allowing them to be canceled prior to work scheduling and provisioning,
- CLECs will be solicited for involvement in some aspects of the test, especially for assistance in the testing of complex services and services with long lead times,
- Data returned in pre-order responses will be analyzed to assess its usability in formatting and submitting order requests.
- In addition to normal orders, orders with planned errors will be sent to Ameritech to check the accuracy of its system edits and LSC (Local Service Center) representatives.

Service locations supported by different Ameritech ordering, provisioning, and CO switching and transmission configurations will be tested.

The test will be conducted using the most current release of the Ameritech business rules at the time of the test. Any Ameritech updates to these rules released during the test period will be incorporated into the remaining orders, which may cause delays. In addition, any interface business rules and format changes necessitated during the course of the test to conduct the test scenarios stated in Appendix A, and which may lead to a Change Control initiative, will be included in the test transaction formats.

Documentation affecting the POP domain given to the CLECs and the resellers - training materials, interface guidelines, business rules, and other appropriate documentation - will be used to submit the transactions, and the accuracy and usefulness of this documentation will be evaluated.

The following chart (applicable to TVV1, TVV2, TVV3, and TVV4) contains the processes and sub-processes that will be used in evaluating Ameritech's pre-ordering, ordering, and provisioning functionality and performance:

Table VI-2 POP Processes

Process Area	Sub-Process
Pre-ordering	Retrieve customer CSR from Customer Information Systems
	Validate Customer Address
	Reserve and release telephone numbers
	Request information about services, features, facilities, and PIC/LPIC choices available to customers
	Determine due date/appointment availability
	Inquire about order status
	Inquire about Network Channel/Network Channel Interface codes (NC/NCI codes)
	Inquire about Connecting Facility Assignment (CFA)
	Request Loop Makeup Information
	Inquire about Working Telephone Number (WTN)
Ordering	Submit an order for the migration of a customer from Ameritech to a CLEC "as is"
	Submit an order for the migration of a customer from Ameritech to a customer "as specified"
	Submit an order for the partial migration of a customer from Ameritech to a CLEC
	Submit an order for establishing service for a new customer of a CLEC
	Submit an order for feature changes to an existing CLEC customer
	Submit an order for adding lines/circuits to an existing CLEC customer.
	Submit an order for a telephone number change for an existing CLEC customer
	Submit an order for a directory change for an existing CLEC customer
	Submit an order for an inside move of an existing CLEC customer
	Submit an order for the outside move of an existing CLEC customer
	Submit an order for suspending service of an existing CLEC customer
	Submit an order for restoring service to an existing CLEC customer
	Submit an order for disconnecting service from an existing CLEC customer
	Submit an order for disconnecting some lines/circuits for an existing CLEC customer
	Submit an order for migration of a customer from another CLEC
	Change service delivery method for an existing CLEC customer
	Order interoffice facilities
	Submit an order to convert a customer to a line shared Loop
	Receive order confirmation
Provisioning	Receive notification of jeopardy or delay
	Receive completion notification

Ameritech's pre-ordering, ordering, and provisioning functionality and performance:

Table VI-3 POP Evaluation Measures

Evaluation Measure	Evaluation Technique	Criteria Type
Pre-ordering and Ordering		
Clarity, accuracy and completeness of documentation	Document Review, Transaction Generation	Qualitative Quantitative
Accessibility of GUI (excluding Interoffice facilities)	Transaction Generation	Quantitative

Evaluation Measure	Evaluation Technique	Criteria Type
Accessibility of machine-machine (excluding Interoffice Facilities)	Transaction Generation	Quantitative
Accessibility of manual processing (exclusing Interoffice facilities)	Transaction Generation	Quantitative
Accuracy and completeness of functionality	Transaction Generation	Quantitative
Timeliness of response	Logging	Quantitative
Accuracy and completeness of response	Transaction Generation, Inspection	Qualitative Quantitative
Clarity and accuracy of error messages	Transaction Generation, Inspection, Document Review	Qualitative Quantitative
Accuracy, responsiveness, and completeness of Help Desk support	Transaction Generation, Logging	Qualitative Quantitative
Usability of information	Transaction Generation, Inspection	Qualitative
Consistency with retail capability	Inspection	Qualitative Quantitative
Consistency between data returned on pre-order responses and that required on order requests	Inspection	Qualitative
Provisioning		
Timeliness of provisioning	Transaction Generation, Inspection, Logging	Quantitative Qualitative
Frequency of delay or rescheduling of provisioning	Transaction Generation, Inspection, Logging	Quantitative Qualitative
Accuracy and completeness of provisioning	Transaction Generation, Inspection, Logging	Quantitative Qualitative

1.5 Scenarios

The specific pre-order and order scenarios to be used in this test can be found in Appendix A.

1.6 Test Approach

Inputs	Activities	Outputs
– Test scenarios and cases – Test case execution schedule – Certified interfaces – Documentation (order/pre-order business rules, etc.) – Trained personnel to execute test cases – Test "Go/No Go" checklist – Help Desk log and contact checklists	– Determine functionality of both Ameritech wholesale and retail ordering, preordering, and provisioning systems – Compare wholesale and retail functionality – Use test cases to develop transactions and transaction content based upon instructions provided in the appropriate handbook(s) – Interview CLEC volunteers and coordinate joint testing activities – Attend CLEC training classes	– A Summary report comparing the relative functionality of Ameritech's Wholesale and Retail ordering, preordering, and provisioning systems – Reports that provide the metrics to support the standards of performance defined in Appendix D – Variance between actual performance and the standards of performance defined in Appendix D – Report of expected results versus actual test case results

	as appropriate – Submit transactions. Submittal date and time and appropriate transaction information logged – Receive transaction responses. Receipt date, time, response transaction type, and response condition (valid vs. reject) logged – Match transaction response to original transaction – Verify transaction response contains expected data and flags unplanned errors – Manually review unexpected errors. Identify error source (the Test Manager, or Ameritech). Identify and log reason for the error. Determine if test should be discontinued – Contact help desk for support as indicated in test cases and for unexpected errors following the appropriate resolution procedures. Log response time, availability, and other behavior of functions as identified on the help desk checklist – Correct expected errors and resubmit. Re-submittal date, time, and appropriate information logged – Identify transactions for which responses have not been received. Where multiple responses are expected for the same request, the receipt of each response will be monitored – Record missing responses – Review status of pending orders. Verify and record accuracy of response – Generate Systems/interface reports – Generate Ameritech metrics report for test date range – Compare Test systems/interface metrics to Ameritech retail metrics – Develop and document findings	– Unplanned error count by type and percentage of total – Report of unplanned errors as the result of documentation problems – Rejects received after confirmation notification and percentage of total – Transaction counts, error ratio, response time, etc., by transaction type, product family, and delivery method – Minimum, maximum, mean, average, and aggregate response time/interval per transaction set – Transaction counts per response time/interval range per transaction set – Orders erred after initial confirmation – "Flow through" orders by order type, product family, etc. – Completed help desk logs and checklists – Help desk accuracy and timeliness report – Interface measurement reports – Measure of parity performance between retail and wholesale

1.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

2.0 Test TVV2: POP Volume Performance Tests

2.1 Description

The Volume Performance Test will identify the capacity and potential choke points, at projected future transaction volumes, of the Ameritech GUI and machine-machine interfaces and Ameritech systems and processes for responding to pre-ordering queries and for initial processing of orders. There will be three parts to the test: 1) a "normal volume" test using anticipated transaction volumes for available services and products for the time frame as determined by the Commission, with CLEC and Ameritech input, 2) a "peak" test using volumes at 150% (1.5 times) of the normal volume test, and 3) a "stress" test using volumes at 250% (2.5 times) of the normal volume test. The "normal volume", "peak", and "stress" tests will be conducted in Ameritech's production environment. In order to derive the "normal volume" estimate, the Test Manager will solicit forecasts by product type from both Ameritech and CLECs offering service or planning to offer service in the Ameritech footprint.

The Volume Performance Test will look at the performance of Ameritech's pre-ordering and ordering systems and processes from the submission of queries to the creation of internal service orders and the return of an order confirmation. The orders submitted in the Volume Performance Test will not go through the physical provisioning process. The test will include a mix of stand-alone pre-ordering and flow-through ordering transactions. Included in this mix will be planned errors—both business rules errors and flow-through drop-out errors. Transactions will be submitted using the GUI and machine-machine interfaces.

The volume tests will only run on certain days during the testing period. Transactions will be submitted throughout the entire transaction test period via GUI and machine-machine interfaces as part of the POP Functional Evaluation, including the days on which volume tests will be run. The exact timeframe for the volume test will remain unannounced to both Ameritech and the CLECs. There will be two 24-hour "normal volume" days of testing. There will be one 24-hour "peak" test. There will be one 4-hour, off-peak "stress" test. The "stress" test will be run during business, off-peak hours to limit the impact of the test on real customers. All the attributes and activities that apply to the POP Functional Evaluation for pre-ordering and ordering also apply to this test.

2.2 Objective

The objective of the Volume Performance Test is to measure Ameritech's capability and identify potential choke points of the manual, GUI, and machine-machine interfaces and systems put in place to access pre-ordering information and submit orders to Ameritech at projected future volumes.

2.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
All TVV1 entrance criteria	See Table VI-1.3
Agreement on volumes and distribution by scenario and entry mode	Test Manager, The Commission
Test Scenarios selected	Test Manager
Specific Test Cases developed	Test Manager
Test Case execution schedule developed	Test Manager
Resolution and Implementation of Issue S (Flow Through) as documented in PSCW Case No. 6720-TI-160	Commission, Ameritech

2.4 Test Scope

The scope for this test includes the following test processes:

1. Pre-Ordering
2. Order Processing

2.5 Scenarios

The specific pre-order and order scenarios to be used in this test will be chosen from those found in Appendix A.

2.6 Test Approach

Inputs	Activities	Outputs
– Test Cases – Test case execution schedule – Documentation (pre-ordering/ordering business rules, etc.) – Personnel to execute test cases – Test "Go/No Go" Checklist – Help Desk log and contact checklists – Certified interfaces	– Use test cases to develop transactions and transaction content based upon instructions provided in the appropriate handbook(s) – Submit transactions. Submittal date, time and appropriate transaction information are logged – Receive transaction responses. Receipt date, time, response transaction type, and response condition (valid vs. reject) are logged – Match transaction response to original transaction. Verify matching transaction can be found and record mismatches – Verify transaction response contains expected data and flag unplanned errors – Manually review unplanned errors. Identify error source (Test Manager or Ameritech). Identify and log reason for the error. Determine if test should be discontinued – Contact help desk for support as indicated in test	– Reports that provide performance metrics – Contact analysis results report – Variance between actual performance and standards of performance – Report of expected results versus actual results – Unplanned error count by type and percentage of total – Report of Unplanned errors as the result of documentation problems – Transaction counts, error ratio, response time, etc. by transaction type, product family and delivery method – Minimum, maximum, mean, average, and aggregate response time/interval per transaction set – Transaction counts per response time/interval range per transaction set – Orders erred after initial confirmation Completed help desk logs and checklists Help desk accuracy and

	cases and for unexpected errors following the appropriate resolution procedures. Log response time, availability, and other behavior of functions as identified on the help desk checklist – Identify transactions for which responses have not been received. Where multiple responses are expected for the same request, the receipt of each response will be monitored. Record missing responses – Review status of pending orders. Verify and record accuracy of response – Generate gateway systems/interface reports – Compare gateway systems/interface metrics to Ameritech detail metrics – Review gateway systems/interface Ameritech measures – Develop and document findings	timeliness report – Measure of parity performance between retail and wholesale – Summary report

2.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

3.0 Test TVV3: Order "Flow Through" Evaluation

3.1 Description

The Order "Flow Through" Evaluation tests the ability of orders to flow through from the CLEC through the interface into the Ameritech ordering system, without any human intervention. Only orders that qualify as "flow through", orders not needing manual action, will be tested. The list of "flow through" types will be taken from Ameritech's Flow Through and Exceptions document and will be updated during the testing period as appropriate. Additions and deletions to the list will be incorporated into the test.

As appropriate, "flow through" orders will be submitted through the GUI, and machine-machine interfaces. Any supplements and cancels that are considered to be "flow through" will also be submitted. The order transactions will be monitored to verify that they do not "fall out" for manual handling in the Ameritech work center. Orders will also be monitored to ensure

that Firm Order Confirmations are received within the appropriate timeframes as defined in the performance metrics.

As a separate part of this test, the Test Manager will conduct an analysis of the Ameritech retail ordering functionality. Based on this analysis, a comparison of the "flow through" capabilities of the retail and wholesale systems will be made.

This test will be conducted as a part of the POP functional and normal volume testing (TVV1, TVV2).

3.2 Objective

The objective of the Order "Flow Through" Test is to verify the ability of orders to flow through from the CLEC through the interface into the Ameritech ordering system, without any human intervention. This includes all order types that at the time the transactions are submitted as designated by Ameritech or otherwise considered to be "flow through".

3.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-1
All TVV1 entrance criteria	See Table VI-1.3
Documentation specifying which orders are expected to flow through	Ameritech
Test Scenarios selected	Test Manager
Specific Test Cases developed	Test Manager
Test Case execution schedule developed	Test Manager
Resolution and Implementation of Issue S (Flow Through) as documented in PSCW Case No. 6720-TI-160	Commission, Ameritech

3.4 Test Scope

The scope for this test includes the following test processes:

1. Ordering

3.5 Scenarios

The specific order scenarios to be used in this test will be chosen from those that can be found in Appendix A.

3.6 Test Approach

Inputs	Activities	Outputs
– Test Cases and expected results – Test case execution schedule – Interfaces built and certified – Personnel to execute test cases – Test "Go/No Go" Checklist – Ameritech Flow Through	– Compare order flow through capabilities of Ameritech wholesale and retail systems – Submit order transactions. Log submittal date, time and appropriate transaction information – Receive transaction responses. Log receipt date, time, response transaction type, and response condition	– A summary report comparing the order flow through capabilities of Ameritech's Wholesale and Retail systems – Percentage and number of orders that flowed through by order type, product family, etc. – Percentage and number of orders that did not flow

and Exceptions document	(valid vs. reject) – Verify transaction response contains expected data and flags unplanned errors – Identify orders that had manual handling. Identify reason for manual handling. Record manual handling and order attributes – If there was an error that caused the order not to flow through, identify error source (Test Manager or Ameritech). Identify and log reason for the error. Ameritech errors will not be corrected by the Test Manager – Correct any Test Manager errors and re-submit. Verify orders now flow through – Verify that all orders submitted are accounted for. Log any orders that are submitted but do not appear as processed or erred by Ameritech – Generate Ameritech manual handling report – Generate gateway systems/interface reports – Compare gateway systems/interface reports to Ameritech Retail metrics – Develop and document findings	through by order type, product family, etc. – Orders that did not flow through by reason code – Variance between actual performance and the standards of performance defined in various arbitrated agreements – Report of expected results versus actual results – Report of orders not processed – Ameritech manual handling report – Summary report

3.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

4.0 Test TVV4: Provisioning Verification and Validation

4.1 Description

The Provisioning Verification and Validation test is a comprehensive review of Ameritech's ability to complete accurately and expeditiously the provisioning of CLEC orders. This test will be conducted as a part of the POP functional testing (TVV1). It will incorporate orders submitted via the following interfaces: manual, machine-machine, and GUI. While most kinds of orders will be included, the test will concentrate on those types of orders that require physical provisioning.

This test will involve verifying that orders submitted have been properly provisioned and that the provisioning has been completed on time. Included in the test will be orders that have been supplemented and canceled, as well as those submitted with anticipated errors, to test the impact on provisioning.

For some orders, particularly the more complex ones, the involvement of CLECs operating in Wisconsin will be solicited to volunteer use of their facilities to enhance the "real world" nature of the test. The CLECs will also be asked to provide data on their experiences with provisioning, after verification and validation by Test Manager.

4.2 Objective

The objective of this test is to evaluate the ability of Ameritech to accurately provision orders submitted by CLECs and to do so on time.

4.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
All TVV1 entrance criteria	See Table IV-1.3
Test Scenarios selected	Test Manager
Specific Test Cases developed	Test Manager
CLEC volunteers identified	Test Manager
Provisioning log and activity checklists created	Test Manager
Test case execution schedule developed	Test Manager

4.4 Test Scope

The scope for this test includes the following operational reviews:

- UNE Loop migrations (including LNP)
- xDSL installations
- xDSL Line Sharing installations
- Analog, Digital, High Capacity and Interoffice Facility installation
- Disconnect and intercept messaging
- Provisioning completion notice reconciliation
- Directory listing reconciliation
- CSR update reconciliation

4.5 Scenarios

The specific order scenarios to be used in this test will be chosen from those that can be found in Appendix A.

4.6 Test Approach

Inputs	Activities	Outputs
– Test Cases and expected results – Test case execution schedule – Provisioning documentation – Provisioning log and activity checklists – Personnel to execute test cases – Test "Go/No Go" Checklist	– Use test cases to develop transactions and transaction content based upon instructions provided in the appropriate documentation – Attend CLEC training classes as appropriate – Submit machine-machine transactions – Submit GUI and manual transactions – Receive confirmations of transactions – Log notification of provisioning jeopardies and delays – Perform joint provisioning activities and record provisioning interactions – Perform testing on provisioned services – Test completion on orders. Record results in appropriate provisioning log and activity checklist – Generate gateway systems/interface reports – Compare gateway systems/interface metrics with Ameritech retail and other CLECs – Develop and document findings	– Reports that provide the metrics to support standards of performance listed in Appendix D – Variance between actual performance and standards of performance listed in Appendix D – Report of expected results versus actual test case results – Completed provisioning logs and checklists – Help desk accuracy and timeliness report – Provisioning accuracy and timeliness report – Gateway systems/interface to other CLEC comparison – Measure of parity performance between retail and wholesale – Summary report

4.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

5.0 Test TVV5: M&R Functional Evaluation

5.1 Description

The M&R Functional Evaluation is a comprehensive review of all of the functional elements of the Ameritech Wisconsin's M&R Systems, Electronic Bonding Trouble Administration (EBTA) and the publicly provided GUI, their conformance to documented specifications, and an analysis of its functionality in comparison to Ameritech's Retail Residence and Business M&R system. The test has two major phases, Phase 1 — a basic functional evaluation, and Phase 2 — a comparative functional evaluation.

5.2 Objective

The objective of this test is to validate the existence and behavior of M&R functional elements as documented in CLEC M&R Training Guides and other applicable documents, and to evaluate the equivalence of CLEC M&R functionality to Ameritech Residence and Business M&R.

5.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria have been satisfied	See Table III-4
Detailed Test Plan completed	Test Manager
Test Scenarios selected	Test Manager
Specific Test Cases and Transaction Sets developed	Test Manager
Product descriptions and business rules for all transactions to be tested are available	Ameritech
Basic documentation review completed	Test Manager
Detailed Functional Checklist created	Test Manager
Test bed of working services selected and/or established	Ameritech
Specific Evaluation techniques developed	Test Manager
Physical access to Ameritech Web site established	Ameritech
Physical access to Ameritech Web site established	Ameritech
Security access to M&R System established	Ameritech
Evaluation Criteria defined and approved	The Commission
Checklists and Interview Guides created	Test Manager

5.4 Test Scope

CLEC M&R functionality will be reviewed within the context of specific documentation addressing its use and in comparison to Ameritech's retail Residence and Business M&R.

Table VI-4 Test Target: M&R Functional Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Trouble Reporting	Create/Enter Trouble Report (TR)	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Modify TR	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Close/Cancel TR	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Retrieve TR Status	Functionality exists as documented	Inspection	Existence Qualitative Parity
Trouble History Access	Retrieve Trouble History	Functionality exists as documented	Inspection	Existence Qualitative Parity
Access To Test Capability	Initiate MLT Test	Functionality exists as documented	Inspection	Existence Qualitative Parity

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
	Receive MLT Test Results	Functionality exists as documented	Inspection	Existence Qualitative Parity
Functionality	Functional Equivalence to M&R system	Existence of Specific Function	Inspection Interviews	Parity Qualitative

5.5 Scenarios

The specific M&R scenarios to be used in this test will be chosen from those that can be found in Appendix A.

5.6 Test Approach

This test is broken down into two phases:

- Phase 1 involves the use of test cases created for this test to evaluate CLEC M&R functionality and to determine if the system(s) behave(s) as documented.
- Phase 2 involves observation and interviews of Retail Maintenance Administrators (MA) processing trouble calls and entering trouble reports into Residence and Business M&R system to assess functionality in comparison to CLEC M&R.

Inputs	Activities	Outputs
– Test Cases – Documentation – Functionality checklists – Personnel to execute test cases – Personnel to interview Retail Maintenance Administrators and observe their use of Residence and Business M&R	Phase I – Use test cases created for this test and appropriate Ameritech documentation to perform each of the functions listed on the checklist provided via the EBTA M&R interface and GUI systems – Attend CLEC training classes as appropriate – Verify that each system function behaves as documented – Note any anomalies in the space provided on the checklist – Note any discrepancies between M&R documentation and behavior – Ensure that all trouble reports entered in M&R have been canceled Phase II – Use the checklist and interview guide to conduct interviews with MA's selected from the Residence	– Completed checklists from Phases I and II activities – Completed interview summaries – Summary reports of findings from each phase, including a discussion of anomalies and relevant observations relating to usability and timeliness of each system interface – A Summary report comparing relative functionality in CLEC M&R and Retail Residence and Business M&R highlighting differences and contrasting ease of use of the two systems in performing the functions observed – Summary report

	and Business M&R work centers – Observe MA trouble report activities as identified on the checklist provided – Note the presence and behavior of functions identified on the checklist – Identify any anomalies relative to the functions being observed – Note any additional relevant information from the MA interview (e.g., additional capabilities, performance, etc.) – Determine and document any M&R functions that can be performed from a Retail Residence and Business M&R Workstation that are not available in CLEC M&R – Perform a detailed evaluation of relative functionality and capabilities between CLEC M&R and Retail Residence and Business M&R Common Activities – Document the results and findings from the activities conducted in Phases I and II	

5.7 Exit Criteria

Criteria	Responsible Party
Global exit criteria have been satisfied	See Table III-6
All activities completed	Test Manager
Checklists and reports completed by personnel participating in the test.	Test Manager

6.0 Test TVV6: M&R Performance Evaluation

6.1 Description

The M&R Performance Evaluation will identify the capacity and potential choke points at projected future transaction volumes for the Ameritech Maintenance and Repair systems. Both the Electronic Bonding Trouble Administration (EBTA) system, and the publicly available system (GUI) will be tested under load conditions. Both system evaluations will be conducted in three parts. These are: 1) a "normal" volume test suing anticipated M&R transaction volumes for the time frame finalized by the Commission, 2) a "peak" test using volumes at 150% (1.5 times) of the normal volume test and, 3) a "stress" test using volumes at 250% (2.5 times) of the normal volume test. The "normal," "peak," and "stress" tests will be conducted in Ameritech's production environment.

The M&R Performance Evaluation will look at the performance of Ameritech's maintenance and repair systems and processes from the submission of trouble transactions to the receipt of a response. Transactions will be submitted using the machine-machine and GUI interfaces.

6.2 Objective

The objective of this test is to evaluate the behavior of Ameritech's M&R systems under load conditions, to determine system performance in terms of response time and operability, and to identify future performance bottlenecks.

6.3 Entrance Criteria

Criteria	Responsible Party
Global entrance criteria have been satisfied	See Table III-4
Interface has been fully tested and is operational for the submission of test cases	Test Manager
Test transaction sets have been built and validated	Test Manager
Product descriptions and business rules for all transactions to be tested are available.	Ameritech
System test bed has been established	Ameritech
M&R test coordination details have been worked out	Test Manager

6.4 Test Scope

M&R performance will be evaluated under normal projected loads and in a stress/load test mode.

Table VI-5 Test Target: M&R Performance Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Performance	Projected Normal Loads	Timeliness Operability	Inspection Transaction Generation	Qualitative Quantitative
	Stress/Load	Timeliness Operability Capacity	Inspection Transaction Generation	Qualitative Quantitative

6.5 Scenarios

The specific M&R scenarios to be used in this test will be chosen from those that can be found in Appendix A.

6.6 Test Approach

Test transactions will be sent to Ameritech's M&R system. The transaction sets are structured to provide a transaction mix consistent with current system usage, projected normal volumes, and stress/load volumes. Submission rates should mirror peak busy hour and peak busy day behaviors.

Inputs	Activities	Outputs
– Test Cases and transaction	– Feed transaction sets to	– Test execution and

tests – Personnel to operate systems/interfaces – Personnel to supervise and observe test execution – Personnel to execute test cases – M&R systems and associated test beds – Systems/interfaces	Ameritech's M&R system – Observe and capture observations from above in terms of performance and operability – Capture transaction performance statistics via data test generator.	– Observation reports – Systems/interface performance reports – M&R performance reports – Summary report
	– Capture transaction performance statistics via Ameritech's M&R system – Monitor M&R system interfaces to identify any bottleneck conditions (Ameritech system personnel) – Ensure that all generated trouble reports have been canceled/closed – Reset test bed for next test (if required) or clean up production databases (Ameritech) – Execute test once with normal, projected transaction volumes and once with stress/load volumes – Analyze performance reports – Develop and document findings	

6.7 Exit Criteria

Criteria	Responsible Party
Global exit criteria have been satisfied	See Table III-6

7.0 Test TVV7: End-to-End Trouble Report Processing

7.1 Description

This test involves the execution of selected M&R test scenarios to evaluate Ameritech's performance in making repairs under the conditions of various wholesale maintenance scenarios.

7.2 Objective

The objective of this test is to evaluate Ameritech's performance in making repairs under the conditions of various wholesale maintenance scenarios.

7.3 Entrance Criteria

Criteria	Responsible Party
Global entrance criteria have been satisfied	See Table III-4
Test scenarios selected	Test Manager

Criteria	Responsible Party
Product descriptions and business rules for all transactions to be tested are available.	Ameritech
Test-bed circuits provisioned	Ameritech
Faults inserted into test-bed circuits as required by the test scenarios	Test Manager

7.4 Test Scope

Selected M&R test scenarios will be executed to evaluate Ameritech's performance in making repairs under the conditions of various wholesale maintenance scenarios. The following chart contains the processes, sub-processes, and methods for evaluating the End-to-End Trouble Report Processing test:

Table VI-6 Test Target: Execution of M&R Test Scenarios

Process Area	Sub-Process	Evaluation measure	Evaluation Technique	Criteria Type
End-to-End Trouble Report Processing – Resale	M&R Test Scenarios	Accuracy Timeliness	Inspection	Quantitative
End-to-End Trouble Report Processing – UNE/UNE Combinations	M&R Test Scenarios	Accuracy Timeliness	Inspection	Quantitative

7.4 Scenarios

The specific M&R scenarios to be used in this test will be chosen from those that can be found in Appendix A.

7.5 Test Approach

Inputs	Activities	Outputs
– Test-bed circuits with embedded faults – Personnel to create trouble tickets and track the trouble ticket status for each scenario	– Attend CLEC training classes as appropriate – Conduct circuit test if applicable for each test scenario – Create and submit trouble ticket via Ameritech's M&R system – Periodically monitor each trouble report throughout its life using trouble report status transactions in Ameritech's M&R system – Note significant events in the trouble report life cycle (error occurrences, corrections, trouble ticket submission time, time cleared, etc.)	– A time to repair measurement for each fault repaired – Summary report

	– Calculate time to repair measurements for each test scenario fault repaired – Develop and document findings	

7.6 Exit Criteria

Criteria	Responsible Party
Global exit criteria have been satisfied	See Table III-6
Time to repair measurements for repaired faults	Test Manager
Summary report of observations	Test Manager

8.0 Test TVV8: Billing Functional Usage Evaluation

8.1 Description

The Functional Usage Evaluation is an analysis of Ameritech's daily message processing to ensure usage record types including Access records, Rated records, Unrated records and Credit records appear accurately on the Daily Usage Feed (DUF) according to the defined schedule.

8.2 Objective

The objective of this test is to evaluate the following:

- Accuracy and completeness of all usage record types on the DUF including access records that should appear, not receiving records that should not appear, and not receiving empty set files.
- Timeliness of the DUF and access records delivery

8.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
Test bed completed and ready	Ameritech
Product descriptions and business rules for all transactions to be tested are available.	Ameritech
Techniques and instrumentation developed and approved	Test Manager
Ameritech resources are available to participate in the test	Ameritech
Detailed Test Plan completed and approved	Test Manager

8.4 Test Scope

Table VI-7 Test Target: Billing Functional Usage Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Usage and Delivery	Track valid usage	Timeliness of DUF files and records	Inspections	Quantitative
	Account for no usage	Completeness of data	Inspections	Quantitative

8.5 Scenarios

Test calling is dependent on the provisioning process, which is dependent on scenarios. Some customers are subject to service changes (e.g. migrations from Ameritech retail to a CLEC, feature changes, etc.). Test calls and service changes will occur simultaneously. A subset of the Appendix A order scenarios will be used in this test.

8.6 Test Approach

This test will use operational analysis to evaluate the accuracy and completeness of records contained in the DUF. This analysis will also examine the age of calls on the DUF. The evaluations will be accomplished by dispatching testers to various locations within Wisconsin. These testers will place test calls and will record information about these calls including the "call from" number, "call to" number, "bill to" number, call time and duration. The data contained in these Daily Usage Feeds will then be compared to the call logs. The Test Team will also record information about the contents of DUFs received by Test Manager.

Test calls will be made using some customer accounts that will migrate during the test period. Migration refers to the conversion of account ownership from one LEC to another. Test calls will be made from migrating accounts before and after the migration date to ensure accurate routing of data in the Daily Usage Feed.

For example, an Ameritech retail customer migrates to a CLEC during the test. Call made by the customer prior to migration should be routed to Ameritech. Calls made by the customer after migration should be routed to the new CLEC.

Test calls should be placed from around the Ameritech calling region. Test calls will be made throughout the workday. Test calls will include a variety of call types with the exception of 911, and will be placed from locations where 5E, Siemens and DMS switches are used. Local and toll test calls terminating on the test lines will also be made. These calls will be subject to evaluation.

Inputs	Activities	Outputs
– A provisioned Test-bed – Personnel to create and track tusage for each scenario	– Develop Test Call Matrices, which include test call logs for each location, on each day, for each originating phone number	– A report of the testers logs – A report showing the validation of calls made during the test – A Report showing the

	– Assemble tester resources, provide instructions and dispatch testers to calling locations – Complete calls and log results – Receive DUF files from Ameritech – Verify that appropriate data is on the DUF – Verify that calls that do not belong on the DUF are not on the DUF – Verify that appropriate calls present in the DUF match the testers call log – Identify DUF files that contain no billable records – Received in the DUF files, Test Team will validate the age of calls by determining the number of business days between the call date and the day the DUF file was created – Develop and document findings	number of empty DUF files sent by Ameritech – Summary report

8.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

9.0 Test TVV9: Functional Carrier Bill Evaluation

9.1 Description

The Functional Carrier Bill Evaluation is an analysis of Ameritech's ability to accurately bill usage plus monthly recurring charges (MRC) and non-recurring charges (NRC) on the appropriate type of bill. An accurately billed item will contain the correct price and correct supporting information, such as start/end dates, duration, standard amounts, and discount amounts. This test will also evaluate the timeliness of bill delivery to the CLECs. Any billing system changes implemented during the course of the test will also be evaluated.

Ameritech will need to run a bill cycle from the initial test bed prior to any ordering and provisioning tests to use as a baseline set of bills.

Monthly charges will be examined for both Resale and UNE billing on Carrier Access Billing System (CABS) and Resale Billing System (RBS) bills. Table VI-9 reflects a number of key characteristics of Retail, Resale, and UNE billing information that will be used in the design of test cases. Information includes the various charge components and their destination bill.

Table VI-8: Key Characteristics Of Billing Information for Resale and UNE Customers

	Billing Component	Rating	Usage	Billing
Resale	Usage	CAMPS	DUF	RBS
Resale	MRC/NRC	ACIS	N/A	RBS
UNE	UNE loops, usage, MRC/NRC, and Combinations	ACIS/ CAMPS	DUF	CABS/RBS
UNE-Other	IOF, collocation	CABS	DUF	CABS
UNE-Other	High Cap Loops (DS1/3) MRC/NRC	CABS	N/A	CABS
Other	Directory Listings		N/A	
Retail	Non-unbundled Services MRC/NRC (Ancillary services)	ACIS	N/A	

ACIS: Ameritech Customer Information System
CABS: Carrier Access Billing System
CAMPS: Common Ameritech Message Processing System
RBS: Resale Billing System

9.2 Objective

This test evaluates the timely delivery of the bill and the accurate and timely appearance of charges on the appropriate bill. Appearance of charges will depend on the type of products ordered and/or class of service changes for resale and UNE. Details to be evaluated include:

- Appropriate prorating of charges for new and/or disconnected service
- Charges are accurate (order matches billing)
- Totals are accurate
- New/disconnected products appear (or do not appear) on the bill
- Bill dates are correct and match appropriate date from provisioning process e.g., order completion dates
- Adjustments appear on the bill
- Bills are delivered to CLECs and Resellers in a timely manner
- UNE billed on a usage basis are billed correctly, including the terminating access usage details for calls placed to UNE-P served end users

9.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
All Retail, RBS, and CABS baseline bills produced from the initial test bed	Ameritech
Test bed matches requirements.	Ameritech

Criteria	Responsible Party
Techniques and instrumentation developed and approved	Test Manager
Product descriptions and business rules for all transactions to be tested are available.	Ameritech
Test bed completed and ready	Ameritech
Calls made during Functional Usage Evaluation processed through to the DUF and available for billing.	Ameritech
Availability of Ameritech resources to test and produce RBS and CABS bills	Ameritech
Method for viewing bills implemented	Ameritech, Test Manager

9.4 Test Scope

Table VI-9: Test Scope for Carrier Bill Evaluation

Process Area	Sub Process	Evaluation Measure	Evaluation Techniques	Criteria Type
Maintain Bill Balance	Carry balance forward	Accuracy of bill balance	Inspection	Quantitative
Verify Billing Accounts	Verify Billing Accounts	Completeness and accuracy of extraction	Inspection	Quantitative
Bills and Delivery	Verify normal recurring charges	Completeness and accuracy of data	Inspection	Quantitative
	Verify one-time charges	Completeness and accuracy of data	Inspection	Quantitative
	Verify prorated recurring charges	Completeness and accuracy of data	Inspection	Quantitative
	Verify Usage Charges	Completeness and accuracy of data	Inspection	Quantitative
	Verify discounts	Completeness and accuracy of data	Inspection	Quantitative
	Verify adjustments (debits and credits)	Completeness and accuracy of data	Inspection	Quantitative
	Verify late charges	Completeness and accuracy of data	Inspection	Quantitative
	Receive bill copy	Timeliness of media delivery	Logging	Quantitative

As part of this test, a variety of products and services will be ordered. This may result in many variations in billing presentation from the two primary billing systems (RBS and CABS). Relevant bill types will be selected for review based upon the product mix and anticipated charges as defined in the expected test results.

9.5 Scenarios

A subset of the Appendix A scenarios will be utilized for billing and usage testing purposes. The set selected will include:

- Test cases for 'migration/conversion' of customers
- Test cases for disconnects, new service (add/delete)
- Test cases for changes to services (modify)

All migration situations should be adequately represented:

- Ameritech to a CLEC
- CLEC to Ameritech
- CLEC to CLEC

The scenarios utilized for billing and usage testing will apply to all service delivery methods (SDM) available in Ameritech at the time of the test(s).

9.6 Approach

This test will use systems and operational analysis to evaluate the completeness and accuracy of charges that should appear on the bill based on usage information from the Functional Usage Evaluation and selected scenarios. Expected results will be defined for each test case.

Three bill periods will be processed for the same set of customers.

- The first bill period consists of the baseline bills where customers created for this test are billed for the first time directly from the initial test bed. These bills are produced prior to the execution of any transaction scenarios that affect selected customers.
- The second and third bill periods consist of bills produced after selected scenarios have been executed. This second set of bills will include items such as prorates, disconnects, migrations, adjustments, etc. Some customers will be created during the test execution, and will only receive second period bills.

Inputs	Activities	Outputs
– A provisioned test-bed – Verified Baseline Bills and CSRs – Selected usage from the Billing Functional Usage Evaluation (TVV 8.0) – CSRs and completions from relevant TVV1 orders	– Process service order changes – Develop expected results for each test case – Begin first bill period by receiving baseline bills – Record invoice bill date and actual date received – Validate test results for each applicable test case – Identify discrepancies – Receive Bills for next bill period – Receive CSRs for all cycles – Record invoice bill date and actual date received – Validate test results for each applicable test case – Identify discrepancies. – Complete second bill period. Repeat 7-11 until third bill period is complete – Develop and document findings	– A report showing each test case, expected results, and discrepancies – A report showing Ameritech bill delivery dates compared to the expected delivery dates based on the bill cycle date – Summary report

9.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

Appendix A: Test Scenarios

The scenarios listed in this appendix are based on a current understanding of the products and capabilities that are likely to be available at the time the test is executed. Depending on changes in availability, the scenarios may need to be modified before the test begins. Also, it should be noted that the scenarios will include variations such as planned errors and supplements to cancel, change an order, or revise due dates. Each Transaction Verification and Validation Test will utilize the scenarios detailed below in parentheses.

Resale (TVV-1, TVV-2, TVV-3, TVV-4, TVV-8, TVV-9)

Activity	Res./ Bus. POTS	Res./ Bus. ISDN	Centrex	Private Line	PBX
Migration from Ameritech "as is"	X	X	X		X
CLEC to CLEC migration	X				
Feature changes to existing customer	X		X		
Migration from Ameritech "as specified"	X	X			
New customer	X	X	X	X	X
Telephone number change	X				
Directory change	X		X		
Add lines/trunks/ circuits	X	X	X	X	X
Suspend/restore service	X				
Disconnect (full and partial)	X	X	X	X	X
Moves	X		X		
Convert line to ISDN		X			
Migrate from CLEC to Ameritech	X				
Convert POTS line to Centrex			X		
Regrade service from residential to business	X				

UNE (TVV-1, TVV-2, TVV-3, TVV-4, TVV-8, TVV-9)

Activity	Res./ Bus. Analog Loop	Res./ Bus. xDSL Capable Loop	Line Share	Bus. DS1 Loop	Inter-office Facility	Dark Fiber	Collocation
Migration from Ameritech without number porting (full and partial)	X	X		X			
Migration from Ameritech with LNP (full and partial)	X	X		X			
Migration from CLEC to CLEC	X	X					
Add new loops to existing customer	X	X		X			

Activity	Res./ Bus. Analog Loop	Res./ Bus. xDSL Capable Loop	Line Share	Bus. DS1 Loop	Inter-office Facilility	Dark Fiber	Collocation
Add new interoffice DS1/DS3 facilities					X		
Purchase loops/pairs for a new customer	X	X	X	X		X	
Disconnect (full and partial)	X	X	X	X	X	X	
Moves	X	X		X			
Standalone directory change	X	X	X				
Standalone LNP	X						
Convert from UNE-P to UNE loop	X						
Convert from Resale to UNE loop	X						
Migrate data service from Ameritech to CLEC			X				
Migrate voice service from CLEC to Ameritech			X				
Purchase dark fiber					X		
Disconnect data service			X				
Disconnect voice service			X				
Order "light-up" from "A" to "Z" where both points are in a metropolitan area						X	
Convert line to ISDN	X						
Order virtual and physical							X

UNE Platform (TVV-1, TVV-2, TVV-3, TVV-4, TVV-8, TVV-9)

Activity	Res./Bus. POTS	Res./ Bus. ISDN
Migration from Ameritech "as is"	X	X
Migrate from CLEC to CLEC	X	
Feature changes to existing customer	X	
Migration from Ameritech "as specified" (full and partial)	X	X
New customer	X	X
Telephone number change	X	
Directory change	X	
Add lines/trunks/ circuits	X	X
Suspend/restore service	X	
Disconnect (full and partial)	X	X
Moves	X	X
Convert line to ISDN		X
Migrate from CLEC to Ameritech	X	
Convert from Resale to UNE-P	X	X

Stand-alone Preorder (TVV-1, TVV-2)

Activity	Residence/ Business
Obtain CSRs	X
Validate customer address	X
Reserve telephone numbers	X
Loop qualification (including xDSL and Remote Terminal Availability)	X
Inquire about product/service availability	X
Determine availability of desired due date (including dispatch information)	X
Obtain Directory Listing information	X
Channel Facility Assignment (CFA) Inquiry	X
Network Channel/Network Channel Interface (NC/NCI) Inquiry	X
Availability of dark fiber	X
Pending order of status	X
CLLI Code (Manual)	X

UNE EEL (TVV-1, TVV-2, TVV-3, TVV-4, TVV-9)

Activity	Res./Bus. DS0	Bus. DS1 Loop
Migrate lines from Ameritech w/o number port.	X	X
Migrate lines from Ameritech with LNP	X	X
Add new lines to existing EEL	X	X
Purchase lines for a new customer	X	X
Convert customer from Resale to UNE EEL	X	
Disconnect (full and partial)	X	X

Stand Alone Maintenance & Repair (TVV-4, TVV-5, TVV-6)

Activity	Res./ Bus. POTS	Res./ Bus. ISDN	Centrex	Private Line	PBX	xDSL UNE - Loop	Line Share
Short on outside plant facility	X				X	X	X
Open on outside plant facility	X	X				X	X
Short on the line within the central office	X		X	X		X	X
Open on the line within the central office	X	X	X	X	X	X	X
Noise on line	X	X				X	X
Echo on line	X					X	X
Customer w/ LNP not receiving incoming calls	X						
Customer receiving incoming calls intended for another customer's number.	X						X
Call waiting not working	X						X
Repeat dialing not working	X						
Customer cannot call 900	X						

numbers							
Calls do not roll-over for customer w/ multiline hunt group	X		X				
Call forwarding not working	X						
Caller ID not working	X						X
Pick-up group order for large centrex customer not functioning properly			X				
DS1 loop MUXed to DS3 IOF not functioning.				X			
Customer's data not operational							X
CLEC requests MLT	X						

Appendix B. Normal and Peak Volume Test Section

A. Purpose

This section provides the methodology the Test Manager will use to define volumes required to evaluate the systems, processes and other operational elements associated with Ameritech's support of the competitive market. The purpose of the volume tests is to evaluate the ability of Ameritech's systems interface to process representative future wholesale transaction volumes to support competitors' entry into the market. These tests are performed at both peak and normal volumes. In addition, stress or capacity tests will be performed to test overall system capacity on selected transactions.

B. Scope

Scope is defined within each appropriate domain section. Statistical analysis of volume data will be performed in accordance with the statistical principles developed during the pre-hearing process and described in Appendix C of this document.

C. Data Development

Overall normal daily test volumes will be developed through a synthesis of information obtained from Ameritech and various CLECs. The Commission has solicited CLEC and Ameritech forecast data and will provide this data to the Test Manager for its analysis. Three volume types will be addressed: pre-ordering, ordering (as part of the TVV2 Evaluation), and maintenance and repair (as part of the TVV 6 Evaluation). The development methodology will be consistently applied to each of the types.

Orders by product/service will be developed using the Ameritech and CLEC forecasts of competitive lines viewed by service and order type. The Test Manager will develop a proportion for each service and order type based on forecasted net adds, and then will extend the normal daily volume figure by that proportion to determine the daily volume by service and order type. The daily order volume of supplements and order changes/disconnects and moves (i.e., churn) will be calculated by applying historic factors to daily volumes by service and order type.

The peak volumes are planned to be 150% of normal volumes. The stress volumes are planned to be 250% of normal volumes.

Appendix C: Statistical Approach

A. Overview

This test will rely on standard statistical methods to evaluate Ameritech performance. Each test will define the data population to be observed, the measurements to be taken, and the statistical tests to be used. Data will be normalized, tabulated, and archived in a way that allows verification of test results and re-analysis of data using additional statistical methods, if appropriate.

B. Measures

The measures (metrics and their associated standards) that will serve as parameters for testing will be listed in Appendix D.

C. Sampling

In instances where sampling is used, sampling will be designed so that samples are sufficiently representative of populations with respect to the measures being studied to ensure that the resulting statistical inferences made about populations are valid. For most tests, simple random sampling will be used.

D. Hypothesis Testing

This test will employ a hypothesis testing approach to frame the analysis of test results. The standard "null" hypothesis will be that Ameritech is performing adequately. The possibility of an error arises if this hypothesis is rejected when it is true (Type I error) or is accepted when it is false (Type II error). An attempt will be made to balance Type I and Type II errors as much as is feasible.

E. Parity Tests and Non-Parity Tests

There are two basic types of tests. Parity tests compare an Ameritech retail average or percentage to a CLEC or test transaction average or percentage. The typical test for this type of comparison is a hypergeometric test for percentages and a two-sample t-test or z-test for averages. For those parity tests where sufficiently large samples can be drawn, hypothesis testing will be done by performing a "z-test" to calculate a "z-score." A z-score is a single number, which indicates the differences between sample data. A low z-score supports the hypothesis of parity (i.e., both CLEC and ILEC performance are from the same "population" in terms of performance). In cases where this test is not appropriate due to small sample size (for tests of averages) or assumption violations, other tests, such as permutation tests, will be performed.

Non-parity tests compare a percentage or average to a fixed standard or benchmark. In this case, the typical test is a binomial test or a one-sample t-test. Once again, alternative statistical tests will be used, where appropriate, based on tests of assumptions and sample sizes.

F. Results

Test results will include a summary of the statistics calculated, the hypotheses postulated for the test, and the conclusion(s) drawn based on the statistical results.

Appendix D: Performance Metrics and Standards

The Performance Metrics and Standards to be used for this test will be determined in accordance with the Orders in docket numbers 6720-TI-120 and 6720-TI-160. Additions and changes stemming from the pre-hearing process and orders will be included as well.

Ameritech's performance measures web site is located at https://CLEC.SBC.COM

Mapping of A-AA Issues to Performance Measures

A-AA From 7/19/00 Order & A-AA Matrix	Performance Measure
A: Facilities Availability Process (7/18/00 Order, p. 5)	See F below
A: Improved Escalation Process Concerning Facilities Assignment (7/18/00 Order, p. 5)	Not Applicable
A: Procedures for Requesting and Receiving by Central Office DLC Loop Percentages (7/18/00 Order, p. 5)	None at this time– Process is not yet defined
A: Facility Problem Notification Within 24 Hours of FOC (See F below) (7/18/00 Order, p. 5)	See F below
B: UNE-P – Proposed Tariff provided to parties (7/18/00 Order, p. 8)	Performance Measures are not applicable for the agreement. However, Performance Measurements for the product is discussed on page 36.
B: UNE-P – Implementation of Resolved Issues (7/18/00 Order, p. 8)	Ameritech provides UNE-P disaggregations in the following PMs: #5 - % FOC returned within X hours #6 – Average time to return FOC #13 – % Order Process Flow Through #13.1 - % Total Order Process Flow Through Provisioning & Maintenance Measures # 27-41
C: Loop Assignment for DSL (7/18/00 Order, p. 5)	#1 - Average Response Time for Pre-order Interfaces (Electronic Loop Make-Up Information) #2 – Percent Responses Received within "X" seconds – OSS Interfaces #57 – Average Response Time for Manual Loop Make-up Information Ordering, Provisioning Maintenance and Repair PMs for Line Sharing are addressed in MI Phase II PM pre-hearing modifications.
D: Sub-Loops – Documentation available (7/18/00 Order, p. 9)	Not Applicable
D: Sub-Loops – Process to identify "Points of Access" (7/18/00 Order, p. 9)	Not Applicable
D: Sub-Loops – Implementation of Resolved Issues (7/18/00 Order, p. 9)	Ameritech to develop disaggregations of 55-69 as required.
E: Dark Fiber – Documentation available – Tariff Filing (7/18/00 Order, p. 9)	Not Applicable
E: Dark Fiber – Implementation of Resolved Issues (7/18/00 Order, p. 9)	Disaggregations for Dark Fiber are included in current PMs: #58 – Percent Ameritech Caused Missed Due Dates #59 – Percent Trouble Reports Within 30(I-30) Days of Installation

A-AA From 7/19/00 Order & A-AA Matrix	Performance Measure
	#60 – Percent Ameritech Missed Due Dates Due To Lack Of Facilities #62 - Average Delay Days for Missed Due Dates Due To Lack Of Facilities #62 - Average Delay Days For Ameritech Caused Missed Due Dates #63 - Percent Ameritech Caused Missed Due Dates > 30 days #65 - Trouble Report Rate #67 - Mean Time To Restore #67 - Percent Out Of Service (OOS) < "24" Hours #69 - Percent Repeat Reports
F: New Firm Order Confirmation (FOC) and Facility Modification Process – Documentation Available (7/18/00 Order, p. 5)	Not Applicable
F: New Facility Modification Process – Identify Facility Problems and Notify CLEC of modification or build options "Simple Modifications" – Ameritech will complete simple modifications within existing interval without notification to CLEC; existing jeopardy and new committed due dates processes will be used if simple modifications are not completed within existing interval "Complex Modifications" – Ameritech will provide to CLEC an initial Complex Notification targeted for two business days of initial FOC; Complex Notification with revised date is targeted for three business days from initial Complex Notification. New Build – Ameritech will provide a New Build Notification targeted for two business days of initial FOC; CLEC and local account team will then discuss possible solutions (7/18/00 Order, pp. 5-6)	Ameritech proposes to measure simple modifications within existing intervals. No notifications will be required or provided. Ameritech proposes to add the following WI #7 - Percent Initial Facility Modification Notifications within Specified Timeframe WI#8 - Percent Complex Modification Classification, Requirements, and Revised Due Date within Specified Timeframe WI#9 - Percent New Build Notifications within Specified Timeframe Ameritech agreed to propose additional measures for FMOD Missed Due Dates, Percent of FMod Notification and Good News Notice. Ameritech reviewing CLEC proposal for comparison to Retail Parity and for FMOD accuracy measure.. Existing PMs will incorporate FMOD orders (Missed Due Dates etc.) Ameritech will exclude initial FOC response (as a missed due date) on PM# 58 – Percent Ameritech Caused Missed Due Dates (UNE)
F: New Firm Order Confirmation Process – Incorporate version numbers and reason codes on revised FOCs (7/18/00 Order, p. 6)	None at this time
G: Hot Cut Procedures (7/18/00 Order, p. 6)	#114 - % Premature Disconnects #114.1 – CHC LNP w/Loop Provisioning Interval #115 - % Ameritech Caused Delayed Coordinated Conversions #115.1 - % Provisioning Trouble Reports #115.2 – Mean Time to Restore Provisioning Trouble Reports MI#3 - Coordination Conversions Outside of Interval Additional measures which may evaluate portions of the Hot Cut process include: #55.2 – Average Installation Interval for Loop with LNP #91-101 – LNP measures

A-AA From 7/19/00 Order & A-AA Matrix	Performance Measure
G: Hot Cut Procedures-ISDN-xDSL (7/18/00 Order, p. 6)	No specific disaggregations for Service Type, all Hot Cuts measured per item above.
H: Street Address Guide (SAG) to CSR Conversion (abbreviated validation) (7/18/00 Order, p. 6)	Data may be reflected in PM#9, % Rejects
I. Parsed CSRs will be provided	Not applicable
J. Implement industry standard versions of EDI (Version 10) and LSOG (Version 4) for ordering, including all associated functionalities by August 2000.	Not applicable
K. Implement an industry standard version of LSOG (Version 4) for preordering.	Not applicable
L: Directory Assistance/Directory Publishing a. Provide current SBC documentation on its " Retain Current Listing" process (7/18/00 Order, p. 7)	Not Applicable
L: Directory Assistance/Directory Publishing b. Provide current AAS documentation on its Order and Query Process via website (7/18/00 Order, p. 7)	Not Applicable
L: Directory Assistance/Directory Publishing c. Second pre-BOC (Draft Directory) Review (dates are directory specific) (7/18/00 Order, p. 7)	Not Applicable – one time event
L: Directory Assistance/Directory Publishing d. Implement a process to allow CLECs the option to retain current listings, except on partials (7/18/00 Order, p. 7)	Expect current measurements to address issues: #112 - % DA Database Accuracy for Manual Updates #113 - % Electronic Updates that Flow Through without Manual Assistance
L: Directory Assistance/Directory Publishing e. Provide interface (or work-around) for integrated directory listings ordering ability (7/18/00 Order, p. 7)	Process is not yet defined, however expect current measurements to address issues: #110 - % Updates Completed into DA Database w/in 72 hours for Facility Based CLECs #111 - Average Update Interval for DA Database for Facility Based CLECs #112 - % DA Database Accuracy for Manual Updates #113 - % Electronic Updates that Flow Through without Manual Assistance
M: E911 Database Management (confirm parity between Ameritech and CLECs regarding use of SAG) (7/18/00 Order, p. 7)	Texas Measures: #102 - Average Time to Clear Errors #103 - Percent Accuracy for 911 Database updates #104 - Average Timer Required to Update 911 Database
N: Customer Premise Access – Provide Copies of Policy (7/18/00 Order, p. 7)	Ameritech proposes two measures for UNE Loops (all loop types): WI#1 – Percent No Access UNE Loops – Provisioning WI#2 – Percent No Access UNE Loops - Maintenance
O: Replacement of Internal Network Interface Devices (NIDs) (7/18/00 Order, p. 7)	Ameritech proposes new measure : WI# 3 - Percent Installation Trouble Reports for field visit orders which are coded to NID
P: TC/Net Change Process (7/18/00 Order, p. 7)	Not Applicable
Q: LEC Protection (7/18/00 Order, p. 7)	Not Applicable
Q: LEC Protection – LOA Policy (7/18/00 Order, p.	Not Applicable

A-AA From 7/19/00 Order & A-AA Matrix	Performance Measure
7)	
R. Service Order Completion - Identification of actual changes entered	Not Applicable
S: Flow Through (7/18/00 Order, p. 7)	No Performance Measures required for the provision of flow-through documentation. However, Ameritech proposes to measure flow-through by the following measures: PM # 13 Order Process Flow Through PM # 13.1 Total Order Process Percent Flow Through
T. Supplemental Orders - Resubmit whole order, just changes, or whole order with changes added	Not Applicable
U. Preorder/Order Synchronization - Identification of elements that won't synchronize after LSOG4 implementation	Not Applicable
V: Enhanced Extended Links (EELS) - Proposed Tariff provided to parties (7/18/00 Order, p. 9)	Not Applicable
V: Enhanced Extended Links (EELS) - Implementation of Resolved Issues (7/18/00 Order, p. 9)	None at the time.
W: Branded Operator Services (7/18/00 Order, p. 7)	Additional investigation (of Branded OS) in progress, PM's may need modification pending investigation and discussion w/ CLECs. #79 - Directory Assistance Grade of Service #80 - Directory Assistance Speed of Answer #81 - Operator Services Grade of Service #82 - Operator Services Speed of Answer
X: Partial Migrations (7/18/00 Order, p. 8)	Not Applicable
Y: Account Management Process - Edited Ameritech Handbook (7/18/00 Order, p. 8)	Not Applicable
Y: Account Management Process - Coordination Between Account Team and Directory Listing and Directory Assistance (7/18/00 Order, p. 8)	Not Applicable
Z: Collocation Ordering, Rates, Auditing and Record Keeping Processes (7/18/00 Order, p. 8)	For Ordering: PM# 107 % Missed Collocation Due Dates PM# 108 Average Delay Days for Ameritech Caused Missed Due Dates PM#109 Percent of Requests Processed Within Established Timelines PM# MI 4, Average Time to Provide a Collocation Arrangement
AA: LNP 10-Digit Trigger Ordering (7/18/00 Order, p. 8)	#91 - % of Time Old Service Provider Releases Subscription prior to the Expiration of Second 9 Hour Timer (T2) #97 - % Time Ameritech Applies 10-digit Trigger Prior to the LNP Order Due Date

Appendix E: Glossary

Term	Definition
271 Application	An application to offer long distance services from an RBOC to a state or federal regulatory agency. In order to grant this application, the agency must find the applicant is in compliance with the 14 point competitive checklist described in the 1996 Telecommunications Act.
ACIS	Ameritech Customer Information System for resale customers. All customer records are kept in this system.
AEBS	Ameritech Electronic Bill Service which creates monthly billing detail by state.
AEMS	Ameritech Electronic Messaging System. This front end system identifies what type of pre-order transaction was request.
ALPS	Ameritech Listing Publishing Services is the entity that publishes Ameritech's directory listings.
AMA	Automatic Message Accounting. A system that records and documents billing information for (long distance) calls made by a (corporate) subscriber.
ARES	Ameritech Records and Engineering System. This system contains the plant inventory, detailed loop make-up information, and load coil information.
ARIS/EXACT	Ameritech's Access Request Information System. This system receives the ASRs and validates and processes them. ARIS generates the service order formatted with the USOCs and FIDs.
ASC	Ameritech's Access Service Centers.
ASON/ACIS	Ameritech Service Order Negotiation System. The system in which orders are processed for Resale, UNE, and TNs.
ASR	Access Service Request. Form used to order interoffice facilities such as dedicated trunk ports.
Ameritech Pre-Filing Statement	A filing with the State of Wisconsin that lists commitments from Ameritech with regards to Ameritech's 271 Application.
Bill Certification	Process by which Ameritech demonstrates billing process management to its Reseller customers.
Bill Cycle	The grouping of customers for purposes of billing. An end-user normally belongs to one bill cycle. In Wholesale billing, all end-users belonging to the same bill cycle are aggregated onto a single CLEC bill. Assignments of cycle and period are accomplished by Ameritech. Bill cycles enable even distribution of a large number of customers so as to allow efficient use of computing resources and to mitigate risks associated with computer failures.
Bill Cycle Balancing	The procedure by which the charges associated with the inputs of a billing cycle are reconciled with the charges of the outputs of the billing cycle.
Bill Period	The length of time covered by a customer bill. Each end-user has one bill per bill period. CLECs receive one bill per bill period and bill cycle for all end-users belonging to that period and cycle. Assignments of cycle and period are accomplished by Ameritech.
Billing Domain	Tests related to creation of correct carrier bills.
Black Box	Internal processes within Ameritech's systems that are considered out of scope for the purposes of this test plan. Correct functioning of 'black box' systems can be inferred from input and output interface files.
BTN	Billing Telephone Number. The number to which charges from a given telephone service are billed.
BTN Accounts	Billing Telephone Number accounts. These accounts represent "dummy" phone numbers which are used to aggregate a Reseller's charges into a consolidated bill. Reseller's have several separate BTN accounts.

Term	Definition
CABS	Carrier Access Billing System that creates and maintains customer account information, receives service order input from PBSI, applies wholesale rates for elements using USOC rate tables, and creates a monthly bill by state.
CAMPS	Common Ameritech Message Processing System. The system upgrades the usage guide for the TN, accumulates and formats usage for the DUF, and rates resale usage.
CAP	Competitive Access Provider. Facilities-based carrier providing alternative access service.
CSR	Customer Service Record. Details of a customer's fixed monthly charges billed by the local telephone company.
Carrier Bill Code	Each bill format has its own unique code. Particular charges will cause the production of a specific bill format. The code is related to each product, and determines on which bill the product will appear.
Casual Usage	Usage dialed through a calling card or 10XXXXX.
Central Office (CO)	Facility where subscribers' lines connect to switching equipment.
Change Management	The process by which changes are introduced at Ameritech. Important steps include: 1) Advance notification that a change will occur; 2) CLEC input is considered when making changes; and 3) Smooth roll-out of the change.
CLEC	Competitive Local Exchange Carrier.
CLEC Live Data	Production data delivered through interfaces that are already operational for real CLEC customers.
Customer Account Record Exchange (CARE)	Industry standard for formatting exchange of subscription information.
Daily Usage Feed	A daily download of usage data from the switch which is delivered to Ameritech's's message processing system and directly to the CLEC.
Data-Driven Process	Scenarios tested through the creation of generated transactions, operations data, or live data.
DID number block	Direct Inward Dialing. A block of numbers reserved for a Centrex/PBX. DID allows internal dialing by entering only extensions.
Document review	Compilation and review of books, manuals, and other publications related to the process and system under study.
EBTA	Ameritech's Electronic Bonding and Trouble Administration system is where CLECs submit trouble tickets for maintance and repair issues.
EDI	Electronic Data Interchange. A process for exchanging information that is subject to industry standards.
EMI / EMR	Exchange Message Interface / Record. Standard format in which usage data is passed to the Reseller, as specified by Bellcore.
EXACT	Ameritech's Exchange Access Control and Tracking system provides mechanized order entry, control, and tracking support.
Entrance and Exit Criteria	The necessary conditions for starting or completing individual tests described in the Test Plan.
Evaluation Measures	Discrete set of measures to be applied to specific test components.
Existence Criteria Type	These are criteria where only two possible test results can exist (e.g., true/false, presence/absence), such as whether a document exists or does not exist.
Expected Results Worksheet	A report format that lists the expected results for each test while allowing the tester to record the current results of the test. This allows an easy comparison of numbers.
FID	Field Identifier. A code used when administering usage limits on residence and business end users. Also refers to fields of information used in the service order.

Term	Definition
Firm Order Confirmation	A response from the Ameritech Service Order Confirmation that acknowledges a successful receipt of an error-free order from a CLEC and provides a committed due date. Such committed due date may change or be canceled, but only in accordance with the Facility Modification Policy.
Flow-through	An order placed by a CLEC's customer service representative that can be provisioned correctly without manual intervention by Ameritech's service representatives.
GUI	Graphical User Interface. A computer interface that allows users to access programs and enter data.
Good Management Practice (GMP) Guidelines criteria source	This includes benchmarks, performance goals, and guidelines derived from industry and topic area experts, Ameritech and CLEC performance targets, publications, academic journals and other sources.
ILEC	Incumbent Local Exchange Carrier. The local exchange carrier for a particular area as of 1996. Ameritech is the relevant ILEC.
Inspection	Physical reviews of process activities and products, including site visits, walk-throughs, read-throughs, and work center observations.
LATA	Local Access and Transport Area. A geographic area established by law within which a Bell Operating Company may provide telecommunications services.
LFACS/FACS	Ameritech's Loop Facility Assignment Center System and Facility Assignment Center. Ameritech's system that performs order analysis and control functions as well as building outside plant facilities. The system also assigns loop facilities and CO assignments.
LOC	Ameritech's Local Operations Center is the primary point of interfacefor provisioning and maintance issues related to unbundled network elements.
LSC	Ameritech's Local Service Center is responsible for processing the orders, is the interface for issues related to orders, and is the first escalation point for matters relating to orders.
Legal and Regulatory Requirements criteria source	This includes requirements specified by statute and regulation, such as FCC orders, court orders, Commission regulations, federal and state statutes, and other binding requirements resulting from judicial/governmental proceedings.
Logging	Monitoring activities and collecting information by logging process events and products as they happen. Logging can be mechanized or manual.
LPIC	Predesignated Intra-LATA Carrier, or Local Primary Interexchange Carrier. Telephone company chosen by the end user as being the default carrier for calls outside the local calling area, but within the same LATA. These are also known as regional toll calls.
LSR	Local Service Request. Form sent to Local Exchange Carrier requesting local telephone services.
MARCH	Ameritech system component that assigns the Central Office loop translations/line site and activates service based on due date information.
MDF	Main Distribution Frame. The primary point at which outside plant facilities terminate within a Wire Center for interconnection to other telecommunications facilities within the Wire Center.
MOR	Ameritech's Mechanical Order Receipt System is the centralized order translator.
MOR/Tel	Ameritech application which tracks order status and services and is the service center interface. It contains the state specific rules.
MWA	Ameritech's Mechanized Work Assignment system automatically assigns new ASRs to workgroups or individuals.
Maintenance and Repair Domain	Tests related to trouble administration.
Master Test Plan	Identifies the overall framework and structure of the test.

Term	Definition
NSDB	Ameritech's Network Services Database system which receives assigned service orders and stores them in the network service database.
OCN	Operating Company Number. A 4 character code to identify any service provider. Specifically used to identify the Reseller on usage detail records.
Operational Analysis	Operational analysis focuses on the form, structure, and content of the business process under study. This method is used to evaluate day-to-day operations and operational management practices.
OSS	Operation Support Systems. Systems used to perform pre-ordering, ordering, provisioning, maintenance and repair, and billing.
PAWS	Ameritech's Provisioning Analyst Workstation is an error manager for FACS.
PBSI	Ameritech's Provisioning and Billing System Interface communicates with FACS and CABS.
PIC	Primary Interexchange Carrier. The long distance company to which traffic is automatically routed when an end user dials 1+ in equal access areas.
PTE	Ameritech's Post TUF Editor system edits service order formats.
Parity Criteria Type	These are criteria that require two measurements to be developed and compared, such as whether external response time is at least as good as internal response time.
Performance and Capacity	Methods used to evaluate the performance and capacity of selected elements within the four domains. Relates to tests to determine if Ameritech's OSS can handle quantities of orders matching a reasonable forecasted demand.
Port	Point of access into a network.
Pre-Ordering, Ordering, and Provisioning Domain	Tests related to CLEC's acquisition of customer information, placing orders, and ensuring correct and timely provision and notification of order status.
Provisioning	The act of supplying telecommunications service or UNEs.
PSC	Public Service Commission of Wisconsin. A state regulatory agency responsible for telecommunications companies.
Qualitative Criteria Type	These criteria set a threshold for performance where a range of quality values is possible, such as level of customer satisfaction.
RBS	Ameritech's Resale Billing System. The system receives ACIS extract and applies wholesale rates to non-usage elements using the resale USOC rate table. It also receives rated usage from CAMPS and reformats.
RID	Ameritech's Reseller Information Desktop system applies term/volume discounts, performs installment billing calculations, and assesses late charges.
Recognized Standards Criteria Source	This includes widely recognized standards and guidelines promulgated by sanctioned industry and governmental organizations and other bodies.
Relationship Management and Infrastructure Domain	Tests relating to activities, processes and documents that are focused on the establishment and maintenance of the CLEC/ILEC relationship.
Report Review	Reviews and analysis of historical data, reports, metrics, and other information in order to assess the effectiveness of a particular system or business function. This includes performance measurement reports and other management reports.
Resource Center	Ameritech's center for CLEC OSS Interface trouble referrals.
SAG	Ameritech's Street Address Database.
SAM	Ameritech's Service Access Manager is a middleware system that provides a common way to interface with all systems. This system finds and formats the data from the legacy systems.
SOAC	Ameritech's system for Service Order Assignment and Control. The system receives service orders and routes the work components to the other provisioning systems.
SOD	Ameritech's Service Order Distributor. The system distributes errors and completion notices through MOR and then out to the CLECs.

Term	Definition
SWITCH	Ameritech's Central Office Physical Switch Inventory System. The system provides activation and provisioning services for Central Office equipment and interfaces with MARCH for physical switch programming translations.
Scalability	The degree to which an application can be scaled to accommodate order of magnitude increases in transaction volumes and users.
Supplements	A change to an order taken after the original order was submitted, but before the order has been executed. Order execution should include all supplements.
Suspend for Non-Payment	Collection Activity including suspension of outgoing calls (one-way), or both outgoing and incoming calls (two-way).
TC Online	Ameritech's internet website that contains the documentation CLECs need to conduct business in the Ameritech region.
TIRKS	Ameritech's Trunk Intergrated Records Keeping System which receives service orders and local assignments and reviews critical dates to determine priorities. TIRKS also tracks all jeopardies.
TN	Telephone number.
TUF	Ameritech's translator of USOCs and FIDs, translates ASRs into service orders.
Test Bed	A set of fictitious customers that are designed to assist with testing. The test bed consists of working lines and provisioned products, although the owning customer is fictitious. The test bed is used to test all Ameritech system functions. KPMG Consulting will build a test bed to meet testing requirements.
Test Call Matrix	A list of call types and the quantity of calls for each type that should be included in a particular test.
Test Domain	A specific testing area with defined targets, measures, scenarios, evaluation methods, and test processes.
Test Scenario Coverage Matrices / Traceability Matrices	A list of products or processes that are involved with each scenario. Describes how testing elements are traced from the compliance requirements through the test process.
Test Scenario Index	Master list of scenarios from which specific scenarios will be selected to be used in the testing.
Test Scenario to Metrics Analysis Index Cross Reference	For each scenario, a list of metrics that are examined during the test.
Test Scenarios	Scenarios describe realistic situations in which CLECs purchase wholesale services and network elements from Ameritech for resale to the CLEC's end-user customer on a retail basis.
Test Target	A discrete set of measures to be applied to specific test components.
Transaction Driven - GUI Cases	The GUI test method is applied to test cases that use the GUI approach in real-world actions.
Transaction-Driven System Analysis	Transaction driven system analysis relies upon initiation of transactions, tracking of transaction progress, and analysis of transaction completion results to evaluate the automated system under test.
Transaction Generation	Transaction generation is the use of live, historical, and/or generated data and data processing capability to evaluate an automated and/or manual system under test.
Unbundled Access	Ability of other LECs to access and use Ameritech network components to fill in gaps where these providers' networks do not have their own facilities.
Unbundled Loop	A transmission channel between an end user location and LEC central office that is not a part of, or connected to, other LEC services.
Unbundled Port	An interface on a local switching system that is not bundled with a loop or transport facility, and provides access to and from the switch and the functionality of the local switching system.
UNE	Unbundled Network Element.

Term	Definition
USOC	Universal Service Order Code. A 3-5 character alphanumeric code that represents a product or service.
Verification and Validation	Methods used in the evaluation of activities and processes not amenable to data-driven testing, but which require verification and validation.
WTN	Working Telephone Number.

Appendix F: Negotiated Modifications and Enhancements

Modifications and enhancements have been negotiated between Ameritech and CLECs. These modifications and enhancements are documented in PSCW Case No. 6720-TI-160, which is hereby incorporated by reference. The following table summarizes the negotiated modification and enhancements.

Modifications and Enhancements to be Tested

Type of Modification and Enhancement	Brief Description
Functionalities, processes and procedures to be deployed (Note that letters in parentheses refer to the issue as described in Appendix F)	– Facilities Availability Process (A) – PPR9, TVV4 – Improved Escalation Process Concerning Facility Assignment (A) – PPR9 – Procedures for Requesting and Receiving by Central Office DLC Loop Percentages (A) – N/A – Facility Problem Notification Within 24 Hours of FOC (A) – PPR9, TVV1, TVV4 – Loop Assignment for DSL (C) – PPR9, TVV1, TVV4 – New Firm Order Confirmation (FOC) and Facility Modification Process – Documentation Available (F) – PPR9, TVV4 – New Facility Modification Process – Identify Facility Problems and Notify CLEC of modification or build options (F) – PPR9, TVV4 – New Firm Order Confirmation Process – Incorporate version numbers and reason codes on revised FOCs (F) – TVV1 – Hot Cut Procedures (G) - PPR9, TVV4 – Hot Cut Procedures – Integrated Services Digital Network (ISDN)-xDSL (G) – PPR9, TVV4 – Street Address Guide (SAG) to CSR Conversion (abbreviated validation) (H) – TVV1 – Directory Assistance/Directory Publishing (L) – TVV1 – Provide current SBC documentation on its " Retain Current Listing" process (L) – TVV1 – Provide current AAS documentation on its Order and Query Process via website (L) – N/A – Implement a process to allow CLECs the option to retain current listings, except on partials (L) – TVV1 – Provide interface (or work-around) for integrated directory listings ordering ability (L) – TVV1, TVV4 – E911 Database Management (confirm parity between Ameritech and CLECs regarding use of SAG) (M) – N/A – Customer Premise Access – Provide Copies of Policy (N) – PPR9 – Replacement of Internal Network Interface Devices (NIDs) (O) – N/A – TC/Net Change Process (P) – PPR1 – LEC Protection (Q) – TVV1 (if offered) – LEC Protection – LOA Policy (Q) – TVV1 (if offered) – Flow Through (S) – TVV3 – Branded Operator Services (W) – PPR9 – Partial Migrations (X) – TVV1 – Account Management Process – Edited Ameritech Handbook (Y) – PPR2 – Account Management Process – Coordination Between Account Team and Directory Listing and Directory Assistance (Y) – PPR2 – Collocation Ordering, Rates, Auditing and Record Keeping Processes (Z) –

Type of Modification and Enhancement	Brief Description
	PPR6 – LNP 10-Digit Trigger Ordering (AA) – TVV 1
Products and services made available for ordering and provisioning in commercial quantities	– UNE-P (B) - TVV1, TVV4 – Line Sharing (C) - TVV1, TVV4 – Line Splitting (C) – TVV1, TVV4 – Digital Subscriber Line (DSL) (C) – TVV1, TVV4 – Sub-Loops (D) - TVV1, TVV4 – Dark Fiber (E) – TVV1, TVV4 – Enhanced Extended Links (EELS) (V) – TVV1, TVV4
Modifications to Ameritech's OSS and interfaces to provide functionality in conformance with industry standards for Ameritech's machine-to-machine interface and its graphical user interface providing such functionality	– Graphical User Interface (GUI) for Ordering (A, B, C, D) – TVV1, TVV2, TVV3 – Parsed (Fielded) Customer Service Record (CSR) (I) - TVV1 – Service Order Completion Notices (R) - TVV1, TVV4 – Conform To ATIS Standards For Pre-Ordering And Ordering At The Local Service Ordering Guideline, Version 4.0 Level (J & K) – N/A – Accept Full Refresh Supplemental Orders (or mutually agreed upon work around) (T) – TVV1 – Synchronized Pre-Order And Order Data Elements (U) – TVV1 – Enable CLEC Use Of Frame Due Time Specification On UNE Loop Orders (G) – TVV1 – Retain Current Listing On All Order Types (L) – TVV1

Attachment J

Master Test Plan, Version 2.0

Public Service Commission of Wisconsin

Ameritech
OSS Evaluation Project
Master Test Plan

Version 2.0

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September 28, 2000

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I. Document Control

Table I-1: Version Control

Version	Date	Reason
Draft 1.0	August 25, 2000	Draft Release
Draft 1.1	September 15, 2000	Updated Draft Release
Draft 1.2	September 22, 2000	Updated Draft Release
Version 2.0	September 28, 2000	First Release

II. Introduction

A. Background

The Telecommunications Act of 1996 (the Act) requires Ameritech in Wisconsin to meet numerous objectives, including:

- Provision of just, reasonable and nondiscriminatory access to its operations support systems (OSS);
- Provision of the documentation and support necessary for competitive local exchange carriers (CLECs) to access and use these systems; and
- Demonstration that Ameritech's systems are operationally ready and meet prescribed performance standards.

Pursuant to Orders in docket numbers 6720-TI-120, 6720-TI-160, 7825-TI-100, 6720-TI-154, the Public Service Commission of Wisconsin (the Commission[1]) has ordered a comprehensive test of Ameritech-Wisconsin's OSS and its CLEC-facing operations to assist the Commission in assessing whether Ameritech is meeting these and other requirements of the Act. The Commission and Ameritech have retained KPMG Consulting, LLC to design this Master Test Plan and manage the test.

Some Ameritech-Wisconsin systems and processes may not be available for evaluation at the start of the test (Appendix F outlines these systems and processes). The test is not expected to conclude until such systems and processes have been implemented and evaluated.

B. Objective

The overall objective of this Master Test Plan is to describe an approach for testing Ameritech-Wisconsin's OSS systems, interfaces, and processes to determine whether Ameritech's provision of access to OSS functionality enables and supports CLEC entry in the local market. To meet these objectives, KPMG Consulting developed a test plan to evaluate the entire CLEC/ILEC relationship under real world conditions. KPMG Consulting, Ameritech, or the CLECs may propose modifications to the test plan, subject to Commission approval, to assure adequate breadth and depth of testing. In developing the test plan, all stages of the CLEC-ILEC relationship were considered. These include the following:

- Establishing the CLEC-ILEC relationship
- Performing daily CLEC-ILEC operations
- Maintaining the CLEC-ILEC relationship

A broad range of products and service delivery methods are included within the scope of the test. Furthermore, key business functions and transactions such as ordering, provisioning, billing, maintenance and repair, and account management are included in the scope of the review. Other key aspects of the test include the following:

[1] The Commission refers to the Public Service Commission of Wisconsin or its designees.

- The test will be conducted using the most current Ameritech pre-ordering, ordering, maintenance & repair, and billing interfaces in production and the most current published Ameritech business rules;
- The following interfaces will be tested: pre-order (GUI/machine-to -machine), order (GUI/EDI/ASR), maintenance & repair (GUI/machine-to-machine), and billing (usage and invoice feeds);
- An evaluation of Ameritech's Local Service Ordering Guide version 4 (LSOG 4) pre-ordering and ordering interface releases will be conducted;
- The test will include certain service delivery methods, such as Enhanced Extended Links (EELs), sub-loop unbundling, and Digital Subscriber Line (DSL).
- During the production transaction tests, transactions will be sent to the Ameritech production environment.

The SBC Texas performance measures will be used as a baseline for the purposes of the test. Any new performance measures or further modifications to existing measures that occur during the course of the test will also be evaluated.

C. Plan Overview

The test plan is organized into three test families:

- Performance Metrics Reviews (PMR)
- Policies and Procedures Reviews (PPR)
- Transaction Validations and Verifications (TVV)

Within each of the test families, the methods and processes to be applied to measure Ameritech's performance are described along with the specific points in the systems and processes where Ameritech's performance will be evaluated. The results of the test will be compared against measures and criteria identified by the Commission and other measures and criteria as deemed appropriate by the Commission.

This plan also describes the scenarios to be used for evaluating Ameritech's OSS and related support services. The scenarios were designed to depict real-world pre-ordering, ordering, provisioning, maintenance and repair, and billing situations that CLECs currently face or may face in the near future. During testing, the scenarios will be used to develop test cases that provide a detailed description of the transactions and introduce additional variables such as errors and supplements to further simulate real world transactions.

D. Audience and Test Roles

The audience for this document falls into two main categories:

1. Readers using this document during the testing process;
2. Interested parties who have some stake in the result of the Ameritech OSS evaluation and wish to have insight into the evaluation effort.

The primary users of this document are the Commission and KPMG Consulting. Others are the Wisconsin Attorney General's Office, CLECs, Ameritech, the Department of Justice (DOJ), and the Federal Communications Commission (FCC).

Table II-1: Participant Roles

Participant	Role Description
Public Service Commission of Wisconsin	The Public Service Commission of Wisconsin (the Commission) is responsible for directing the overall testing effort. KPMG Consulting will provide results and preliminary evaluation of the results to the Commission. The Commission is responsible for the final evaluation of the test results.
KPMG Consulting, LCC	KPMG Consulting will be the Test Manager. The Test Manager has overall responsibility for the preparation of the master test plan and the management and execution of the test. This role includes preparing for and conducting the test, providing change control throughout the testing cycle, and reporting results to the Commission.
Hewlett Packard	A vendor will be retained to establish and operate an EDI gateway system which interfaces the Test Manager's OSS with Ameritech's OSS for pre-ordering and ordering. The Commission has directed Ameritech to retain Hewlett Packard for this purpose.
Ameritech Wisconsin	Ameritech will be the test subject. In addition, Ameritech will participate in test administration activities and make available its subject matter resources to facilitate the conduct of the test.
CLECs	CLECs have been engaged in providing input to the test design and will participate in several aspects of testing. For example, KPMG Consulting will work with CLECs to develop test parameters, create test specifications, determine transaction mixes for the markets being tested in terms of volumes by transaction type, and determine reasonably expected demand levels for transaction volume tests.
Department of Justice	The Department of Justice may observe the process of developing, conducting, and evaluating the tests.
The Federal Communications Commission	The Federal Communications Commission may observe the process of developing, conducting, and evaluating the tests.

The Web addresses http://www.psc.state.wi.us/ and http://www.osstesting.com/Wisconsin%20OSS%20Test%20Home.htm contain information on Wisconsin's third party testing of Ameritech's OSS.

E. CLEC Simulation for Test Purposes

Several tests within this Master Test Plan require the simulation of real world business situations. To this end, numerous transactions and operations will be conducted using the systems and procedures developed by Ameritech for CLEC use. For example, during the test a wholesale account relationship will be established and system interfaces will be built to Ameritech's OSS, in accordance with Ameritech's published documentation. After setting up for "business," "customers" will be acquired and serviced by submission of orders, receipt of bills, and conduct of maintenance and repair activities. These experiences will be recorded and analyzed by KPMG Consulting.

During the test, numerous steps will be taken to ensure that the information and level of assistance provided by Ameritech is available to all CLECs and is not enhanced solely for the testing organization. To help ensure the validity of data gathered during the CLEC simulation, the following steps will be taken:

- The Test Manager will assign personnel to conduct CLEC simulation activities so that such personnel are not known as testers to Ameritech operations personnel;
- Test beds will be specified and configured to avoid detection of test transactions and situations by Ameritech operations personnel;
- The Test Manager will require testing personnel involved in CLEC simulation activities to utilize only publicly available Ameritech documents and processes;
- When dealing with Ameritech employees during CLEC simulation activities, testing personnel will behave as though they are working on a real business situation -- personnel will avoid indicating that they are conducting a test;
- Test transactions and interactions conducted under production situations are not to be announced to Ameritech beforehand;
- During testing, results from CLEC simulation testing will be compared periodically with other test data to detect differences which may suggest that the simulation data do not reflect real world situations or performance;
- A detailed record of simulation activities and results will be kept, including lists of Ameritech documents, systems, processes, and procedures used;
- To the maximum extent possible, people working for KPMG Consulting on the Process and Procedures Review will not be the same people as those that work on the Transaction Verification and Validation Tests.

A significant portion of the CLEC simulation effort involves pre-ordering and ordering transactions. To facilitate these CLEC simulation activities, a vendor working at the direction of the test manager will be retained to establish and operate a gateway system which interfaces the test manager's OSS with Ameritech's OSS. This vendor will also abide by the aforementioned rules of engagement established for CLEC simulation.

F. Test Until Pass Approach

The test is expected to be conducted using a "test until pass" approach. This is believed to be in the best interest of all parties seeking an open, competitive market for local telephone services in Wisconsin. The process is expected to work as follows:

- If an issue or problem is encountered during the test, KPMG Consulting will inform the Commission and Ameritech by documenting an Observation or Exception describing the situation and providing an assessment:
  - An Observation will be created if KPMG Consulting determines that a test reveals one of Ameritech's practices, policies, or system characteristics might result in a negative finding in the final report;
  - An Exception will be created if KPMG Consulting, LCC determines that a test reveals one of Ameritech's practices, policies, or system characteristics is not expected to satisfy one or more of the evaluation criteria defined for the test.

- Observation and Exception status will be discussed weekly by the Commission, KPMG Consulting, and Ameritech. CLECs will be able to listen to the calls as observers and ask clarifying questions.
- CLECs will be able to view Exceptions on the Commission web site as well as provide input about them to the Commission.
- Observations may or may not become Exceptions. Some Exceptions will not have been identified previously as Observations.
- Ameritech will respond to Observations verbally and to Exceptions in writing. These responses will describe either a clarification of the issue or Ameritech's intended fix(es) to the problem. The responses will be posted on the Commission website.
- If Ameritech has made a change to a process, system, document, or performance measure in response to an Exception, KPMG Consulting will retest as appropriate unless otherwise directed by the Commission.
- KPMG Consulting and the Commission will be responsible for determining when to close an Exception. If the issue raised by the Exception is not resolved, the cycle will continue to iterate until closure is reached, no further action is warranted, or the Commission specifically exempts the Exception from further testing.
- If KPMG Consulting determines that an element of Ameritech's OSS fails to perform as it is documented in materials used by CLECs (e.g., on TC Online, in handbooks, specifications and other such documentation), the documentation in question will be noted.

At the conclusion of this test, there may be some issues raised by Exceptions that remain open. The Commission will decide how to proceed with such Exceptions.

G. Assumptions

This section describes the assumptions made in the development of this Test Plan.

- Ameritech will provide suitable resources in sufficient numbers to assist KPMG Consulting with the evaluation effort.
- Ameritech will provide access to appropriate documentation in the same manner as it makes such documentation available to CLECs.
- Ameritech will provide the necessary resources, facilities, and support to enable the testing organization to establish connectivity with its systems and to create the test bed required to execute the tests (e.g., secure, non-Ameritech office space; equipment; security access; customer accounts and addresses; and appropriate company codes).
- Ameritech will process test transactions as part of normal processing including the provisioning of some scenarios/test cases.
- Ameritech and, where appropriate, CLECs will provide the facilities required to execute the live scenarios.

- Ameritech and, where appropriate, CLECs will allow KPMG Consulting to observe retail and wholesale processes on-site during the evaluation effort.
- Ameritech and the CLECs will give KPMG Consulting access to historical data and current operational reports, as needed, to complete the evaluation.
- CLECs will be afforded numerous opportunities to be informed about the status of testing and to provide input to KPMG Consulting throughout the testing process. In certain situations, CLECs may also be able to monitor test personnel interaction with Ameritech during CLEC simulation activities.
- Ameritech will allow KPMG Consulting to inspect algorithms that may have a bearing on parity access, such as the algorithm used to manage trouble reports.
- Regulatory, legal, and confidentiality issues or concerns can be resolved without significant impact to either the intent of the tests, the ability to execute the tests, or the schedules for their execution.
- KPMG Consulting will hold an informational workshop to discuss the statistical methodologies, approaches, and issues (e.g., alternative hypothesis, sample sizes, alpha and beta levels, permutation testings, etc.) relevant to the test. This workshop will include participation from CLECs, Ameritech, Commission, and other interested parties.
- To the extent the certain non-tariffed products and services are included in the test, reasonable steps will be taken to make available documents which describe the basis on which these products and services are offered by Ameritech to KPMG Consulting.

H. Limitations

The purpose of this section is to describe some limitations of the testing effort. These limitations will be described in terms of what is to be tested and what conclusions can be drawn from the results.

- The philosophy employed throughout the conduct of the OSS Evaluation is to execute a broad test that mirrors a real-world commercial market. The Test Manager is expected to make every reasonable effort to test all technically feasible recommended test scenarios. There are some cases in which certain order types, troubles, and processes cannot be tested directly by KPMG Consulting or Hewlett Packard. Examples include orders with very long interval periods (such as the establishment of collocation arrangements) or high volumes of test provisioning transactions. There are scenarios where in-progress live transactions cannot be obtained or are not practical to execute in a test environment. Also, it is not practical or desirable to execute certain live tests that would disrupt service to Ameritech or CLEC customers, such as a maintenance and repair test that requires an equipment failure. Accordingly, historical information may be used where the process in question has been stable for a sufficient length of time and where data supplied by CLECs and/or Ameritech can be validated by the Test Manager. Likewise, tests may utilize interviews, inspections, live order review, review of performance or operational reports, or other methods that capture the performance of Ameritech with respect to the order types and processes in question.

- Some of the transaction types submitted through the interfaces being tested can only be properly executed with direct involvement from the CLECs. One category of such tests are those that include complex transactions involving physical CLEC facilities. For example, UNE orders involving LNP require a physical switch and a real CLEC in order to be fully completed. Another category would be those tests requiring realistic customer data, such as address validation and directory listing inquiries.
- Operational, time and resource constraints make it impossible to construct a completely, exhaustive test suite. Significant effort has been expended to clearly portray the scope of the proposed test suite, and it is believed that this suite does provide both extensive and sufficient coverage. Provision has been made in the plan to amend or extend the test coverage if, in the judgment of the Commission, an amendment or extension is deemed justified.

I. CLEC Involvement in Testing

CLECs operating in Wisconsin will be asked to volunteer to participate in certain portions of the process and transaction tests. For example, CLECs may be asked to complete a "CLEC Feedback Survey" for use in the POP Work Center Support Evaluation. CLEC participation will also be solicited to provide test cases for the POP Functional Evaluation.

In addition, the inclusion of selected CLEC live transactions provides an alternative test method for transactions that may not be practical to provide through the interfaces being tested, and further facilitates a more realistic depiction of real world production. Use of CLEC live transactions also provides a means to help control for test bias, and allows for an element of blind testing and tracking performance in a "real-world" environment.

The successful execution of those portions of the test requiring CLEC participation is dependent on the extent of that participation. The Test Manager will meet those CLECs who volunteer to participate to mutually agree on the nature and extent of the participation. It is anticipated that agreement on the following issues will be reached: (a) what commitments are needed in terms of people, time, physical resources, access to facilities and work centers, etc. (b) when the commitments need to be delivered and (c) what lead times will be provided in order to arrange to meet the commitments.

Use of CLEC transactions for test purposes will require extensive participation by the Test Manager either to observe the execution of the transactions in order to measure, audit, inspect and monitor progress and report results or otherwise verify and validate the observed results.

J. Communication Forums

The Test Manager will work with the Commission to provide numerous informational forums during the test. For example, the Test Manager will schedule periodic meetings with the Commission, the CLECs, and Ameritech as necessary to address testing status, issues, and proposed resolutions and keep CLECs apprised of all relevant aspects of the project. The Test Manager will also host weekly CLEC status meetings (which will not involve Ameritech staff).

K. Document Structure

This section describes the structure of the document. It includes a table that lists each major section number along with a brief description.

Table II-2: Document Overview

Sect. No.	Section	Content
I	Document Control	Identifies document distribution and necessary approvals.
II	Introduction	Documents project background, scope, and objectives, assumptions, and limitations. Includes who should read the document, and how it is structured.
III	Test Plan Framework	Describes the methodologies for testing Ameritech's systems, interfaces and processes. Includes how testing is segmented and organized, testing components, entrance and exit criteria, data acquistion, and traceability.
IV	Performance Metrics Audit Test Section	Describes the methods and procedures for evaluating Ameritech's data collection, transfer, and processing into its performance metrics.
V	Policies and Procedures Review Test Section	Describes the methods and procedures for evaluating the Ameritech Wholesale's business rules.
VI	Transaction Verification and Validation Test Section	Describes the methods and procedures for verifying and validating Ameritech's core systems through a series of transaction tests.
Appendix A	Test Scenarios	Describes the scenarios to be used in this test.
Appendix B	Normal and Peak Volumes Test Section	Describes the volumes to be used in testing.
Appendix C	Statistical Approach	Describes the statistical methods and tests used to determine whether parity exists.
Appendix D	Performance Metrics and Standards	Lists metrics for process areas gathered from sources such as the Interim Guidelines.
Appendix E	Glossary	Testing terms and definitions used in this document.
Appendix F	PSCW Case No. 6720-TI-160	Modifications and enhancements have been negotiated and continue to be negotiated between Ameritech and CLECs to be included in the test.

III. Test Plan Framework

The overall test of Ameritech's OSS is designed to be multi-faceted and provide end-to-end coverage of the systems, interfaces, and processes that fall within the scope of the testing effort. In constructing a master test plan, many factors were considered, including the systems and processes to be tested, the measurement points and respective evaluation criteria, and the necessary conditions required to stage a successful, efficient, and objective test. The Test Manager is expected to execute all tests listed in this plan.

To present a comprehensive, complete, and thorough test of Ameritech's OSS systems, interfaces, and processes, the master test plan framework has five key dimensions:

- Test Scenarios
- Test Families
- Test Domains
- Test Processes
- Evaluation Criteria

The test scenarios and the test domains define **what is to be tested** *Test scenarios* provide the contextual basis for testing by defining the transactions, products, volumes, data elements, and other variables that must be considered and included during testing. The *test families* organize the systems and processes to be tested. The *test domains* define the systems and processes to be tested.

Test processes and evaluation criteria define **how testing will be conducted** *Test processes* define the techniques, measures, inputs, activities, and outputs of each component test. *Evaluation criteria* serve as the basis for evaluation by defining the norms against which test results are compared.

These concepts are discussed in more detail in the following sections.

A. Test Scenarios

Based on KPMG Consulting's industry experience, the knowledge gained from the New York Public Service Commission Test, the Pennsylvania Public Utility Commission Test, the Florida Public Utility Commission third party test, a review of the available offerings in Wisconsin, the scenarios developed for the Michigan MTP, and contributions from Wisconsin CLECs, KPMG Consulting has developed a representative set of test scenarios.

The test scenarios describe at a high level realistic situations in which CLECs purchase wholesale services and network elements from Ameritech to be resold or repackaged to the CLEC's end-user customer on a retail basis, as well as situations in which CLECs access repair, maintenance, and billing services. The key principles applied in generating the scenarios included: (1) emulating real world coverage, mix, and types of transactions while (2) balancing the requirement for practical and reasonably executable transactions which would not unduly

disrupt normal production or negatively affect customer service. In general, each test scenario describes a real-world situation that will be used to create test cases.

1.0 Scenario Purpose

Scenarios serve several key purposes. Scenarios help define the products, services, and transactions that should be included for transaction testing. In this regard, test scenarios provide the guidance and framework for developing "real world" test cases to simulate live production in a controlled test environment. The test cases provide the actual detailed instructions required to build individual transaction test instances.

These scenarios will be used to test functionality, performance, and other attributes associated with the ability of CLECs to access information from Ameritech business processes and associated systems. Scenarios provide a way to bridge across test domains and families, thereby facilitating both point-specific and end-to-end testing of various systems and processes and providing the breadth and depth of coverage of products and services to be tested.

2.0 Scenario Use

A list of the scenarios is provided in table form in Appendix A. In general, these scenarios specify a high-level description of a transaction situation. For example, one scenario is to change features for an existing CLEC Resale business Plain Old Telephone Service (POTS) customer. These scenarios will be used to generate specific test cases during testing.

The test cases represent variations on the basic scenario. For example, from the scenario mentioned above, there could be several test cases. One such test case might be to delete Call Waiting and add Caller ID to each line of a ten-line business customer with sequential hunting among the lines. Another case might be to add hunting to a five-line business customer account and then cancel the order after two days. Yet another case might be to remove hunting from a seven-line business customer and then supplement the order three days later to remove Call Waiting from the auxiliary lines. A further case might be to introduce a specific intentional error in this order and then submit an order supplement to correct the error.

Each of these test cases drive the definition of detailed test instances for various components of the total test. These test instances correspond to the test case for a specific customer account. The Test Manager is expected to transmit numerous test instances for each test case. To help ensure the blindness and objectivity of the test, only the high-level scenarios, and not the more detailed test cases or instances are listed in this document. CLECs are expected to contribute to the development of the test case requirements during the course of the test.

For functionality testing, volumes of test instances will be assigned to each of the test cases based, in part, on a determination of the sufficiency of sample sizes to determine compliance with appropriate performance metrics. The method for determining the appropriate performance metrics that will be used in this test is described in Appendix D. Other considerations that will be taken into account by the Test Manager in determining test volumes will be assurance of sufficient samples by customer type (residence vs. business), as well as by service delivery method. In addition, the Test Manager may determine based on experience in other jurisdictions and further analysis of CLEC experience in Wisconsin to add additional volumes to certain scenarios.

For volume testing, normal expected volumes will then be assigned to a selected set of the test cases based on projections of expected real world production. In order to derive the "normal volume" estimate, the Test Manager will solicit forecasts by product type from both Ameritech and CLECs offering service or planning to offer service in the Ameritech footprint. Individual test instances that match the test cases will be generated based on the volume that has been assigned.

In addition, a stress volume test will be conducted to test the capacity and identify potential choke points of the interfaces. Stress volumes will be assigned to a subset of the test case types based on some multiplier of the normal expected volumes.

B. Test Domains

The areas subject to testing exist in four domains that mirror the major business functions performed by a telecommunications carrier:

- Pre-Order, Order, and Provisioning (POP)
- Maintenance and Repair (M&R)
- Billing (BLG)
- Relationship Management and Infrastructure (RM&I)

These four domains are useful in defining the areas to be tested and the specific tests to be conducted.

1.0 Pre-Order, Order, and Provisioning Domain

This domain is comprised of the systems, processes, and other operational elements associated with Ameritech's support for Pre-Ordering, Ordering, and Provisioning activities for wholesale services and unbundled network elements. The purpose of the specified tests is to evaluate functionality, to evaluate compliance with prescribed measurements, and to provide a basis for comparing this operational area to parallel systems and processes supporting Ameritech's retail operations.

2.0 Maintenance and Repair Domain

This domain is comprised of the systems, processes, and other operational elements associated with Ameritech's support for wholesale maintenance and repair activities. Tests associated with this domain will evaluate functionality and provide a basis for comparing this operational area to parallel systems and processes supporting Ameritech's retail operations and applicable industry standards. Tests will also evaluate Ameritech's compliance with maintenance and repair performance measurements.

3.0 Billing Domain

This domain is comprised of the systems, processes and other operational elements associated with Ameritech's support for wholesale billing. Tests associated with this domain are designed to evaluate Ameritech's compliance with measurement agreements and to ensure adherence to sound management practices.

4.0 Relationship Management & Infrastructure Domain

This domain is comprised of the systems, processes and other operational elements associated with Ameritech's establishment and maintenance of business and technical relationships with the CLECs.

C. Test Families

The areas subject to testing have been organized into three test families that are composed of tests that require similar methods of evaluation. The three test families are:

- Transaction Verification and Validation
- Processes and Procedures Review
- Performance Metrics Review

These three test families are useful in organizing the areas to be tested and the specific tests to be conducted. The Transaction Verification and Validation (TVV) test family is comprised of transaction-based tests, while the Processes and Procedures Review (PPR) test family is comprised of reviews of Ameritech's wholesale business processes and management practices. The third test family, Performance Metrics Review (PMR), is comprised of reviews Ameritech's service quality measurement data collection, calculation, and reporting functions.

Within each of these test families, specific test targets have been identified for testing. The POP, Billing, and M&R domains are addressed in each of the test families. RM&I is addressed completely within the PPR test family. The relationship between the test families and test domains is shown below.

Table III-1: Domain/Test Family Matrix

	POP	Billing	M&R	RM&I
PMR	X	X	X	
PPR	X	X	X	X
TVV	X	X	X	

D. Test Processes

Within each of the three test families, specific test processes to be executed have been defined. In general, two kinds of tests have been developed:

- Transaction-Driven System Analysis
- Operational Analysis

1.0 Transaction-Driven System Analysis

Tests utilizing transaction-driven system analysis rely on initiation of transactions, tracking of transaction progress, and analysis of transaction completion results to evaluate a system under test. Transaction-driven system analysis requires defining several key facets of testing, including the data sources (e.g., CLEC live data, Ameritech historical data), the system

components under test (e.g., machine-to-machine interfaces, graphical user interfaces), and volumes (e.g., normal, stress).

The transactions, or test instances, to be used in each transaction-driven system analysis test will be derived from higher level sets of one or more transactions called test cases, which in turn have been developed from test scenarios. See the Scenario section above for additional discussion.

2.0 Operational Analysis

Tests utilizing operational analysis focus on the form, structure, and content of the business process under study. This test method will be used to evaluate day-to-day operations and operational management practices, including policy development, procedural development, and procedural change management. Operational analysis validates and verifies the results of a process to determine that the process functions correctly and according to documentation and expectations. Operational analysis also tests compliance by reviewing management practices and operating procedures against legal, statutory, and other requirements.

E. Evaluation Criteria

Measures and their corresponding evaluation criteria provide the basis for conducting tests. Evaluation criteria are the norms, benchmarks, standards, and guidelines used to evaluate measures identified for testing. Evaluation criteria provide a framework for the scope of tests, the types of measures that must be taken during testing, and the approach necessary for analyzing results.

There are four types of evaluation criteria, as shown in the table below.

Table III-2: Evaluation Criteria

Evaluation Criteria Type	Description	Examples
Quantitative	These criteria set a threshold for performance where a numerical range of values is possible, such as response time.	System response time is four seconds or less.
Qualitative	These criteria set a threshold for performance where a range of quality values is possible, such as level of customer satisfaction.	Documentation defining daily usage feeds is adequate.
Parity	Parity measures can be of three types: 1) Quantitative: These are criteria that require two measurements to be developed and compared, such as whether external response time is at least as good as internal response time. 2) Functionality: These criteria require that both wholesale and retail systems offer the same set of functions. 3) Process: These criteria require that the processes used for both wholesale and retail offer similar controls and outcomes.	CLEC transaction time no greater than Ameritech Retail transaction time.

Evaluation Criteria Type	Description	Examples
Existence	These are criteria where only two possible test results can exist (e.g., true/false, presence/absence), such as whether a document exists or not.	Documentation defining daily usage feeds exists.

The evaluation criteria to be applied in the overall test effort are based largely on the legal and regulatory requirements for functionality and performance applicable to Ameritech's OSS. Overall, evaluation criteria are derived from three types of sources, as shown below.

Table III-3: Sources of Evaluation Criteria

Evaluation Criteria Source Types	Description
Legal and Regulatory Requirements	Requirements specified by statute and regulation, such as FCC orders, court orders, Commission statutes, orders, rules, and regulations, federal and state statutes, and other binding requirements such as interconnect aggrements and others resulting from judicial or governmental proceedings. (State and federal proceedings that the Test Manager uses in evaluation of legal and regulatory requirements will be cited in the final report.)
Consensus Requirements	Norms, benchmarks and standards developed by formal consensus proceedings.
Good Management Practices (GMP)	Widely recognized standards and guidelines promulgated by sanctioned industry and governmental organizations and other bodies (e.g., Association for Telecommunications Industry Solutions (ATIS), Ordering and Billing Forum (OBF), Telecommunications Industry Forum (TCIF)); also includes benchmarks, performance goals, and guidelines derived from industry and topic area experts, Ameritech and CLEC performance targets, publications, academic journals and other sources.

F. Test Process Elements

For every test defined within each test family, the test process includes a description of the test, its objectives, the targets and scope of the test, the measures to be used, the test scenarios which apply to the test, the test's inputs, activities, and outputs, as well as entrance and exit criteria. Several key test process elements are described in the following sections. Each test process specifies the evaluation techniques used to capture and analyze information developed during testing and the evaluation measures used to conduct testing.

The general presumption of this test plan is that all facets of this test plan, including but not limited to the A-AA issues, will be tested specifically for Wisconsin. KPMG Consulting will review OSS testing in other states in the Ameritech region to determine whether the results of those tests may be applicable to any specific portion of this Master Test Plan. KPMG Consulting, after notice to and reasonable opportunity for input by the pre-hearing participants, may recommend to the Commission to utilize the results of those tests rather than conducting duplicative testing, where KPMG Consulting can attest that the testing done in other states is independent and reliable and can be used as a basis for evaluation acceptable to the Commission or its representatives. To be considered duplicative, a test must meet the specifications listed in the Wisconsin MTP.

1.0 Global Entrance Criteria

Entrance criteria are those requirements that must be met before individual tests can commence. Global entrance criteria, which apply to every individual test (except where noted otherwise), include the following:

1. **The Master Test Plan has been approved.**

   The Test Plan must be approved by the Commission.

2. **All relevant legal dependencies have been resolved.**

   Any pending legal and regulatory proceedings that impact the ability to perform the test must be concluded in a manner, which allow testing to proceed. Any necessary legal or regulatory approvals must be secured. This includes compliance with all applicable orders in Docket number 6720-TI-160.

3. **The performance measurements to be used in the test are determined.**

   The performance metrics to be used in the test must be determined by the Commission and fully defined. Fully functional Ameritech measurements are required to support collection of test results and to ensure a method exists to monitor on-going compliance. With assistance from the Test Manager, Commission will assess the operational readiness of all required Ameritech measurements and verify that all requirements have been met.

4. **All Ameritech interface capabilities subject to testing at the onset of the evaluation must be operationally ready.**

   Electronic interfaces to OSS access functions of pre-ordering, ordering, provisioning, maintenance and repair, and billing must be operational and in production in order to be tested. (During the test period, additional functionality to be tested may become operational. For these systems and processes, Ameritech will indicate via the CLEC Change Control process when such functionality is operational and in production.)

5. **For transaction tests to begin, construction of the transaction testing systems (including the gateway systems and Test Manager's OSS) must be complete.**

   The Test Manager's interfaces to Ameritech's OSS will be built based on specifications and documentation provided by Ameritech to all CLECs. Acceptance testing by the Test Manager will be necessary to verify that the test systems are capable of communicating with Ameritech's systems. The Test Manager will indicate to Commission when construction of these systems is complete.

Table III-4: Global Entrance Criteria

Criteria	Responsible Party
The Test Plan has been approved.	The Commission
All relevant legal dependencies have been resolved.	Ameritech, The Commission
The performance measurements to be used in the test are determined.	The Commission
All Ameritech interface capabilities subject to testing at the onset of the evaluation must be operationally ready.	Ameritech
For transaction tests to begin, construction of the transaction testing systems (including the gateway systems and Test Manager's OSS) must be complete.	Test Manager, Ameritech

2.0 Global Exit Criteria

Exit criteria are the requirements that must be met before the tests defined in the Test Plan can be concluded. The Exit Criteria must be met prior to KPMG Consulting providing its report to the Commission as described in this MTP.

1. **All test activities required by the MTP must be completed.**

   For each test, all fact finding and analysis activities must be completed. All results and test methodologies have been documented. Any exceptions must be resolved or retesting completed, unless specifically exempted by the Commission.

2. **All change control, verification, and confirmation steps have been completed.**

   The results of test activities must be documented and reviewed for accuracy. Any results that require clarification or follow-up are confirmed.

3. **All negotiated modifications and enhancements are tested.**

   The test will not be considered complete until Ameritech has implemented a series of modifications and enhancements to its OSS (as described in the table below and in Appendix F), and those modifications and enhancements have been tested in the state of Wisconsin. These modifications and enhancements have been negotiated[2] between Ameritech and CLECs in pre-hearing work sessions conducted under the auspices of several state regulatory agencies and at the Federal Communications Commission (Memorandum Opinion and Order, Applications of Ameritech Corp., Transferor, and SBC Communications Inc.,

[2] At this point, Ameritech and the CLECs have agreed that these modifications and enhancements should be implemented, and they have further agreed that the third-party test cannot be deemed complete until these modifications and enhancements have been tested. However, the pre-hearing parties have not yet come to final agreement concerning the specifics of each and every modification and enhancement. Pre-hearing discussions regarding these specifics are ongoing. Per the Order in Docket number 6720-TI-160 dated July 19, 2000, if resolution of these issues cannot be reached, the parties will provide a statement of such issues for inclusion into the temporary Administrative Law Judge's report scheduled to be presented to the Commission by October 2, 2000. The Commission may then take action on the items contained within the report.

Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95 and 101 of the Commission's Rules, CC Dkt. No. 98-141, FCC 99-279, 1999 WL 809551 (rel. Oct. 8, 1999), app. pend. ,sub. nom. Telecommunications Resellers Ass'n v. FCC, Case No. 99-1441 (D.C. Cir.) (*The Merger Order*).

Table III-5: Modifications and Enhancements to be Tested[3]

Type of Modification and Enhancement	Brief Description
Functionalities, processes and procedures to be deployed (Note that letters in parentheses refer to the issue as described in Appendix F)	– Facilities Availability Process (A) – PPR9, TVV4 – Improved Escalation Process Concerning Facility Assignment (A) – PPR9 – Procedures for Requesting and Receiving by Central Office DLC Loop Percentages (A) – N/A – Facility Problem Notification Within 24 Hours of FOC (A) – PPR9, TVV1, TVV4 – Loop Assignment for DSL (C) – PPR9, TVV1, TVV4 – New Firm Order Confirmation (FOC) and Facility Modification Process – Documentation Available (F) – PPR9, TVV4 – New Facility Modification Process – Identify Facility Problems and Notify CLEC of modification or build options (F) – PPR9, TVV4 – New Firm Order Confirmation Process – Incorporate version numbers and reason codes on revised FOCs (F) – TVV1 – Hot Cut Procedures (G) - PPR9, TVV4 – Hot Cut Procedures – Integrated Services Digital Network (ISDN)-xDSL (G) – PPR9, TVV4 – Street Address Guide (SAG) to CSR Conversion (abbreviated validation) (H) – TVV1 – Directory Assistance/Directory Publishing (L) – TVV1 – Provide current SBC documentation on its " Retain Current Listing" process (L) – TVV1 – Provide current AAS documentation on its Order and Query Process via website (L) – N/A – Implement a process to allow CLECs the option to retain current listings, except on partials (L) – TVV1 – Provide interface (or work-around) for integrated directory listings ordering ability (L) – TVV1, TVV4 – E911 Database Management (confirm parity between Ameritech and CLECs regarding use of SAG) (M) – N/A – Customer Premise Access -- Provide Copies of Policy (N) – PPR9 – Replacement of Internal Network Interface Devices (NIDs) (O) – N/A – TC/Net Change Process (P) – PPR1 – LEC Protection (Q) – TVV1 (if offered) – LEC Protection – LOA Policy (Q) – TVV1 (if offered) – Flow Through (S) – TVV3 – Branded Operator Services (W) – PPR9 – Partial Migrations (X) – TVV1 – Account Management Process – Edited Ameritech Handbook (Y) – PPR2 – Account Management Process – Coordination Between Account Team and

[3] To the extent that the processes listed in Table III-5 involve manual pre-ordering or ordering, they will be evaluated as part of PPR7, POP Manual Order Processing Evaluation.

Type of Modification and Enhancement	Brief Description
	Directory Listing and Directory Assistance (Y) - PPR2 - Collocation Ordering, Rates, Auditing and Record Keeping Processes (Z) - PPR6 - LNP 10-Digit Trigger Ordering (AA) - TVV 1
Products and services made available for ordering and provisioning in commercial quantities	- UNE-P (B) - TVV1, TVV4 - Line Sharing (C) - TVV1, TVV4 - Line Splitting (C) - TVV1, TVV4 - Digital Subscriber Line (DSL) (C) - TVV1, TVV4 - Sub-Loops (D) - TVV1, TVV4 - Dark Fiber (E) - TVV1, TVV4 - Enhanced Extended Links (EELS) (V) - TVV1, TVV4
Modifications to Ameritech's OSS and interfaces to provide functionality in conformance with industry standards for Ameritech's machine-to-machine interface and its graphical user interface providing such functionality	- Graphical User Interface (GUI) for Ordering (A, B, C, D) - TVV1, TVV2, TVV3 - Parsed (Fielded) Customer Service Record (CSR) (I) - TVV1 - Service Order Completion Notices (R) - TVV1, TVV4 - Conform To ATIS Standards For Pre-Ordering And Ordering At The Local Service Ordering Guideline, Version 4.0 Level (J & K) - N/A - Accept Full Refresh Supplemental Orders (or mutually agreed upon work around) (T) - TVV1 - Synchronized Pre-Order And Order Data Elements (U) - TVV1 - Enable CLEC Use Of Frame Due Time Specification On UNE Loop Orders (G) - TVV1 - Retain Current Listing On All Order Types (L) - TVV1

4. All negotiated performance measures are tested.

The set of performance measures to be used in the test are being negotiated between Ameritech and CLECs in pre-hearing work sessions conducted under the auspices of the Commission. The measures to be used for this test will include: 1) the baseline measures used in Texas for SBC, 2) measures for any new processes, policies, products or services, and 3) remedy measures currently under discussion in pre-hearing work sessions. The Wisconsin pre-hearing members have set a target date of October 1, 2000 for performance metrics and remedy measures to be raised to the Commission but changes or additions can be made to the set of performance and remedy measures to be tested after October 1 subject to agreement by the pre-hearing and by Commission order. The test will not conclude until (1) Ameritech has implemented the modifications, deletions, and additions to the baseline measures resulting from the pre-hearing (either by agreement of the pre-hearing parties or as otherwise ordered by the Commission) and (2) those modifications, deletions, and additions are encompassed as part of the third-party test and audited. In addition to these global exit criteria, test-specific exit criteria, where applicable, are defined within each test.

Table III-6: Global Exit Criteria

Criteria	Responsible Party
All required test activities must be completed.	Test Manager
All change control, verification, release management and confirmation steps have been completed.	Test Manager
All negotiated modifications and enhancements are tested.	Test Manager, Ameritech, the Commission

Criteria	Responsible Party
All negotiated performance measures are tested.	Test Manager, Ameritech, the Commission

3.0 Evaluation Techniques

Each test relies on one or more techniques to collect and record measurements and analyze the results. The five types of techniques defined for this test are described in the chart below.

Table III-7: Evaluation Techniques

Technique	Description
Transaction Generation	Transaction generation is the use of live, historical, and/or generated data which is executed through the system under review. The results of this test are evaluated for quality.
Report Review	Review and analysis of historical data, reports, metrics, and other information in order to assess the effectiveness of a particular system or business function. This includes performance measurement reports and other management reports.
Inspection	Physical review of process activities and products, including site visits, walk-throughs, read-throughs, and work center observations.
Logging	Monitoring activities and collecting information by logging process events and products as they happen. Logging can be mechanized or manual.
Document Review	Compilation and review of books, manuals, and other publications related to the process and system under study.
Calculation	Verification of company calculations to evaluate accuracy and reconciliation to assure completeness of the data.
Interviews	Examination of processes or results through questioning ILEC or CLEC management and staff.

IV. Performance Metrics Audit Test Section

A. Purpose

The purpose of this section is to define the specific tests to be undertaken in evaluating the systems, processes, and other operational elements associated with Ameritech's support for Performance Metrics (Service Quality Measurements). This will constitute the first annual audit but does not prescribe the scope of any future audits. The performance metrics audit will be initiated as soon as possible. The performance measurements audit will determine if Ameritech has properly implemented the Commission required parity and performance standards measurements, and the reliability of the data. This section defines the specific tests to be undertaken in the audit of performance metrics.

The performance metrics audit test will be conducted using the United States General Accounting Office Government Auditing Standards related to issues of performance audits as applicable to public utilities, as determined by KPMG Consulting in the exercise of its reasonable professional judgment in consultation with the Commission.

B. Organization

The Performance Metrics Review is organized into three test target areas, which represent the key focus areas for testing in this domain. The Performance Metrics scope section contains a series of tables that identify the specific tests to be associated with each target test area. The tables are organized based upon subject test matter.

The subsequent section, Performance Metrics Review "Test Process," provides additional information and tables that further define the testing approach, inputs, outputs, as well as entrance and exit criteria.

C. Scope

The Performance Metrics Review test family is comprised of three test target areas, representing important and generally distinct areas of effort undertaken by Ameritech. The three test target areas are:

- Standards & Definitions
- Data Processing
- Data Retention

Each target test area is further broken down into a number of increasingly discrete Process and Sub Process Areas that serve to identify the test details and procedures.

D. Test Process

Five tests have been designed to address the three test target areas. The organization of the subject test processes is as follows:

PMR1: Data Collection and Storage Verification and Validation Review

PMR2: Metrics Definitions and Standards Development and Documentation Verification and Validation Review

PMR3: Metrics Change Management Verification and Validation Review

PMR4: Metrics Data Integrity Verification and Validation Review

PMR5: Metrics Calculations and Reporting Verification and Validation Review

The three test target areas and five metrics tests will review all of the service quality measures that Ameritech is currently reporting, in part based on requirements of state and federal regulators. The metrics to be used in the test will be determined by the Commission before the test commences. This determination will be based on input from a Work Group consisting of representatives from CLECs active in Wisconsin, Ameritech, and the Commission. When these metrics have been determined, they will be listed in Appendix D.

The metrics tests will involve an examination of both live industry data and, where applicable, data from the test transactions performed by the Test Manager. The tests will involve an investigation of the processes both for developing the metrics and for deriving the standards derived from retail analogs. That is, both CLEC and Retail data will be included in the test.

1.0 Test PMR1: Data Collection and Storage Verification and Validation Review

1.1 Description

This test evaluates key policies and practices for collecting and storing raw and target data necessary for the creation of performance metrics. The procedures both for data used in the calculation of the metrics and data required for the calculation of retail analogs will be included. This test will rely on checklists, document reviews, and inspections.

1.2 Objectives

The objectives of this test are to determine the adequacy and completeness of key policies and procedures for collecting and storing performance data. This test will also evaluate the extent to which Ameritech's operations are consistent with the policies and procedures - i.e., are the policies and procedures being followed consistently.

1.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager

1.4 Test Scope

Table IV-1 Test Target: Data Collection and Storage Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Collection of Data	Collection policies & procedures for CLEC and retail data	Adequacy and completeness of collection policies and procedures	Inspection Document review Report review	Qualitative
	Identification of collection points	Applicability of and measurability from control points	Inspection	Qualitative
	Existence of collection tools	Adequacy and scalability of data collection tools	Inspection	Qualitative
	Internal Controls	Adequacy and completeness of the internal control process	Inspection Document review Report Review	Qualitative
Storage of Data	Storage policies & procedures for CLEC and retail data	Adequacy and completeness of storage policies and procedures	Inspection Document review Report review	Qualitative
	Identification of storage sites	Applicability of and measurability from control points	Inspection	Qualitative

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
	Existence of storage tools	Adequacy and scalability of data storage tools	Inspection	Qualitative
	Internal Controls	Adequacy and completeness of the internal control process	Inspection Document review Report Review	Qualitative

1.5 Scenarios

This test does not rely on scenarios.

1.6 Test Approach

Inputs	Activities	Outputs
– Ameritech Metrics Policies and Processes Documentation – Ameritech Metrics Definition Documentation – Other procedural and technical documentation – Evaluation checklists – Interview guides	– Gather information – Review collection and storage policies and procedures for both CLEC data and data used in calculations of retail analogs – Perform walkthroughs of Ameritech facilities that are relevant to the production of performance measurements – Perform interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

1.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

2.0 Test PMR2: Metrics Definitions and Standards Development and Documentation Verification and Validation Review

2.1 Description

This test evaluates the overall policies and practices for developing and documenting metrics definitions and standards. This would include policies and practices associated with both CLEC and, for standards that are retail analogs, retail measurements. This test will rely on checklists, document reviews and inspections.

2.2 Objectives

The objectives of this test are to determine the adequacy and completeness of key procedures for developing, documenting, and publicizing standards and definitions for performance metrics.

2.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Process evaluation checklist	Test Manager
Interview guides	

2.4 Test Scope

Table IV-2 Test Target: Metrics Definition and Standards Development and, Documentation Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Metrics Definitions	Documentation of Metrics Definitions	Adequacy and completeness of Metrics Definitions	Inspection Document review Report review	Qualitative
	Distribution of Metrics Definitions	Adequacy and completeness of the distribution of the Metrics Definitions	Inspection Document review Report review	Qualitative Qualitative
Standards Definitions	Documentation of Standards Definitions	Adequacy completeness of Standards Definitions	Inspection Document review Report review	Qualitative Qualitative
	Distribution of Standards Definitions	Adequacy and completeness of the distribution of the Standards Definitions	Inspection Document review Report review	Qualitative Qualitative

2.5 Scenarios

This test does not rely on scenarios.

2.6 Test Approach

Inputs	Activities	Outputs
– Ameritech Metrics Development Documentation – Ameritech Metrics Definitions Documentation – Other procedural and technical documentation that may be appropriate – Evaluation checklists – Interview guides	– Gather information – Perform interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

2.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

3.0 Test PMR3: Metrics Change Management Verification and Validation Review

3.1 Description

This test evaluates the overall policies and practices for managing the change of the standards and definitions in the Ameritech metrics and the calculation of the metrics, and the communication of these changes to the Commission and the CLECs. This would include policies and practices associated with both CLEC and, where the standards are retail analogs, retail measurements. This test will rely on checklists, document reviews and inspections.

3.2 Objectives

The objectives of this test are to determine the adequacy and completeness of key procedures for developing, conducting, monitoring, and publicizing change management of the performance metrics. This test will also evaluate the extent to which Ameritech's practices and procedures used to effect change in the performance metrics systems conform to the documented Ameritech change management process for performance metrics.

3.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager
Ameritech's written Change Management Process for performance metrics	Ameritech

3.4 Test Scope

Table IV-3 Test Target: Metrics Change Management Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Change Management	Developing Change Proposals	Completeness and consistency of change development process	Inspection Document review Report review	Qualitative
	Evaluating Change Proposals	Completeness and consistency of change evaluation process	Inspection Document review Report review	Qualitative
	Implementing Change	Completeness and consistency of change implementation process	Inspection Document review Report review	Qualitative
	Intervals	Reasonableness of change interval	Inspection Document review Report review	Qualitative
	Documentation	Timeliness of documentation updates	Inspection Document review Report review	Qualitative
	Tracking Change Proposals	Adequacy and completeness of change management tracking process	Inspection Document review Report review	Qualitative

3.5 Scenarios

This test does not rely on scenarios.

3.6 Test Approach

Inputs	Activities	Outputs
– Ameritech Metrics Policies and Processes Documentation – Other procedural and technical documentation – Evaluation checklists – Interview guides	– Gather information – Perform interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

3.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

4.0 Test PMR4: Metrics Data Integrity Verification and Validation Review

4.1 Description

This test evaluates the overall policies and practices for processing the data used by Ameritech in the production of the reported performance metrics and standards. This test will rely on document reviews, inspections, and sampling of partially converted data. Both CLEC and retail data will be included in the test. In addition, both retrospective data and data derived from the transactions submitted by the Test Manager will be included.

4.2 Objectives

The objective of this test is to determine the integrity of key procedures for processing the data necessary for the production of performance metrics.

4.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager
Preliminary analysis of PMR 5	Test Manager

4.4 Test Scope

Table IV-4 Test Target: Metrics Data Integrity Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Data Integrity	Transfer of data from point(s) of collection	Accuracy, adequacy and completeness of the data transfer process	Inspection Document review Report review Calculation	Qualitative Quantitative
	Conversion of data from raw to processed form	Accuracy, adequacy and completeness of the conversion policies and procedures	Inspection Document review Report review Calculation	Qualitative Quantitative
	Internal Controls	Adequacy completeness of the internal control process	Inspection Document review Report review	Qualitative

4.5 Scenarios

This test does not rely on scenarios.

4.6 Test Approach

Inputs	Activities	Outputs
– Ameritech Metrics Definitions Documentation – Ameritech Metrics Definition Documentation	– Gather information – Perform interviews and documentation reviews – Complete evaluation	– Completed evaluation checklists and interview summaries – Summary report

– Other procedural and technical documentation – Evaluation checklists – Interview guides	checklists and interview summaries – Gather sample of data – Analyze data – Develop and document findings	

4.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

5.0 Test PMR5: Metrics Calculations and Reporting Verification and Validation Review

5.1 Description

This test evaluates the processes used to calculate performance metrics and retail analogs. The test will rely on re-calculating metrics and retail analogs and reconciling any discrepancies to verify and validate the reporting of the metrics. The test will use both retrospective data and data collected by Ameritech from the execution of transactions. This test will also analyze the documentation published by Ameritech about metrics and the consistency between the documentation and the procedures used for calculating metrics. The test will rely on checklists, document reviews, inspections, and standard statistical techniques.

5.2 Objectives

The objectives of this test are to determine the accuracy of recent metrics calculations and to verify that the metrics as produced by Ameritech are consistent with its documentation and stated objectives.

5.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4

5.4 Test Scope

Table IV-5 Test Target: Metrics Calculations and Reporting Review Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Metrics Calculations and Reporting	Accuracy of metrics calculations	Ability to recreate calcuations of metrics values and retail analogs	Calculation	Quantitative

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
	Documentation	Consistency between definitions and metrics calculations programs	Document review	Qualitative

5.5 Scenarios

This test does not rely on scenarios.

5.6 Test Approach

Inputs	Activities	Outputs
– Ameritech definitions and standards as verified by PMR2 – Ameritech's target database as verified and validated by PMR1 – Ameritech Metrics Definition Documentation – Other procedural and technical documentation – Evaluation checklists – Interview guides	– Gather information – Perform interviews and documentation reviews – Complete evaluation checklists and interview summaries – Gather data – Recreate performance metrics from target data – Develop and document findings	– Completed evaluation checklists and interview summaries – Completed performance metrics calculations – Summary report

5.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

V. Processes and Procedures Review Test Section

A. Purpose

The purpose of this section is to define the specific tests to be undertaken in evaluating the systems, processes and other operational elements associated with Ameritech's establishment and maintenance of business relationships with the CLECs. Areas to be evaluated include the provisioning of on-going operational support to CLECs in a manner both adequate to CLEC business needs and comparable to that provided to Ameritech retail operations.

B. Organization

The Processes and Procedures Review "Scope" section contains a series of tables that identify the types of tests to be associated with each Target Test Area and are organized based upon test subject matter.

The subsequent section, Processes and Procedures Review "Test Process," provides additional information and tables that further define the testing approach, inputs (including those from CLECs), outputs, as well as entrance and exit criteria. The tests are grouped to enable an efficient overall test procedure.

C. Scope

The Process and Procedures Review Test family is comprised of Target Test Areas representing important and generally distinct areas of effort undertaken by Ameritech to establish and subsequently support CLECs. These Target Test Areas include:

- Change Management, including ongoing development of CLEC interfaces with Ameritech's OSS, and Ameritech interface testing facilities made available to CLECs
- Release Management
- CLEC Training
- Account Establishment & Management
- Forecasting
- Interface Development
- Network Design, Collocation and Interconnection Planning
- Domain Specific Process Reviews

Each Target Test Area is further broken down into a number of increasingly discrete Process and Sub Process Areas that serve to identify the particular area of interest under test.

Due to the nature of certain manual processes, the evaluations will be conducted in order to achieve a representative sampling. Factors that will be included are:

- Reviews conducted over multiple days
- Reviews conducted at multiple locations, where appropriate
- Reviews conducted with multiple individuals

D. Test Process

Sixteen test processes have been designed to address the seven Test Target areas. The organization of the subject test processes is as follows:

PPR1	Change Management Practices Verification and Validation Review
PPR2	Account Establishment & Management Verification and Validation Review
PPR3	OSS Interface Help Desk Functional Review
PPR4	CLEC Training Verification and Validation Review
PPR5	OSS Interface Development Verification and Validation Review
PPR6	Collocation and Network Design Verification and Validation Review
PPR7	POP Manual Order Processing Evaluation
PPR8	POP Work Center/Help Desk Support
PPR9	Provisioning Process Evaluation
PPR10	Billing Work Center/Help Desk Support Evaluation
PPR11	Daily Usage Feed Returns – Process Evaluation
PPR12	Daily Usage Production and Distribution – Process Evaluation
PPR13	Billing Production and Distribution – Process Evaluation
PPR14	End-to-End M&R Process Evaluation
PPR15	M&R Work Center Support Evaluation
PPR16	Network Surveillance Support Evaluation

1.0 Test PPR1: Change Management Practices Verification and Validation Review

1.1 Description

This test evaluates Ameritech's policies and procedures for managing changes to the OSS interfaces and business processes utilized by CLECs. The change management practices for Ameritech-initiated and CLEC-initiated changes shall be considered. Additionally, data will be reviewed to evaluate change management of a major software release, LSOG 4, from initiation through implementation. Adherence to change management procedures will be monitored, analyzed, and reported throughout the life of the test.

1.2 Objectives

The objectives of this test are to determine the adequacy and completeness of procedures for developing, publicizing, conducting, and monitoring change management.

1.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager

1.4 Test Scope

Table V-1 Test Target: Change Management Practices Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Change Management	Developing Change Proposals	Completeness and consistency of change development process	Inspection Document review Report review	Qualitative
	Evaluating Change Proposals	Completeness and consistency of change evaluation process	Inspection Document review Report review	Qualitative
	Implementing Change	Completeness and consistency of change implementation process	Inspection Document review Report review	Qualitative
	Intervals	Reasonableness of change interval	Inspection Document review Report review	Qualitative
	Documentation	Timeliness of documentation and notification updates.	Inspection Document review Report review	Qualitative
	Tracking Change Proposals	Adequacy and completeness of change management tracking process	Inspection Document review Report review Logging	Qualitative

1.5 Scenarios

This test does not rely on scenarios.

1.6 Test Approach

Inputs	Activities	Outputs
– Ameritech change management process documentation – Other procedural and technical documentation – Ameritech instructions to CLECs for interacting with change management functions and interpreting change management activities – Evaluation checklists – Interview guides – CLEC data and interviews – Change management process artifacts, such as change management meeting notes, change management notifications and updated specifications – CLEC Forum and CLEC User Forum artifacts such as notices of meeting, documents provided by Ameritech to CLECs that outline changes that are to be implemented, specifications and issues for resolution	– Gather documentation and other relevant data – Perform interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

1.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

2.0 Test PPR2: Account Establishment & Management Verification and Validation Review

2.1 Description

This test evaluates Ameritech's policies and practices for establishing and managing CLEC account relationships. Account establishment and management activities such as requests for account manager assistance are included in the scope of this test.

2.2 Objectives

The objectives of this test are to determine the adequacy, completeness, and compliance with procedures for developing, publicizing, conducting, and monitoring account management.

2.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager
Retail analogs	Test Manager/The Commission
Interval standards for account management responsiveness to CLEC requests	The Commission

2.4 Test Scope

Table V-2 Test Target: Account Establishment & Management Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Establishing an Account Relationship	Staffing	Appropriateness of roles and responsibilities	Inspection Document review	Qualitative Parity
		Capacity, coverage, and account allocation	Inspection Document review	Qualitative Parity
Maintaining an Account Relationship	Customer contact	Adequacy and completeness of procedures for responding to customer requests	Interviews Logging Report Review	Qualitative Parity
	Intervals	Responsiveness to customer contacts relative to established interval standards	Inspection Document review	Quantitative
	Escalation	Adequacy, completeness and effectiveness of escalation procedures	Inspection Document review Interviews	Qualitative Parity
	Routine and urgent customer communications	Adequacy and completeness of communication and notification procedures	Inspection Document review Interviews	Qualitative Parity
	Customer documentation	Adequacy and completeness of procedures for developing, distributing, and maintaining customer documentation	Inspection Document review Interviews	Qualitative Parity

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Account Management Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

2.5 Scenarios

This test does not rely on scenarios.

2.6 Test Approach

Inputs	Activities	Outputs
– Ameritech account management procedural documentation – Ameritech instructions to CLECs for interacting with account managers, including escalation policies and procedures – Other procedural, technical and customer documentation – Evaluation checklists – Interview guides – CLEC data (such as documented, independently verifiable account management contacts) – Retail analogs (as applicable)	– Gather documentation and other relevant data – Perform Ameritech and CLEC interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

2.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

3.0 Test PPR3: OSS Interface Help Desk Functional Review

3.1 Description

This test is an evaluation of the Ameritech's help desk functions, which provide technical and system administration support for its OSS interfaces.

3.2 Objectives

The objectives of this test are to:

- Determine adequacy, completeness and consistency of help desk processes
- Ensure help desk functions have effective management oversight
- Determine whether help desk escalation procedures are correctly maintained, documented and published
- Determine the existence and functionality of procedures for measuring, tracking, projecting and maintaining help desk performance
- Ensure existence of reasonable security measures to ensure integrity of help desk data and the ability to restrict access to parties with specific access permissions

3.3 Entrance Criteria

Criteria	Responsible Party
Limited to Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager

3.4 Test Scope

Table V-3 Test Target: OSS Interface Help Desk Functional Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Process Help Desk Call	Resolution of user question, problem or issue	Completeness and consistency of process	Inspection Document review	Qualitative
Close Help Desk Call	Closure posting	Completeness and consistency of process	Inspection Document review	Qualitative
Status Tracking and Reporting	Status tracking and reporting	Completeness and consistency of reporting process	Inspection Document review	Qualitative
Problem Escalation	User and Ameritech initiated escalation	Completeness and consistency of process	Inspection Document review	Qualitative
Capacity Management	Capacity planning process	Completeness and consistency of process	Inspection Document review	Qualitative
Security and Integrity	Data access controls	Security of process	Inspection Document review	Qualitative
Process Management	General management practices	Completeness and consistency of operating management practices	Inspection Document review	Qualitative
	Performance measurement process	Controllability, efficiency and reliability of process	Inspection Document review	Qualitative

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
	Process improvement	Completeness of process improvement practices	Inspection Document review	Qualitative

3.5 Scenarios

This test does not rely on scenarios.

3.6 Test Approach

Inputs	Activities	Outputs
– Procedural documentation (such as internal help desk procedure manuals) – Ameritech instructions to CLECs for interacting with help desk functions – Evaluation checklists – Interview guides	– Gather information – Perform walk-through and documentation reviews – Complete evaluation checklists – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

3.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

4.0 Test PPR4: CLEC Training Verification and Validation Review

4.1 Description

This test evaluates key aspects of Ameritech's training program for CLECs. Activities undertaken while conducting the CLEC Training Verification and Validation Review include conducting interviews, reviewing documentation, and attending a sample of CLEC training classes.

4.2 Objectives

The objectives of this test are to:

- Determine the existence and functionality of procedures for developing, publicizing, conducting, and monitoring CLEC training
- Ensure the CLEC training effort has effective management oversight

4.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4

Criteria	Responsible Party
Process evaluation checklist and interview guides	Test Manager
Retail analogs	Test Manager/The Commission

4.4 Test Scope

Table V-4 Test Target: CLEC Training Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Training Program Development	Develop curriculum	Completeness of training curriculum and forums	Document review Inspection	Qualitative Parity
		Adequacy of procedures to respond to information about training quality and utilization	Document review Inspection	Qualitative Parity
		Adequacy of procedures to accept CLEC input regarding training curriculum	Document review Inspection	Qualitative Parity
	Publicize training opportunities	Availability of information about training opportunities	Document review Inspection	Qualitative Parity
Training Program Quality Assurance	Attendance/ utilization tracking	Adequacy of process to track utilization and attendance of various training tools and forums	Document review Inspection	Qualitative Parity
	Session effectiveness tracking	Adequacy of process to survey training recipients on effectiveness of training	Document review Inspection	Qualitative Parity
	Instructor oversight	Adequacy of procedures to monitor instructor performance	Document review Inspection	Qualitative Parity
Process Management	Performance measurement process	Controllability, efficiency and reliability of process	Inspection Document review	Qualitative Parity
	Process improvement	Completeness of process improvement practices	Inspection Document review	Qualitative Parity

4.5 Scenarios

This test does not rely on scenarios.

4.6 Test Approach

Inputs	Activities	Outputs
– Procedural documentation (such as training manuals) – Ameritech instructions to CLECs for accessing Ameriteh training – Evaluation checklists – Interview guides – Retail analogs (as applicable)	– Gather information – Perform interviews and documentation reviews – Attend CLEC training classes – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

4.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

5.0 Test PPR5: OSS Interface Development Verification and Validation Review

5.1 Description

This test evaluates Ameritech's methods and procedures for developing, providing, and maintaining OSS interfaces for pre-ordering, ordering, maintenance & repair, and billing.

5.2 Objectives

The objectives of this test are to determine the adequacy, consistency and completeness of Ameritech's methods and procedures for developing, providing and maintaining OSS interfaces. The test shall also evaluate the capacity management practices used by Ameritech for its OSS interfaces and gateway systems.

5.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager

5.4 Test Scope

Table V-5 Test Target: OSS Interface Development Verification and Validation Review

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Developing Interfaces	Interface development methodology	Adequacy and completeness of interface development methodology	Inspection Document review Report review	Qualitative

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
	Provision of interface specifications and related documentation	Adequacy and completeness of interface documentation distribution procedures	Inspection Document review Report review	Qualitative
Enabling and Testing Interfaces	Interface enabling and testing methodology	Adequacy and completeness of carrier-to-carrier interface enabling and testing procedures	Inspection Document review Report review	Qualitative
	Availability of test environments and technical support to CLECs	Availability and adequacy of functioning test environments, testing protocols, production cutover protocols and technical support for all supported interfaces	Inspection Document review Report review	Qualitative
	Interface enabling and testing support	Adequacy and completeness of interface enabling and testing procedural documentation	Inspection Document review Report review	Qualitative
Maintaining Interfaces	Release management	Adequacy and completeness of interface enhancement and software release management protocols	Inspection Document review Report review	Qualitative
OSS Interface Capacity Management	Capacity management	Adequacy and completeness of capacity management practices for OSS interfaces and gateway systems	Inspection Document review Report review	Qualitative

5.5 Scenarios

This test does not rely on scenarios.

5.6 Test Approach

Inputs	Activities	Outputs
– Procedural and technical documentation – Ameritech instructions to CLECs for enabling, testing, and maintaining compatibility with	– Gather information – Perform Ameritech and CLEC interviews and documentation reviews – Complete evaluation checklists and interview	– Completed evaluation checklists and interview summaries – Summary report

interfaces – Evaluation checklists – Interview guides – CLEC data and interviews	summaries – Develop and document findings	

5.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

6.0 Test PPR6: Collocation and Network Design Verification and Validation Review

6.1 Description

This test evaluates Ameritech's policies and practices for collocation and network design related to establishing and maintaining CLEC ability to access unbundled network elements. This test also evaluates Ameritech's trunk forecasting process. (This test is not intended to examine interconnection for other purposes, such as an interexchange carrier's network-to-network level interconnection.)

6.2 Objectives

The objectives of this test are to:

- Determine whether CLECs have sufficient information and Ameritech technical support to adequately prepare for and implement network designs and collocations
- Determine whether collocation and network design processes are well structured and managed to produce intended results
- Determine the existence and functionality of procedures for developing, publicizing, conducting, and monitoring trunk forecasting efforts with CLECs
- Verify integration of trunk forecasting procedures with Ameritech facilities planning procedures
- Ensure the trunk forecasting effort has effective management oversight

6.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria requirements	See Table III-4
Process evaluation checklist	Test Manager
Interview guides	Test Manager

6.4 Test Scope

Table V-6 Test Target: Collocation and Network Design Verification and Validation

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Network design and collocation	Planning	Adequacy and completeness network design and collocation planning processes	Document review Inspection	Qualitative
	Project management	Adequacy and completeness of collocation project management procedures	Document review Report review Inspection	Qualitative
	Resources	Availability and adequacy of resources and qualified technical support to facilitate collocation activities	Document review Report review Inspection	Qualitative
	Testing and implementation	Adequacy and completeness of network design and collocation testing processes	Document review Report review Inspection	Qualitative
Trunk Forecasting	Forecast Development	Adequacy and completeness of trunk forecasting procedures	Document review Inspection	Qualitative
	Forecast Security	Adequacy and completeness of procedures for ensuring confidentiality of CLEC-provided forecast information	Document review Inspection	Qualitative
	Forecast usage	Availability and integration of published trunk forecasts in Ameritech facilities planning process	Document review Inspection	Qualitative
Collocation Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

6.5 Scenarios

This test does not rely on scenarios.

6.6 Test Approach

Inputs	Activities	Outputs
– Procedural and technical – Ameritech instructions to CLECs for planning and implementing network designs and collocations – Evaluation checklists – Interview guides – CLEC data	– Gather information – Perform Ameritech and CLEC interviews and documentation reviews – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

6.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-6

7.0 Test PPR7: POP Manual Order Processing Evaluation

7.1 Description

The POP Manual Order Processing Evaluation is a comprehensive review of the methods and procedures used to handle orders that have been manually submitted or require manual intervention by Ameritech during order processing. Testing will also consider manual processing of CLEC pre-order requests that Ameritech has not mechanized. Operational analysis techniques will be used to conduct this test. It will rely on the development of various checklists to facilitate a structured walk through of the order handling process. Additionally, practices related to the manual processing of orders will be compared with retail practices for parity, to the extent that specific retail analogs are identified.

7.2 Objective

The objective of this test is to validate the processes and procedures used to support manual submission of orders for service and manual processing of electronically submitted pre-order and order transactions.

7.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
Manual Orders Procedures	Test Manager
Interview checklist	Test Manager
Process review checklist	Test Manager
Interview list	Ameritech, Test Manager
Retail analogs	Test Manager/The Commission

7.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating the timeliness, consistency, and accuracy of manual processing of orders.

Table V-7 Test Target: Manual Order Processes

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Receive Orders for Manual Processing	Order Receipt and Logging	Completeness and consistency of process	Inspection Document review	Qualitative Parity
Process Orders Manually	Entry of Order into AMERITECH SERVICE ORDERING SYSTEMS	Completeness and consistency of process	Inspection	Qualitative Parity
Send Order Response	Delivery of error messages and queries	Completeness and consistency of reporting process	Inspection Document Review	Qualitative Parity
	Delivery of confirmations and completions	Completeness and consistency of reporting process	Inspection Document Review	Qualitative Parity
Status Tracking and Reporting	Status tracking and reporting	Completeness and consistency of reporting process	Inspection Document review	Qualitative Parity
Problem Escalation	User-initiated escalation	Completeness and consistency of process	Inspection Document review	Qualitative Parity
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity
Process Management	General management practices	Adequacy and completeness of processing management practices	Inspection Document review	Qualitative Parity
	Performance measurement process	Adequacy and completeness of manual order processing performance management practices	Inspection	Qualitative Parity

7.5 Scenarios

Not Applicable

7.6 Test Approach

Input	Activities	Outputs
– Order handling methods and procedures – Retail analogs (as applicable) – Ameritech listing of order types that are designed to	– Review procedure documents – Interview Ameritech personnel – Monitor / walk through process	– Completed evaluation checklists and interview summaries – Summary report

flow through and the exceptions that would cause the orders to require manual processing – Ameritech listing of pre-order transactions that require manual processing – Evaluation checklists – Interview guides – CLEC data and interviews	– Observe management oversight system – Complete evaluation checklists and interview summaries – Develop and document findings	

7.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

8.0 Test PPR8: POP Work Center Support Evaluation

8.1 Description

The POP Work Center Support Evaluation is a comprehensive operational analysis of the work center/help desk processes developed by Ameritech to support Resellers and CLECs with OSS questions, escalations, problems, and issues related to pre-ordering, ordering, and provisioning. Basic functionality, performance and escalation procedures will be evaluated.

8.2 Objectives

The objectives of this evaluation are to:

- Determine completeness and consistency of work center/help desk processes and responses
- Determine whether the escalation procedure is documented and known to work center agents and management
- Determine the accuracy and completeness of procedures for measuring work center/help desk performance

8.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
Work Center/Help Desk Evaluation Checklist completed	Test Manager
CLEC Feedback Survey completed	Test Manager
POP Problem Response Survey with standard questions completed	Test Manager

8.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating the timeliness, consistency, and accuracy of handling work center and help desk activities related to pre-ordering, ordering, and provisioning performed by Ameritech.

Table V-8 Test Target: POP Work Center/Help Desk Support

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Rasbond to Help Des	nswer call	Completeness and consistency of process	Inspection	Qualitative
	Interface with user	Availability of user interface	Inspection	Qualitative
	Log call	Completeness of logged information Log is kept in appropriate media for appropriate interval	Document Review Inspection	Qualitative
Process Help Desk Call	Access to systems to observe user problems	Ability to access user records and transactions	Inspection	Qualitative
	Resolve user question, problem or issue	Completeness and consistency of process	Documentation Review	Qualitative
Close Help Desk Call	Log closure information	Completeness, consistency, and timeliness of process	Inspection	Qualitative
Monitor Status	Track status	Accuracy and completeness of status tracking capability Availability of jeopardy notification	Inspection Document Review	Qualitative
	Report status	Completeness and consistency of reporting process Accessibility of status report	Inspection Document Review	Qualitative
Request Escalation	Manage escalations	Consistency and completeness of procedure	Document Review Inspection	Qualitative
Manage the Help Desk Process	Provide management oversight	Completeness and consistency of operating management practices	Inspection	Qualitative
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

8.5 Scenarios

Not applicable

8.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation	– Gather information	– Completed evaluation

– Evaluation checklists – Interview guides – Data from the TVV1 test (this data will be the source for the help desk calls) – CLEC data – Retail analogs (as applicable)	– Perform walk-through documentation reviews – Place and log Help Desk calls – Complete evaluation checklists and interview summaries – Develop and document findings	checklists and interview summaries – Summary report

8.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

9.0 Test PPR9: Provisioning Process Evaluation

9.1 Description

The Provisioning Process Evaluation is a parity and evaluative review of the processes, systems, and interfaces that provide provisioning for CLEC and Reseller orders. The test will also review the procedures, processes, and operational environment used to support coordinated provisioning with CLECs. The review will focus on these areas:

- Order interfaces
- Workflow definitions
- Workforce scheduling
- Memory administration
- Service activation
- Test and acceptance
- Exception handling
- Completion notices
- Coordinated provisioning

The focus of the evaluation will be "downstream" interfaces from manual processing and the gateway system that serves as the interface to all order processing.

As appropriate, provisioning processes for different products and services will be evaluated separately. This will be required in those cases where the process and/or systems used for provisioning are different by product.

The evaluation will address products and situations that require coordinated provisioning to minimize customer disruption. The requirement for coordination may come from either Ameritech policy or a CLEC request.

It is assumed that many of Ameritech's provisioning processes and systems for Wholesale and Retail are the same. The Test Manager will verify that equivalent processes and systems are used to provision orders to the extent that parity in these systems is required or asserted by Ameritech. An operational analysis test approach will be used to evaluate Ameritech's coordinated provisioning processes. It will consist of targeted interviews of key development personnel along with structured reviews of process documentation facilitated by an evaluation checklist. Case studies of actual coordination processes will be created or selected from live CLEC situations. Case studies will be selected and tracked to determine the ways in which the processes are carried out.

9.2 Objective

The objectives of this evaluation are to:

- Determine completeness and consistency of provisioning processes and to verify that the processes and systems utilized to provision retail and wholesale orders are in parity
- Determine whether the provisioning processes are correctly documented, maintained and published. For provisioning documents describing processes to be used by CLECS, determine that those documents are made publicly available.
- Determine the accuracy, completeness, and functionality of procedures for measuring, tracking, projecting, and maintaining provisioning processes performance
- Ensure the provisioning coordination processes have effective management oversight, including efforts to avoid problems
- Ensure responsibilities for provisioning coordination processes performance improvement are defined and assigned

9.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
Detailed Provisioning Process Parity Evaluation Checklist developed	Test Manager
Required system documentation available	Ameritech
Provisioning process documentation available	Ameritech
Technical platforms specifications available	Ameritech
Databases specifications available	Ameritech
Data communications and interfaces specifications available	Ameritech
Interview guide/questionnaire developed	Test Manager
CLEC Case Study Request completed	Test Manager
CLEC Case Study Monitoring Form completed	Test Manager
Detailed Provisioning Coordination Process Checklist developed	Test Manager
Interviewees identified and schedule developed	Ameritech, Test Manager
Retail analogs	Test Manager/The Commission

9.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating Ameritech's provisioning systems and processes to the CLECs and resellers.

Table V-9 Test Target: Provisioning Process

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Provisioning Process Parity	Order entry process (Ameritech internal)	Consistency and repeatability as compared to Retail	Inspection	Parity
	Workflow management	Consistency and repeatability as compared to Retail	Inspection	Parity
	Workforce management	Consistency and repeatability as compared to Retail	Inspection	Parity
	Service activation process	Consistency and repeatability as compared to Retail	Inspection	Parity
	Service design process	Consistency and repeatability as compared to Retail	Inspection	Parity
	Assignment process	Consistency and repeatability as compared to Retail	Inspection	Parity
	Service activation/ installation intervals	Consistency with Retail	Inspection	Parity
Support Provisioning Coordination Process	Provision orders requiring coordination with CLECs	Availability of personnel, procedures and methods Completeness and consistency of processes	Document Review Document Review, Inspection	Existence Qualitative
	Request coordination	Completeness and consistency of processes	Document Review, Inspection	Qualitative
	Notification of provisioning schedule	Completeness and consistency of processes Timeliness of notification	Document Review, Inspection Document Review, Inspection	Qualitative Qualitative
	Coordinate provisioning	Completeness and consistency of operating management practice Controllability, efficiency and reliability of process Completeness of process improvement practices	Inspection Inspection Inspection	Qualitative Qualitative Qualitative
Provisioning Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

9.5 Scenarios

Not Applicable

9.6 Test Approach

Inputs	Activities	Outputs

– Procedural and system documentation
– Ameritech product and service ordering and provisioning process flow for complex and simple (i.e. POTS) services
– Interviewees (per process area)
  – Provisioning process owners
  – Provisioning process staff
  – User requirements project leader
– Evaluation checklists
– Interview guides
– Interview schedule
– Appropriate methods and procedures (determined via interviews)
– CLEC case studies
– Retail analogs (as applicable)
	– Gather information
	– Perform Ameritech interviews and documentation reviews
	– Compare and contrast systems used for Wholesale and Retail
	– Review CLEC case study input suggestions
	– Select and record case studies to monitor
	– Inspect physical systems and communications environments
	– Review case studies
	– Complete evaluation checklists and interview summaries
	– Develop and document findings
		– Completed evaluation checklists and interview summaries
		– CLEC case study submission and selection matrix
		– Summary report

9.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6
Ameritech's revised Loop Assignment process	Ameritech
Ameritech's revised Facilities Modification notificaiton process	Ameritech
Ameritech's revised Hot Cut process	Ameritech
Ameritech's revised Firm Order Confirmation (FOC) process	Ameritech

10.0 Test PPR10: Billing Work Center/Help Desk Support Evaluation

10.1 Description

The Billing Work Center/Help Desk Support Evaluation is an operational analysis of the work center/help desk processes and documentation developed by Ameritech to provide support to Resellers and CLECs with usage (Daily Usage Feed) and/or billing related claims, questions, problems and issues. Basic functionality, performance, escalation procedures, and security will be evaluated.

10.2 Objectives

The objectives of this evaluation are to:

- Determine completeness and consistency of work center/help desk processes, documentation and responses.
- Determine whether the escalation procedure is correctly documented, maintained, published and followed.
- Determine the accuracy, completeness, and functionality of procedures for measuring and tracking work center/help desk performance. Determine the accuracy, completeness, and functionality of procedures for projecting resource needs and maintaining work center/help desk performance.
- Ensure accuracy and completeness of reasonable security measures to ensure integrity of work center/help desk data and the ability to restrict access to parties with specific access permissions.
- Ensure the work center/help desk effort has effective management oversight.
- Ensure responsibilities for performance improvement are defined and assigned.

10.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
Ameritech Billing Process and System specialists available for observation and interviews	Ameritech
Work Center/Help Desk documentation identified and available	Test Manager
Retail analogs	Test Manager/The Commission

10.4 Test Scope

The scope of this test includes all processes, sub-processes, and measurements of the Billing Work Center test target, as shown in Table V-12 below.

Table V-10 Test Target: Billing Work Center/Help Desk Support

Process Area	Sub-Process	Evaluation Measur	Evaluation Technique	Criteria Type
Receive Help Desk Call	Answer call	Timeliness of call	Inspections	Quantitative Parity
	Interface with user	Usability of user interface	Inspections	Qualitative Parity
		Availability of user interface	Inspections	Quantitative Parity
	Log call	Existence of call logging	Document Review	Qualitative Parity
		Accuracy of call logging	Inspections	Quantitative Parity

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
	Record severity code	Compliance of call logging - severity coding	Inspections	Qualitative Parity
Process Help Desk Call	Resolve user question, problem or issue	Completeness and consistency of process	Documentation Review, inspections	Qualitative Parity
		Accuracy of response	Inspections	Quantitative Parity
Receive Claim	File claim	Completeness and consistency of process	Documentation Review, inspections	Qualitative Parity
		Accuracy of response	Inspections	Quantitative Parity
	Process claim	Completeness, consistency, and timeliness of process	Inspections, report review	Qualitative Parity
	Issue adjustment when necessary	Completeness and consistency of process	Documentation review, inspection	Qualitative Parity
	Disposition claim	Accuracy, completeness and reliability of disposition report	Inspections, report review	Quantitative Qualitative Parity
Close Help Desk Call	Post closure information	Completeness, consistency, and timeliness of process	Inspections	Qualitative Parity
		Accuracy of posting	Inspections, report review	Quantitative Parity
Monitor Status	Track Status	Existence of status tracking capability	Inspections	Existence Parity
		Consistency and frequency of follow-up activities	Document Review	Qualitative Parity
		Availability of jeopardy notification	Document Review	Quantitative Parity
	Report Status	**Completeness and consistency of reporting process**	Inspections, report review	Qualitative Parity
		Accuracy and timeliness of report	Inspections, report review	Quantitative Parity
		Accessibility of status report	Inspections	Quantitative Parity
Request Escalation	Identify escalation procedure	Existence of procedure	Document Review	Existence Parity

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
	Evaluate escalation procedure	Completeness of the procedure	Document Review	Qualitative Parity
		Consistency of the process	Inspection	Qualitative Parity
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity
Provide Security and Integrity	Provide secured access	Completeness and applicability of security procedures, profiles, and restrictions	Document Review, Inspections	Qualitative Parity
		Controllability of intra-company access	Document Review, Inspections	Qualitative Parity
Manage the Help Desk Process	Provide management oversight	Completeness and consistency of operating management practices	Inspections	Qualitative Parity
		Controllability, efficiency and reliability of process	Inspections	Qualitative Parity
		Completeness of process improvement practices	Inspections	Qualitative Parity

10.5 Scenarios

Not applicable.

10.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – Data from the TVV8 and TVV9 tests (this data will be the source for the help desk calls) – CLEC data – Retail analogs (as applicable)	– Gather information – Perform walk-through documentation reviews – Place and log Help Desk calls – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

10.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

11.0 Test PPR11: Daily Usage Feed Returns – Process Evaluation

11.1 Description

The Daily Usage Feed Returns Process Evaluation is an operational analysis of the usage return process and related documentation used by Ameritech to accept, investigate and where necessary, correct Daily Usage Feed return requests from CLECs.

11.2 Objectives

The objective of this evaluation is to determine the accuracy (usage is complete and correctly identified), completeness and timeliness of the processes and documentation used to process and respond to Daily Usage Feed Return requests.

11.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
Documentation on Daily Usage Feed Returns Process available	Ameritech
Interview and walk-through arrangements finalized	Ameritech
Retail analogs	Test Manager/The Commission

11.4 Test Scope

The scope of this test includes the processes, sub-processes and measurements listed in the Table V-11 below.

Table V-11 Test Target: Daily Usage Feed Returns – Process Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Process Daily Usage Feed Returns Requests	Returned usage receipt	Completeness and accuracy of documentation and processes for creating, submitting and receiving returned usage	Inspections	Qualitative Parity
	Returned usage processing	Accuracy, completeness and timeliness of corrections	Inspections	Qualitative Parity
	Provision of status for all returned records	Accuracy, completeness and timeliness of status report	Inspections, report review	Qualitative Parity
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

11.5 Scenarios

Not applicable.

11.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – CLEC data – Availability of CLEC to initiate a DUF return – Retail analogs (as applicable)	– Gather information – Perform Ameritech and CLEC interviews and documentation reviews – Arrange and conduct CLEC DUF returns (if available) – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

11.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

12.0 Test PPR12: Daily Usage Production and Distribution - Process Evaluation

12.1 Description

The Daily Usage Production and Distribution Process Evaluation is an operational analysis of the processes and documentation used by Ameritech to create and transmit the Daily Usage Feed (DUF).

12.2 Objectives

The objective of this test is to determine the accuracy, completeness and timeliness of processes used to produce and distribute the DUF.

12.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
Documentation on subject processes available	Ameritech
Interview and walk-through arrangements finalized	Ameritech
Retail analogs	Test Manager/The Commission

12.4 Test Scope

The scope of this test includes the processes, sub-processes and measurements listed in the Table V-12 below.

Table V-12 Test Target: Daily Usage Production and Distribution – Process Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Produce Daily Usage Feed	Balancing and reconciliation of Daily Usage feed.	Completeness of balancing and reconciliation procedures	Inspections	Qualitative Parity
	Route Daily Usage	Controllability of usage	Inspections	Qualitative Parity
Transmit Daily Usage Feed	Data transmission and cartridge tape delivery to CLEC	Completeness, consistency and timeliness of the process	Inspections	Qualitative Parity
Maintain and Re-transmit Usage History	Create Daily Usage backup	Reliability of repeatable process	Inspections	Qualitative Parity
	Retrieve and re-transmit Daily Usage backup data	Availability and timeliness of prior period usage data to CLEC	Inspection	Qualitative Parity
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

12.5 Scenarios

Not applicable.

12.6 Test Approach

	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – CLEC data – Availability of CLEC to request re-transmission of DUF data – Retail analogs (as applicable)	– Gather information – Perform Ameritech and CLEC interviews and documentation reviews – Arrange and conduct DUF data re-transmissions (if available) – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

12.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

13.0 Test PPR13: Bill Production and Distribution - Process Evaluation

13.1 Description

The Bill Production Process Evaluation is an operational analysis of the processes employed by Ameritech to produce and distribute carrier bills.

13.2 Objectives

The objective of this test is to determine whether the processes employed by Ameritech to produce and distribute carrier bills ensure that those bills are accurate (charges are complete and correctly identified on the bill) and are distributed to CLECs on a timely basis. The processes that enable a CLEC to request and obtain copies of previously received bills are also tested. Additionally, the bill production and distribution processes will be compared with retail practices for parity, to the extent that specific retail analogs are identified.

13.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
Documentation on subject processes available	Ameritech
Interview and walk-through arrangements finalized	Ameritech
Retail analogs	Test Manager/The Commission

13.4 Test Scope

The scope of this test includes the processes, sub-processes and measurements listed in the Table V-13 below.

Table V-13 Test Target: Bill Production and Distribution - Process Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Balance Cycle	Define balancing and reconciliation procedures	Completeness and effectiveness of bill balancing and reconciliation procedures	Inspections	Qualitative Parity
	Produce Control Reports	Completeness and accuracy in generation of control elements	Inspections	Qualitative Parity
	Release cycle	Compliance to balancing and reconciliation procedures	Inspections	Qualitative Parity
Deliver Bill	Delivery of bill media	Timeliness and controls of media delivery	Inspections	Qualitative Parity
Maintain Bill History	Maintain billing information	Timeliness and controllability of billing information	Inspections	Qualitative Parity
	Access billing information	Accessibility and availability of billing information	Inspections	Qualitative Parity

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Request Resend		Timeliness and accuracy of the delivery	Inspections	Qualitative Parity
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

13.5 Scenarios

Not applicable.

13.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – Retail analogs (as applicable)	– Gather information – Perform Ameritech and CLECobservations, interviews and documentation reviews – Conduct process observations and interviews. Daily Usage Feed Return testing should include tracing transactions back to the CLEC bill. Ameritech should produce a summary detail bill that will allow the CLEC to reconcile credits for usage returned. – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

13.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

14.0 Test PPR14: End-to-End M&R Process Evaluation

14.1 Description

This test will evaluate the functional equivalence of M&R processing for wholesale and retail trouble reports, by reviewing and evaluating the wholesale and retail process flow, including both manual and automated processes.

14.2 Objective

The objectives of this test are to evaluate Ameritech's wholesale M&R process, and the equivalence of Ameritech's end-to-end processes for trouble reporting and repair of retail and wholesale services. The end-to-end maintenance and repair process also will be compared with retail practices for parity, to the extent that specific retail analogs are identified.

14.3 Entrance Criteria

Criteria	Responsible Party
Global entrance criteria have been satisfied	See Table III-4
Wholesale & Retail M&R process flow documentation	Ameritech
Process Evaluation Checklists	Test Manager
Interview Guides	Test Manager
Retail analogs	Test Manager/The Commission

14.4 Test Scope

Table V-14 Test Target: End-to-End M&R Process Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
End-to-End M&R Process: Resale	Process Flow Documentation	Comparison with Retail	Inspection	Parity
	Trouble Ticket Entry	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity
	Trouble Ticket Assignment	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity
	Trouble Handling Methods & Procedures	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity
End-to-End M&R Process: UNE/UNE Combinations	Process Flow Documentation	Comparison with Retail	Inspection	Parity
	Trouble Ticket Entry	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity
	Trouble Ticket Assignment	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity
	Trouble Handling Methods & Procedures	Completeness, consistency and timeliness of the process	Inspection	Qualitative Parity

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

14.5 Scenarios

This test does not rely on scenarios.

14.6 Test Approach

	Activities	Outputs
– Retail and wholesale M&R process flow documentation – Other applicable documentation – Evaluation checklists – Interview guides – Retail analogs (as applicable)	– Gather information – Review and compare wholesale and retail process flows – Indentify differences between the two processes – Analyze the process – Assess the potential impact of each difference if possible – Document process flow analysis results – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Summary report

14.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

15.0 Test PPR15: M&R Work Center Support Evaluation

15.1 Description

The M&R work center support evaluation is an operational analysis of the work center/help desk processes developed by Ameritech to provide support to CLECs with questions, problems, and issues related to wholesale trouble reporting and repair operations.

15.2 Objective

The objective of this test is to evaluate the effectiveness of M&R work center support operations and adherence to common support center/help desk procedures. An additional objective is to analyze the nature and frequency of problems referred to the work center to determine if they indicate potential problems in other M&R Domain areas.

Specifically, this evaluation is designed to:

- Determine adequacy, completeness and consistency of work center/help desk processes and procedures
- Determine whether expedite and escalation procedures are correctly documented and work effectively
- Ensure existence of reasonable security measures to ensure integrity of work center/help desk data and the ability to restrict access to parties with specific access permissions
- Determine the timeliness and accuracy in identifying and resolving problems
- Determine the existence and functionality of procedures for measuring, tracking, projecting and maintaining work center/help desk performance
- Determine the existence of Maintenance and Repair coordination processes and procedures, and other operational elements associated with M&R coordination activities between Ameritech and CLEC operations organizations

15.3 Entrance Criteria

Criteria	Responsible Party
Global entrance criteria have been satisfied	See Table III-4
Process Evaluation Checklist	Test Manager
Interview Guides	Test Manager
Required data and documentation provided	Ameritech

15.4 Test Scope

Table V-15 Test Target: Work Center Support Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Call Processing	Call Answer	Timeliness	Inspections Logging Interviews	Qualitative
	Call Logging	Accuracy Completeness Consistency	Inspections Logging Interviews	Qualitative
	Prioritization	Existence Effectiveness	Inspections Logging Interviews	Qualitative
Problem Tracking and Resolution	Documentation	Clarity Accuracy	Document Review Interviews	Qualitative
	Identify and Resolve	Timeliness Accuracy Completeness Consistency	Inspections Logging Interviews	Qualitative
	Track Problem	Existence Accuracy	Inspections Logging Interviews	Qualitative

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
	Log Status and Close	Accuracy Completeness Consistency	Inspections Logging Interviews	Qualitative
	Notify Customer	Timeliness	Inspections Logging Interviews	Qualitative
Expedite/ Escalation Procedures	Documentation	Existence Adequacy Accuracy	Document Review Interviews	Qualitative
	Call Answer	Accessability Timeliness	Inspections Logging Interviews	Qualitative
	Escalation Logging	Accuracy	Inspections Logging Interviews	Qualitative
	Identify and Resolve	Timeliness	Inspections Logging Interviews	Qualitative
	Log Status and Close	Accuracy	Inspections Logging Interviews	Qualitative
	Notify Customer	Timeliness	Inspections Logging Interviews	Qualitative
Work Center Procedures		Accuracy Completeness	Inspections Logging Interviews	Qualitative
Joint Meet Procedures	Process Documentation	Accuracy Completeness	Interviews Document Review	Qualitative
	Notification Procedures	Timeliness Accuracy	Interviews	Qualitative
Coordinated Testing	Process Documentation	Accuracy Completeness	Interviews Document Review	Qualitative
	Notification Procedures	Timeliness Accuracy	Interviews	Qualitative
Manual Handling – Resale		Accuracy Timeliness Consistency	Observation Logging Interviews	Qualitative
Manual Handling – UNE/UNE Combinations		Accuracy Timeliness Consistency	Observation Logging Interviews	Qualitative
Capacity Management	Capacity management process	Adequacy and completeness of capacity management process	Inspection Document review Interview	Qualitative Parity

15.5 Scenarios

This test does not rely on scenarios.

15.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – Workcenter contact logs – Ameritech notification procedures for coordinated repair meetings and coordinated repair testing	– Gather information – Conduct Maintenance and Repair center visits – Conduct work center/help desk evaluations – Establish work center contact logs – Analyze and collate contacts by type – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Contact analysis results report – Summary report

15.7 Exit Criteria

Criteria	Responsible Party
Global exit criteria have been satisfied	See Table III-6

16.0 Test PPR16: Network Surveillance Support Evaluation

16.1 Description

The network surveillance support evaluation is a review of the processes and other operational elements associated with Ameritech's network surveillance and network outage notification processes and procedures as they relate to wholesale operations.

16.2 Objective

The objective of this test is to determine the functionality of network surveillance and network outage notification procedures and to assess the performance capabilities of network outage notification procedures for wholesale operations.

16.3 Entrance Criteria

Criteria	Responsible Party
Global entrance criteria have been met	See Table III-4

16.4 Test Scope

Table V-16 Test Target: Network Surveillance Support Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Network Surveillance	IOF Surveillance	Existence Reliability	Inspection	Existence Qualitative

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
	AIN Interconnect Surveillance	Existence Reliability	Inspection	Existence Qualitative
	SS7 Interconnect Surveillance	Existence Reliability	Inspection	Existence Qualitative
Outage Notification	Process Documentation	Accuracy Completeness	Inspection	Qualitative
	Notification Procedures	Timeliness Accuracy Completeness	Inspection	Qualitative

16.5 Scenarios

This test does not rely on scenarios.

16.6 Test Approach

Inputs	Activities	Outputs
– Applicable documentation – Evaluation checklists – Interview guides – Workcenter contact logs – Documentation of all notification and network surveillance procedures for wholesale	– Gather information – Conduct documentation review and procedure interviews – Conduct process analysis – Complete evaluation checklists and interview summaries – Develop and document findings	– Completed evaluation checklists and interview summaries – Contact analysis results report – Summary report

16.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria have been satisfied	See Table III-6

VI. Transaction Verification and Validation Test Section

A. Purpose

The purpose of this section is to describe the specific tests to be undertaken in evaluating the systems, and other operational elements associated with Ameritech's support for machine-to-machine, manual, and GUI (graphical user interface) transactions. The tests are designed to evaluate Ameritech's compliance to measurement agreements, ensure documented functionality exists and works properly, and provide a basis for comparing the operational areas to Ameritech's Retail Operations.

B. Organization

The Transaction Verification and Validation (TVV) test family is organized into three sections that represent the key focus areas for testing in this domain. These three sections are:

- Pre-Ordering, Ordering, Provisioning (POP) Transactions
- Maintenance and Repair (M&R) Transactions
- Billing Transactions

The test targets are further defined in the 'scope' section. The test processes are further defined in the 'test processes' section.

C. Scope

As identified above, the Transaction Verification and Validation test family is comprised of three test sections, representing important and generally distinct areas of effort undertaken by Ameritech. The three test target sections will verify and validate Ameritech's ability to support systems and processes that enable transaction processing.

Each test section is broken down into a number of increasingly discrete Tests, Processes, and Sub-Process Areas that serve a particular area of interest within the test section.

D. Test Processes

Nine tests have been designed to address the three test sections. The organization of the subject test processes is as follows:

TVV1: POP Functional Evaluation

TVV2: POP Volume Performance Tests

TVV3: Order Flow-Through Evaluation

TVV4: Provisioning Verification and Validation

TVV5: M&R Functional Evaluation

TVV6: M&R Performance Evaluation

TVV7: End-to-End Trouble Report Processing

TVV8: Billing Functional Usage Evaluation

TVV9: Functional Carrier Bill Evaluation

1.0 Test TVV1: POP Functional Evaluation

1.1 Description

The POP Functional Evaluation is a comprehensive review of all of the functional elements of Pre-Ordering, Ordering, and Provisioning; the achievement of the prescribed measures; and an analysis of performance in comparison to Ameritech's Retail systems. The Test Manager will examine Ameritech's conformance with its documented specifications, and an analysis of its functional comparison to Ameritech's Wholesale and Retail systems. The test has two phases, a basic functional evaluation, and a comparative functional evaluation.

The test will include the submission of live transactions over three types of Ameritech-supported interfaces: 1) interactively via all available forms of graphical user interfaces (GUIs), 2) machine-machine interfaces (such as EDI and Common Object Request Broker Architecture (CORBA)), and 3) manually.

The following table depicts examples of systems with which each interface is expected to be tested.

Table VI-1 Interfaces to be Tested

	Pre-Order			Order		
System	**GUI**	**Machine-Machine**	**Manual**	**GUI**	**Machine-Machine**	**Manual**
GUI (TCNet and Web Toolbar for Pre-Order; Web Toolbar, Telis PC (ASR), Telis UNIX (ASR) for Order)	X			X		
Machine-Machine (Corba to Datagate, EDI to AEMS for Pre-Order; EDI to MOR, Direct:Connect (ASR) for Order)		X			X	
Manual			X			X

The machine-machine interfaces will be tested using interfaces built by/for the Test Manager according to specifications and processes provided to CLECs by Ameritech. The GUI will be tested through transactions entered directly into the TC Online interface. Manual transactions will be submitted as well.

Data on all of the POP processes will be collected and analyzed and used to produce the output reports. The POP Functional Evaluation will look at an end-to-end view of the pre-ordering through provisioning process. It will include a mix of stand-alone pre-ordering and ordering transactions, along with pre-order transactions followed by orders, supplements, and cancels. The Test Manager will collect data on transaction submissions and responses, and on provisioning activities. Where possible and appropriate, this information will be collected and maintained electronically. Both ASR and LSR orders will be tested. Erred as well as error free transactions will be tested. Not all orders will go through the physical provisioning process.

Some will be future dated, and others will be canceled before provisioning activities commence. The verification and validation of the provisioning activities will be performed in TVV4.

As part of the POP Functional Evaluation, the Test Manager will also seek qualitative input and quantitative data on the "real world" experience of CLECs operating in Wisconsin. CLECs willing to participate in this test will be interviewed and their experiences will be incorporated into the test results after validation by the Test Manager. In addition, for some types of transactions, involvement will be sought from willing CLECs to participate in some aspects of the live transaction testing. CLEC participation will be important for complex orders that cannot be simulated adequately in the test environment. Examples include complex facilities-based orders, and orders like those for unbundled loops with LNP which require an actual CLEC switch to fully complete. Since it is important to attempt to incorporate information to help control for "experiment bias" of the results, the Test Manager will ask CLECs for data that can be validated on live orders that replicate those sent over the test systems. As appropriate, some test orders may be sent over CLEC systems.

1.2 Objective

The objective of this test is to validate the existence, functionality, and behavior of the interfaces and processes required by Ameritech for pre-ordering, ordering, and provisioning transaction requests and responses. The test will evaluate the performance of the Ameritech interfaces and systems according to the performance metrics that are relevant for the pre-order and order transactions.

1.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
Interfaces are built and tested	Test Manager
Ameritech Interfaces are "certified" by Ameritech	Ameritech
Initial Ameritech measurement evaluation completed	Test Manager, The Commission
Ameritech measurements available at the CLEC level	Ameritech
Measurement collection process is defined	Test Manager
Dial-up connectivity to GUI interface established	Test Manager, Ameritech
Product descriptions and business rules for all transactions to be tested are available.	Ameritech
Test bed databases and facilities in place	Ameritech
CLEC test volunteers identified	Test Manager
Test Scenarios developed	Test Manager
Test Cases developed	Test Manager
Specific Test Cases to test in conjunction with CLEC volunteers identified	Test Manager
Functional Checklist created	Test Manager
Specific Evaluation techniques developed	Test Manager
Evaluation Criteria defined and approved	Test Manager
Detailed "Go/No Go" checklist created	Test Manager
Help Desk log and contact checklists created	Test Manager

1.4 Test Scope

Ordering transactions consists of three distinct, but related, processes:

- Pre-Order Processing—submission of requests for information required to complete orders;
- Order Processing—submission of orders required to add/delete/change a customer's service; and
- Provisioning—physical work performed by Ameritech as a result of the submitted orders.

The Ordering Transactions test suite will be comprised of "real-life", end-to-end test cases that cover the entire spectrum of pre-order, order, and provisioning. The following order types will be tested:

- Migrate "as is"
- Migrate "as specified"
- New customer
- Feature Change
- Directory Change
- Number Change
- Add lines
- Suspend/Restore
- Disconnect (full/partial)
- Move (inside/outside)
- Number Portability (LNP)
- Line reclassification
- Change to New Local Service Provider
- UNE Loop Cut Over

The order types identified above will be ordered using the available and applicable Ameritech service delivery methods. The following service delivery methods will be tested:

- Resale
- Unbundled Loops
- UNE Platform
- EELs
- Other Unbundled Network Elements, including xDSL capable Loops
- Any other service delivery methods that may become available at the time of the test

The orders will be placed using Ameritech's existing interfaces: GUI, machine-machine, and manual. The following assumptions pertain to ordering interfaces:

- Orders and pre-orders will be sent over every applicable in-scope interface,
- Orders will be issued using both the ASR and LSR format, as appropriate, and
- The GUI will be tested from multiple terminals at the same time.

Other important aspects of ordering will be tested:

- "Flow through" order types, as stated and agreed-to by Ameritech, will be tested to ensure that they do not require manual handling,
- Supplemental orders (changes to orders in process), including cancels, will be tested,
- Multiple products and features will be tested; the tests will cover a broad range of the options available to CLECs and resellers,
- Multiple switch-types, end-offices and cities will be included in the test,
- A portion of the orders sent will be physically provisioned. Some orders will be future dated, allowing them to be canceled prior to work scheduling and provisioning,
- CLECs will be solicited for involvement in some aspects of the test, especially for assistance in the testing of complex services and services with long lead times,
- Data returned in pre-order responses will be analyzed to assess its usability in formatting and submitting order requests.
- In addition to normal orders, orders with planned errors will be sent to Ameritech to check the accuracy of its system edits and LSC (Local Service Center) representatives.

Service locations supported by different Ameritech ordering, provisioning, and CO switching and transmission configurations will be tested.

The test will be conducted using the most current release of the Ameritech business rules at the time of the test. Any Ameritech updates to these rules released during the test period will be incorporated into the remaining orders, which may cause delays. In addition, any interface business rules and format changes necessitated during the course of the test to conduct the test scenarios stated in Appendix A, and which may lead to a Change Control initiative, will be included in the test transaction formats.

Documentation affecting the POP domain given to the CLECs and the resellers - training materials, interface guidelines, business rules, and other appropriate documentation - will be used to submit the transactions, and the accuracy and usefulness of this documentation will be evaluated.

The following chart (applicable to TVV1, TVV2, TVV3, and TVV4) contains the processes and sub-processes that will be used in evaluating Ameritech's pre-ordering, ordering, and provisioning functionality and performance:

Table VI-2 POP Processes

Process Area	Sub-Process
Pre-ordering	Retrieve customer CSR from Customer Information Systems
	Validate Customer Address
	Reserve and release telephone numbers
	Request information about services, features, facilities, and PIC/LPIC choices available to customers
	Determine due date/appointment availability
	Inquire about order status
	Inquire about Network Channel/Network Channel Interface codes (NC/NCI codes)
	Inquire about Connecting Facility Assignment (CFA)
	Request Loop Makeup Information
	Inquire about Working Telephone Number (WTN)
Ordering	Submit an order for the migration of a customer from Ameritech to a CLEC "as is"
	Submit an order for the migration of a customer from Ameritech to a customer "as specified"
	Submit an order for the partial migration of a customer from Ameritech to a CLEC
	Submit an order for establishing service for a new customer of a CLEC
	Submit an order for feature changes to an existing CLEC customer
	Submit an order for adding lines/circuits to an existing CLEC customer.
	Submit an order for a telephone number change for an existing CLEC customer
	Submit an order for a directory change for an existing CLEC customer
	Submit an order for an inside move of an existing CLEC customer
	Submit an order for the outside move of an existing CLEC customer
	Submit an order for suspending service of an existing CLEC customer
	Submit an order for restoring service to an existing CLEC customer
	Submit an order for disconnecting service from an existing CLEC customer
	Submit an order for disconnecting some lines/circuits for an existing CLEC customer
	Submit an order for migration of a customer from another CLEC
	Change service delivery method for an existing CLEC customer
	Order interoffice facilities
	Submit an order to convert a customer to a line shared Loop
	Receive order confirmation
Provisioning	Receive notification of jeopardy or delay
	Receive completion notification

Ameritech's pre-ordering, ordering, and provisioning functionality and performance:

Table VI-3 POP Evaluation Measures

Evaluation Measure	Evaluation Technique	Criteria Type
Pre-ordering and Ordering		
Clarity, accuracy and completeness of documentation	Document Review, Transaction Generation	Qualitative Quantitative
Accessibility of GUI (excluding Interoffice facilities)	Transaction Generation	Quantitative

Evaluation Measure	Evaluation Technique	Criteria Type
Accessibility of machine-machine (excluding Interoffice Facilities)	Transaction Generation	Quantitative
Accessibility of manual processing (exclusing Interoffice facilities)	Transaction Generation	Quantitative
Accuracy and completeness of functionality	Transaction Generation	Quantitative
Timeliness of response	Logging	Quantitative
Accuracy and completeness of response	Transaction Generation, Inspection	Qualitative Quantitative
Clarity and accuracy of error messages	Transaction Generation, Inspection, Document Review	Qualitative Quantitative
Accuracy, responsiveness, and completeness of Help Desk support	Transaction Generation, Logging	Qualitative Quantitative
Usability of information	Transaction Generation, Inspection	Qualitative
Consistency with retail capability	Inspection	Qualitative Quantitative
Consistency between data returned on pre-order responses and that required on order requests	Inspection	Qualitative
Provisioning		
Timeliness of provisioning	Transaction Generation, Inspection, Logging	Quantitative Qualitative
Frequency of delay or rescheduling of provisioning	Transaction Generation, Inspection, Logging	Quantitative Qualitative
Accuracy and completeness of provisioning	Transaction Generation, Inspection, Logging	Quantitative Qualitative

1.5 Scenarios

The specific pre-order and order scenarios to be used in this test can be found in Appendix A.

1.6 Test Approach

Inputs	Activities	Outputs
– Test scenarios and cases – Test case execution schedule – Certified interfaces – Documentation (order/pre-order business rules, etc.) – Trained personnel to execute test cases – Test "Go/No Go" checklist – Help Desk log and contact checklists	– Determine functionality of both Ameritech wholesale and retail ordering, preordering, and provisioning systems – Compare wholesale and retail functionality – Use test cases to develop transactions and transaction content based upon instructions provided in the appropriate handbook(s) – Interview CLEC volunteers and coordinate joint testing activities – Attend CLEC training classes	– A Summary report comparing the relative functionality of Ameritech's Wholesale and Retail ordering, preordering, and provisioning systems – Reports that provide the metrics to support the standards of performance defined in Appendix D – Variance between actual performance and the standards of performance defined in Appendix D – Report of expected results versus actual test case results

	as appropriate – Submit transactions. Submittal date and time and appropriate transaction information logged – Receive transaction responses. Receipt date, time, response transaction type, and response condition (valid vs. reject) logged – Match transaction response to original transaction – Verify transaction response contains expected data and flags unplanned errors – Manually review unexpected errors. Identify error source (the Test Manager, or Ameritech). Identify and log reason for the error. Determine if test should be discontinued – Contact help desk for support as indicated in test cases and for unexpected errors following the appropriate resolution procedures. Log response time, availability, and other behavior of functions as identified on the help desk checklist – Correct expected errors and resubmit. Re-submittal date, time, and appropriate information logged – Identify transactions for which responses have not been received. Where multiple responses are expected for the same request, the receipt of each response will be monitored – Record missing responses – Review status of pending orders. Verify and record accuracy of response – Generate Systems/interface reports – Generate Ameritech metrics report for test date range – Compare Test systems/interface metrics to Ameritech retail metrics – Develop and document findings	– Unplanned error count by type and percentage of total – Report of unplanned errors as the result of documentation problems – Rejects received after confirmation notification and percentage of total – Transaction counts, error ratio, response time, etc., by transaction type, product family, and delivery method – Minimum, maximum, mean, average, and aggregate response time/interval per transaction set – Transaction counts per response time/interval range per transaction set – Orders erred after initial confirmation – "Flow through" orders by order type, product family, etc. – Completed help desk logs and checklists – Help desk accuracy and timeliness report – Interface measurement reports – Measure of parity performance between retail and wholesale

1.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

2.0 Test TVV2: POP Volume Performance Tests

2.1 Description

The Volume Performance Test will identify the capacity and potential choke points, at projected future transaction volumes, of the Ameritech GUI and machine-machine interfaces and Ameritech systems and processes for responding to pre-ordering queries and for initial processing of orders. There will be three parts to the test: 1) a "normal volume" test using anticipated transaction volumes for available services and products for the time frame as determined by the Commission, with CLEC and Ameritech input, 2) a "peak" test using volumes at 150% (1.5 times) of the normal volume test, and 3) a "stress" test using volumes at 250% (2.5 times) of the normal volume test. The "normal volume", "peak", and "stress" tests will be conducted in Ameritech's production environment. In order to derive the "normal volume" estimate, the Test Manager will solicit forecasts by product type from both Ameritech and CLECs offering service or planning to offer service in the Ameritech footprint.

The Volume Performance Test will look at the performance of Ameritech's pre-ordering and ordering systems and processes from the submission of queries to the creation of internal service orders and the return of an order confirmation. The orders submitted in the Volume Performance Test will not go through the physical provisioning process. The test will include a mix of stand-alone pre-ordering and flow-through ordering transactions. Included in this mix will be planned errors—both business rules errors and flow-through drop-out errors. Transactions will be submitted using the GUI and machine-machine interfaces.

The volume tests will only run on certain days during the testing period. Transactions will be submitted throughout the entire transaction test period via GUI and machine-machine interfaces as part of the POP Functional Evaluation, including the days on which volume tests will be run. The exact timeframe for the volume test will remain unannounced to both Ameritech and the CLECs. There will be two 24-hour "normal volume" days of testing. There will be one 24-hour "peak" test. There will be one 4-hour, off-peak "stress" test. The "stress" test will be run during business, off-peak hours to limit the impact of the test on real customers. All the attributes and activities that apply to the POP Functional Evaluation for pre-ordering and ordering also apply to this test.

2.2 Objective

The objective of the Volume Performance Test is to measure Ameritech's capability and identify potential choke points of the manual, GUI, and machine-machine interfaces and systems put in place to access pre-ordering information and submit orders to Ameritech at projected future volumes.

2.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
All TVV1 entrance criteria	See Table VI-1.3
Agreement on volumes and distribution by scenario and entry mode	Test Manager, The Commission
Test Scenarios selected	Test Manager
Specific Test Cases developed	Test Manager
Test Case execution schedule developed	Test Manager
Resolution and Implementation of Issue S (Flow Through) as documented in PSCW Case No. 6720-TI-160	Commission, Ameritech

2.4 Test Scope

The scope for this test includes the following test processes:

1. Pre-Ordering
2. Order Processing

2.5 Scenarios

The specific pre-order and order scenarios to be used in this test will be chosen from those found in Appendix A.

2.6 Test Approach

Inputs	Activities	Outputs
– Test Cases – Test case execution schedule – Documentation (pre-ordering/ordering business rules, etc.) – Personnel to execute test cases – Test "Go/No Go" Checklist – Help Desk log and contact checklists – Certified interfaces	– Use test cases to develop transactions and transaction content based upon instructions provided in the appropriate handbook(s) – Submit transactions. Submittal date, time and appropriate transaction information are logged – Receive transaction responses. Receipt date, time, response transaction type, and response condition (valid vs. reject) are logged – Match transaction response to original transaction. Verify matching transaction can be found and record mismatches – Verify transaction response contains expected data and flag unplanned errors – Manually review unplanned errors. Identify error source (Test Manager or Ameritech). Identify and log reason for the error. Determine if test should be discontinued – Contact help desk for support as indicated in test	– Reports that provide performance metrics – Contact analysis results report – Variance between actual performance and standards of performance – Report of expected results versus actual results – Unplanned error count by type and percentage of total – Report of Unplanned errors as the result of documentation problems – Transaction counts, error ratio, response time, etc. by transaction type, product family and delivery method – Minimum, maximum, mean, average, and aggregate response time/interval per transaction set – Transaction counts per response time/interval range per transaction set – Orders erred after initial confirmation Completed help desk logs and checklists Help desk accuracy and

	cases and for unexpected errors following the appropriate resolution procedures. Log response time, availability, and other behavior of functions as identified on the help desk checklist – Identify transactions for which responses have not been received. Where multiple responses are expected for the same request, the receipt of each response will be monitored. Record missing responses – Review status of pending orders. Verify and record accuracy of response – Generate gateway systems/interface reports – Compare gateway systems/interface metrics to Ameritech detail metrics – Review gateway systems/interface Ameritech measures – Develop and document findings	timeliness report – Measure of parity performance between retail and wholesale – Summary report

2.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

3.0 Test TVV3: Order "Flow Through" Evaluation

3.1 Description

The Order "Flow Through" Evaluation tests the ability of orders to flow through from the CLEC through the interface into the Ameritech ordering system, without any human intervention. Only orders that qualify as "flow through", orders not needing manual action, will be tested. The list of "flow through" types will be taken from Ameritech's Flow Through and Exceptions document and will be updated during the testing period as appropriate. Additions and deletions to the list will be incorporated into the test.

As appropriate, "flow through" orders will be submitted through the GUI, and machine-machine interfaces. Any supplements and cancels that are considered to be "flow through" will also be submitted. The order transactions will be monitored to verify that they do not "fall out" for manual handling in the Ameritech work center. Orders will also be monitored to ensure

that Firm Order Confirmations are received within the appropriate timeframes as defined in the performance metrics.

As a separate part of this test, the Test Manager will conduct an analysis of the Ameritech retail ordering functionality. Based on this analysis, a comparison of the "flow through" capabilities of the retail and wholesale systems will be made.

This test will be conducted as a part of the POP functional and normal volume testing (TVV1, TVV2).

3.2 Objective

The objective of the Order "Flow Through" Test is to verify the ability of orders to flow through from the CLEC through the interface into the Ameritech ordering system, without any human intervention. This includes all order types that at the time the transactions are submitted as designated by Ameritech or otherwise considered to be "flow through".

3.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-1
All TVV1 entrance criteria	See Table VI-1.3
Documentation specifying which orders are expected to flow through	Ameritech
Test Scenarios selected	Test Manager
Specific Test Cases developed	Test Manager
Test Case execution schedule developed	Test Manager
Resolution and Implementation of Issue S (Flow Through) as documented in PSCW Case No. 6720-TI-160	Commission, Ameritech

3.4 Test Scope

The scope for this test includes the following test processes:

1. Ordering

3.5 Scenarios

The specific order scenarios to be used in this test will be chosen from those that can be found in Appendix A.

3.6 Test Approach

Inputs	Activities	Outputs
– Test Cases and expected results – Test case execution schedule – Interfaces built and certified – Personnel to execute test cases – Test "Go/No Go" Checklist – Ameritech Flow Through	– Compare order flow through capabilities of Ameritech wholesale and retail systems – Submit order transactions. Log submittal date, time and appropriate transaction information – Receive transaction responses. Log receipt date, time, response transaction type, and response condition	– A summary report comparing the order flow through capabilities of Ameritech's Wholesale and Retail systems – Percentage and number of orders that flowed through by order type, product family, etc. – Percentage and number of orders that did not flow

and Exceptions document	(valid vs. reject) – Verify transaction response contains expected data and flags unplanned errors – Identify orders that had manual handling. Identify reason for manual handling. Record manual handling and order attributes – If there was an error that caused the order not to flow through, identify error source (Test Manager or Ameritech). Identify and log reason for the error. Ameritech errors will not be corrected by the Test Manager – Correct any Test Manager errors and re-submit. Verify orders now flow through – Verify that all orders submitted are accounted for. Log any orders that are submitted but do not appear as processed or erred by Ameritech – Generate Ameritech manual handling report – Generate gateway systems/interface reports – Compare gateway systems/interface reports to Ameritech Retail metrics – Develop and document findings	through by order type, product family, etc. – Orders that did not flow through by reason code – Variance between actual performance and the standards of performance defined in various arbitrated agreements – Report of expected results versus actual results – Report of orders not processed – Ameritech manual handling report – Summary report

3.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

4.0 Test TVV4: Provisioning Verification and Validation

4.1 Description

The Provisioning Verification and Validation test is a comprehensive review of Ameritech's ability to complete accurately and expeditiously the provisioning of CLEC orders. This test will be conducted as a part of the POP functional testing (TVV1). It will incorporate orders submitted via the following interfaces: manual, machine-machine, and GUI. While most kinds of orders will be included, the test will concentrate on those types of orders that require physical provisioning.

This test will involve verifying that orders submitted have been properly provisioned and that the provisioning has been completed on time. Included in the test will be orders that have been supplemented and canceled, as well as those submitted with anticipated errors, to test the impact on provisioning.

For some orders, particularly the more complex ones, the involvement of CLECs operating in Wisconsin will be solicited to volunteer use of their facilities to enhance the "real world" nature of the test. The CLECs will also be asked to provide data on their experiences with provisioning, after verification and validation by Test Manager.

4.2 Objective

The objective of this test is to evaluate the ability of Ameritech to accurately provision orders submitted by CLECs and to do so on time.

4.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-4
All TVV1 entrance criteria	See Table IV-1.3
Test Scenarios selected	Test Manager
Specific Test Cases developed	Test Manager
CLEC volunteers identified	Test Manager
Provisioning log and activity checklists created	Test Manager
Test case execution schedule developed	Test Manager

4.4 Test Scope

The scope for this test includes the following operational reviews:

- UNE Loop migrations (including LNP)
- xDSL installations
- xDSL Line Sharing installations
- Analog, Digital, High Capacity and Interoffice Facility installation
- Disconnect and intercept messaging
- Provisioning completion notice reconciliation
- Directory listing reconciliation
- CSR update reconciliation

4.5 Scenarios

The specific order scenarios to be used in this test will be chosen from those that can be found in Appendix A.

4.6 Test Approach

Inputs	Activities	Outputs
– Test Cases and expected results – Test case execution schedule – Provisioning documentation – Provisioning log and activity checklists – Personnel to execute test cases – Test "Go/No Go" Checklist	– Use test cases to develop transactions and transaction content based upon instructions provided in the appropriate documentation – Attend CLEC training classes as appropriate – Submit machine-machine transactions – Submit GUI and manual transactions – Receive confirmations of transactions – Log notification of provisioning jeopardies and delays – Perform joint provisioning activities and record provisioning interactions – Perform testing on provisioned services – Test completion on orders. Record results in appropriate provisioning log and activity checklist – Generate gateway systems/interface reports – Compare gateway systems/interface metrics with Ameritech retail and other CLECs – Develop and document findings	– Reports that provide the metrics to support standards of performance listed in Appendix D – Variance between actual performance and standards of performance listed in Appendix D – Report of expected results versus actual test case results – Completed provisioning logs and checklists – Help desk accuracy and timeliness report – Provisioning accuracy and timeliness report – Gateway systems/interface to other CLEC comparison – Measure of parity performance between retail and wholesale – Summary report

4.7 Exit Criteria

Criteria	Responsible Party
All global exit criteria	See Table III-6

5.0 Test TVV5: M&R Functional Evaluation

5.1 Description

The M&R Functional Evaluation is a comprehensive review of all of the functional elements of the Ameritech Wisconsin's M&R Systems, Electronic Bonding Trouble Administration (EBTA) and the publicly provided GUI, their conformance to documented specifications, and an analysis of its functionality in comparison to Ameritech's Retail Residence and Business M&R system. The test has two major phases, Phase 1 — a basic functional evaluation, and Phase 2 — a comparative functional evaluation.

5.2 Objective

The objective of this test is to validate the existence and behavior of M&R functional elements as documented in CLEC M&R Training Guides and other applicable documents, and to evaluate the equivalence of CLEC M&R functionality to Ameritech Residence and Business M&R.

5.3 Entrance Criteria

Criteria	Responsible Party
Global Entrance Criteria have been satisfied	See Table III-4
Detailed Test Plan completed	Test Manager
Test Scenarios selected	Test Manager
Specific Test Cases and Transaction Sets developed	Test Manager
Product descriptions and business rules for all transactions to be tested are available	Ameritech
Basic documentation review completed	Test Manager
Detailed Functional Checklist created	Test Manager
Test bed of working services selected and/or established	Ameritech
Specific Evaluation techniques developed	Test Manager
Physical access to Ameritech Web site established	Ameritech
Physical access to Ameritech Web site established	Ameritech
Security access to M&R System established	Ameritech
Evaluation Criteria defined and approved	The Commission
Checklists and Interview Guides created	Test Manager

5.4 Test Scope

CLEC M&R functionality will be reviewed within the context of specific documentation addressing its use and in comparison to Ameritech's retail Residence and Business M&R.

Table VI-4 Test Target: M&R Functional Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Trouble Reporting	Create/Enter Trouble Report (TR)	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Modify TR	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Close/Cancel TR	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Retrieve TR Status	Functionality exists as documented	Inspection	Existence Qualitative Parity
Trouble History Access	Retrieve Trouble History	Functionality exists as documented	Inspection	Existence Qualitative Parity
Access To Test Capability	Initiate MLT Test	Functionality exists as documented	Inspection	Existence Qualitative Parity

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
	Receive MLT Test Results	Functionality exists as documented	Inspection	Existence Qualitative Parity
Functionality	Functional Equivalence to M&R system	Existence of Specific Function	Inspection Interviews	Parity Qualitative

5.5 Scenarios

The specific M&R scenarios to be used in this test will be chosen from those that can be found in Appendix A.

5.6 Test Approach

This test is broken down into two phases:

- Phase 1 involves the use of test cases created for this test to evaluate CLEC M&R functionality and to determine if the system(s) behave(s) as documented.
- Phase 2 involves observation and interviews of Retail Maintenance Administrators (MA) processing trouble calls and entering trouble reports into Residence and Business M&R system to assess functionality in comparison to CLEC M&R.

Inputs	Activities	Outputs
– Test Cases – Documentation – Functionality checklists – Personnel to execute test cases – Personnel to interview Retail Maintenance Administrators and observe their use of Residence and Business M&R	Phase I – Use test cases created for this test and appropriate Ameritech documentation to perform each of the functions listed on the checklist provided via the EBTA M&R interface and GUI systems – Attend CLEC training classes as appropriate – Verify that each system function behaves as documented – Note any anomalies in the space provided on the checklist – Note any discrepancies between M&R documentation and behavior – Ensure that all trouble reports entered in M&R have been canceled Phase II – Use the checklist and interview guide to conduct interviews with MA's selected from the Residence	– Completed checklists from Phases I and II activities – Completed interview summaries – Summary reports of findings from each phase, including a discussion of anomalies and relevant observations relating to usability and timeliness of each system interface – A Summary report comparing relative functionality in CLEC M&R and Retail Residence and Business M&R highlighting differences and contrasting ease of use of the two systems in performing the functions observed – Summary report

	and Business M&R work centers – Observe MA trouble report activities as identified on the checklist provided – Note the presence and behavior of functions identified on the checklist – Identify any anomalies relative to the functions being observed – Note any additional relevant information from the MA interview (e.g., additional capabilities, performance, etc.) – Determine and document any M&R functions that can be performed from a Retail Residence and Business M&R Workstation that are not available in CLEC M&R – Perform a detailed evaluation of relative functionality and capabilities between CLEC M&R and Retail Residence and Business M&R Common Activities – Document the results and findings from the activities conducted in Phases I and II	

5.7 Exit Criteria

Criteria	Responsible Party
Global exit criteria have been satisfied	See Table III-6
All activities completed	Test Manager
Checklists and reports completed by personnel participating in the test.	Test Manager

6.0 Test TVV6: M&R Performance Evaluation

6.1 Description

The M&R Performance Evaluation will identify the capacity and potential choke points at projected future transaction volumes for the Ameritech Maintenance and Repair systems. Both the Electronic Bonding Trouble Administration (EBTA) system, and the publicly available system (GUI) will be tested under load conditions. Both system evaluations will be conducted in three parts. These are: 1) a "normal" volume test suing anticipated M&R transaction volumes for the time frame finalized by the Commission, 2) a "peak" test using volumes at 150% (1.5 times) of the normal volume test and, 3) a "stress" test using volumes at 250% (2.5 times) of the normal volume test. The "normal," "peak," and "stress" tests will be conducted in Ameritech's production environment.

The M&R Performance Evaluation will look at the performance of Ameritech's maintenance and repair systems and processes from the submission of trouble transactions to the receipt of a response. Transactions will be submitted using the machine-machine and GUI interfaces.

6.2 Objective

The objective of this test is to evaluate the behavior of Ameritech's M&R systems under load conditions, to determine system performance in terms of response time and operability, and to identify future performance bottlenecks.

6.3 Entrance Criteria

Criteria	Responsible Party
Global entrance criteria have been satisfied	See Table III-4
Interface has been fully tested and is operational for the submission of test cases	Test Manager
Test transaction sets have been built and validated	Test Manager
Product descriptions and business rules for all transactions to be tested are available.	Ameritech
System test bed has been established	Ameritech
M&R test coordination details have been worked out	Test Manager

6.4 Test Scope

M&R performance will be evaluated under normal projected loads and in a stress/load test mode.

Table VI-5 Test Target: M&R Performance Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Performance	Projected Normal Loads	Timeliness Operability	Inspection Transaction Generation	Qualitative Quantitative
	Stress/Load	Timeliness Operability Capacity	Inspection Transaction Generation	Qualitative Quantitative

6.5 Scenarios

The specific M&R scenarios to be used in this test will be chosen from those that can be found in Appendix A.

6.6 Test Approach

Test transactions will be sent to Ameritech's M&R system. The transaction sets are structured to provide a transaction mix consistent with current system usage, projected normal volumes, and stress/load volumes. Submission rates should mirror peak busy hour and peak busy day behaviors.

Inputs	Activities	Outputs
– Test Cases and transaction	– Feed transaction sets to	– Test execution and

tests – Personnel to operate systems/interfaces – Personnel to supervise and observe test execution – Personnel to execute test cases – M&R systems and associated test beds – Systems/interfaces	Ameritech's M&R system – Observe and capture observations from above in terms of performance and operability – Capture transaction performance statistics via data test generator.	– Observation reports – Systems/interface performance reports – M&R performance reports – Summary report
	– Capture transaction performance statistics via Ameritech's M&R system – Monitor M&R system interfaces to identify any bottleneck conditions (Ameritech system personnel) – Ensure that all generated trouble reports have been canceled/closed – Reset test bed for next test (if required) or clean up production databases (Ameritech) – Execute test once with normal, projected transaction volumes and once with stress/load volumes – Analyze performance reports – Develop and document findings	

6.7 Exit Criteria

Criteria	Responsible Party
Global exit criteria have been satisfied	See Table III-6

7.0 Test TVV7: End-to-End Trouble Report Processing

7.1 Description

This test involves the execution of selected M&R test scenarios to evaluate Ameritech's performance in making repairs under the conditions of various wholesale maintenance scenarios.

7.2 Objective

The objective of this test is to evaluate Ameritech's performance in making repairs under the conditions of various wholesale maintenance scenarios.

7.3 Entrance Criteria

Criteria	Responsible Party
Global entrance criteria have been satisfied	See Table III-4
Test scenarios selected	Test Manager

Criteria	Responsible Party
Product descriptions and business rules for all transactions to be tested are available.	Ameritech
Test-bed circuits provisioned	Ameritech
Faults inserted into test-bed circuits as required by the test scenarios	Test Manager

7.4 Test Scope

Selected M&R test scenarios will be executed to evaluate Ameritech's performance in making repairs under the conditions of various wholesale maintenance scenarios. The following chart contains the processes, sub-processes, and methods for evaluating the End-to-End Trouble Report Processing test:

Table VI-6 Test Target: Execution of M&R Test Scenarios

Process Area	Sub-Process	Evaluation measure	Evaluation Technique	Criteria Type
End-to-End Trouble Report Processing – Resale	M&R Test Scenarios	Accuracy Timeliness	Inspection	Quantitative
End-to-End Trouble Report Processing – UNE/UNE Combinations	M&R Test Scenarios	Accuracy Timeliness	Inspection	Quantitative

7.4 Scenarios

The specific M&R scenarios to be used in this test will be chosen from those that can be found in Appendix A.

7.5 Test Approach

Inputs	Activities	Outputs
– Test-bed circuits with embedded faults – Personnel to create trouble tickets and track the trouble ticket status for each scenario	– Attend CLEC training classes as appropriate – Conduct circuit test if applicable for each test scenario – Create and submit trouble ticket via Ameritech's M&R system – Periodically monitor each trouble report throughout its life using trouble report status transactions in Ameritech's M&R system – Note significant events in the trouble report life cycle (error occurrences, corrections, trouble ticket submission time, time cleared, etc.)	– A time to repair measurement for each fault repaired – Summary report

	– Calculate time to repair measurements for each test scenario fault repaired – Develop and document findings	

7.6 Exit Criteria

Criteria	Responsible Party
Global exit criteria have been satisfied	See Table III-6
Time to repair measurements for repaired faults	Test Manager
Summary report of observations	Test Manager

8.0 Test TVV8: Billing Functional Usage Evaluation

8.1 Description

The Functional Usage Evaluation is an analysis of Ameritech's daily message processing to ensure usage record types including Access records, Rated records, Unrated records and Credit records appear accurately on the Daily Usage Feed (DUF) according to the defined schedule.

8.2 Objective

The objective of this test is to evaluate the following:

- Accuracy and completeness of all usage record types on the DUF including access records that should appear, not receiving records that should not appear, and not receiving empty set files.
- Timeliness of the DUF and access records delivery

8.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
Test bed completed and ready	Ameritech
Product descriptions and business rules for all transactions to be tested are available.	Ameritech
Techniques and instrumentation developed and approved	Test Manager
Ameritech resources are available to participate in the test	Ameritech
Detailed Test Plan completed and approved	Test Manager

8.4 Test Scope

Table VI-7 Test Target: Billing Functional Usage Evaluation

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Usage and Delivery	Track valid usage	Timeliness of DUF files and records	Inspections	Quantitative
	Account for no usage	Completeness of data	Inspections	Quantitative

8.5 Scenarios

Test calling is dependent on the provisioning process, which is dependent on scenarios. Some customers are subject to service changes (e.g. migrations from Ameritech retail to a CLEC, feature changes, etc.). Test calls and service changes will occur simultaneously. A subset of the Appendix A order scenarios will be used in this test.

8.6 Test Approach

This test will use operational analysis to evaluate the accuracy and completeness of records contained in the DUF. This analysis will also examine the age of calls on the DUF. The evaluations will be accomplished by dispatching testers to various locations within Wisconsin. These testers will place test calls and will record information about these calls including the "call from" number, "call to" number, "bill to" number, call time and duration. The data contained in these Daily Usage Feeds will then be compared to the call logs. The Test Team will also record information about the contents of DUFs received by Test Manager.

Test calls will be made using some customer accounts that will migrate during the test period. Migration refers to the conversion of account ownership from one LEC to another. Test calls will be made from migrating accounts before and after the migration date to ensure accurate routing of data in the Daily Usage Feed.

For example, an Ameritech retail customer migrates to a CLEC during the test. Call made by the customer prior to migration should be routed to Ameritech. Calls made by the customer after migration should be routed to the new CLEC.

Test calls should be placed from around the Ameritech calling region. Test calls will be made throughout the workday. Test calls will include a variety of call types with the exception of 911, and will be placed from locations where 5E, Siemens and DMS switches are used. Local and toll test calls terminating on the test lines will also be made. These calls will be subject to evaluation.

Inputs	Activities	Outputs
– A provisioned Test-bed – Personnel to create and track tusage for each scenario	– Develop Test Call Matrices, which include test call logs for each location, on each day, for each originating phone number	– A report of the testers logs – A report showing the validation of calls made during the test – A Report showing the

	– Assemble tester resources, provide instructions and dispatch testers to calling locations – Complete calls and log results – Receive DUF files from Ameritech – Verify that appropriate data is on the DUF – Verify that calls that do not belong on the DUF are not on the DUF – Verify that appropriate calls present in the DUF match the testers call log – Identify DUF files that contain no billable records – Received in the DUF files, Test Team will validate the age of calls by determining the number of business days between the call date and the day the DUF file was created – Develop and document findings	number of empty DUF files sent by Ameritech – Summary report

8.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

9.0 Test TVV9: Functional Carrier Bill Evaluation

9.1 Description

The Functional Carrier Bill Evaluation is an analysis of Ameritech's ability to accurately bill usage plus monthly recurring charges (MRC) and non-recurring charges (NRC) on the appropriate type of bill. An accurately billed item will contain the correct price and correct supporting information, such as start/end dates, duration, standard amounts, and discount amounts. This test will also evaluate the timeliness of bill delivery to the CLECs. Any billing system changes implemented during the course of the test will also be evaluated.

Ameritech will need to run a bill cycle from the initial test bed prior to any ordering and provisioning tests to use as a baseline set of bills.

Monthly charges will be examined for both Resale and UNE billing on Carrier Access Billing System (CABS) and Resale Billing System (RBS) bills. Table VI-9 reflects a number of key characteristics of Retail, Resale, and UNE billing information that will be used in the design of test cases. Information includes the various charge components and their destination bill.

Table VI-8: Key Characteristics Of Billing Information for Resale and UNE Customers

	Billing Component	Rating	Usage	Billing
Resale	Usage	CAMPS	DUF	RBS
Resale	MRC/NRC	ACIS	N/A	RBS
UNE	UNE loops, usage, MRC/NRC, and Combinations	ACIS/ CAMPS	DUF	CABS/RBS
UNE-Other	IOF, collocation	CABS	DUF	CABS
UNE-Other	High Cap Loops (DS1/3) MRC/NRC	CABS	N/A	CABS
Other	Directory Listings		N/A	
Retail	Non-unbundled Services MRC/NRC (Ancillary services)	ACIS	N/A	

ACIS: Ameritech Customer Information System
CABS: Carrier Access Billing System
CAMPS: Common Ameritech Message Processing System
RBS: Resale Billing System

9.2 Objective

This test evaluates the timely delivery of the bill and the accurate and timely appearance of charges on the appropriate bill. Appearance of charges will depend on the type of products ordered and/or class of service changes for resale and UNE. Details to be evaluated include:

- Appropriate prorating of charges for new and/or disconnected service
- Charges are accurate (order matches billing)
- Totals are accurate
- New/disconnected products appear (or do not appear) on the bill
- Bill dates are correct and match appropriate date from provisioning process e.g., order completion dates
- Adjustments appear on the bill
- Bills are delivered to CLECs and Resellers in a timely manner
- UNE billed on a usage basis are billed correctly, including the terminating access usage details for calls placed to UNE-P served end users

9.3 Entrance Criteria

Criteria	Responsible Party
All Global Entrance Criteria satisfied	See Table III-4
All Retail, RBS, and CABS baseline bills produced from the initial test bed	Ameritech
Test bed matches requirements.	Ameritech

Criteria	Responsible Party
Techniques and instrumentation developed and approved	Test Manager
Product descriptions and business rules for all transactions to be tested are available.	Ameritech
Test bed completed and ready	Ameritech
Calls made during Functional Usage Evaluation processed through to the DUF and available for billing.	Ameritech
Availability of Ameritech resources to test and produce RBS and CABS bills	Ameritech
Method for viewing bills implemented	Ameritech, Test Manager

9.4 Test Scope

Table VI-9: Test Scope for Carrier Bill Evaluation

Process Area	Sub Process	Evaluation Measure	Evaluation Techniques	Criteria Type
Maintain Bill Balance	Carry balance forward	Accuracy of bill balance	Inspection	Quantitative
Verify Billing Accounts	Verify Billing Accounts	Completeness and accuracy of extraction	Inspection	Quantitative
Bills and Delivery	Verify normal recurring charges	Completeness and accuracy of data	Inspection	Quantitative
	Verify one-time charges	Completeness and accuracy of data	Inspection	Quantitative
	Verify prorated recurring charges	Completeness and accuracy of data	Inspection	Quantitative
	Verify Usage Charges	Completeness and accuracy of data	Inspection	Quantitative
	Verify discounts	Completeness and accuracy of data	Inspection	Quantitative
	Verify adjustments (debits and credits)	Completeness and accuracy of data	Inspection	Quantitative
	Verify late charges	Completeness and accuracy of data	Inspection	Quantitative
	Receive bill copy	Timeliness of media delivery	Logging	Quantitative

As part of this test, a variety of products and services will be ordered. This may result in many variations in billing presentation from the two primary billing systems (RBS and CABS). Relevant bill types will be selected for review based upon the product mix and anticipated charges as defined in the expected test results.

9.5 Scenarios

A subset of the Appendix A scenarios will be utilized for billing and usage testing purposes. The set selected will include:

- Test cases for 'migration/conversion' of customers
- Test cases for disconnects, new service (add/delete)
- Test cases for changes to services (modify)

All migration situations should be adequately represented:

- Ameritech to a CLEC
- CLEC to Ameritech
- CLEC to CLEC

The scenarios utilized for billing and usage testing will apply to all service delivery methods (SDM) available in Ameritech at the time of the test(s).

9.6 Approach

This test will use systems and operational analysis to evaluate the completeness and accuracy of charges that should appear on the bill based on usage information from the Functional Usage Evaluation and selected scenarios. Expected results will be defined for each test case.

Three bill periods will be processed for the same set of customers.

- The first bill period consists of the baseline bills where customers created for this test are billed for the first time directly from the initial test bed. These bills are produced prior to the execution of any transaction scenarios that affect selected customers.
- The second and third bill periods consist of bills produced after selected scenarios have been executed. This second set of bills will include items such as prorates, disconnects, migrations, adjustments, etc. Some customers will be created during the test execution, and will only receive second period bills.

Inputs	Activities	Outputs
– A provisioned test-bed – Verified Baseline Bills and CSRs – Selected usage from the Billing Functional Usage Evaluation (TVV 8.0) – CSRs and completions from relevant TVV1 orders	– Process service order changes – Develop expected results for each test case – Begin first bill period by receiving baseline bills – Record invoice bill date and actual date received – Validate test results for each applicable test case – Identify discrepancies – Receive Bills for next bill period – Receive CSRs for all cycles – Record invoice bill date and actual date received – Validate test results for each applicable test case – Identify discrepancies. – Complete second bill period. Repeat 7-11 until third bill period is complete – Develop and document findings	– A report showing each test case, expected results, and discrepancies – A report showing Ameritech bill delivery dates compared to the expected delivery dates based on the bill cycle date – Summary report

9.7 Exit Criteria

Criteria	Responsible Party
All Global Exit Criteria satisfied	See Table III-6

Appendix A: Test Scenarios

The scenarios listed in this appendix are based on a current understanding of the products and capabilities that are likely to be available at the time the test is executed. Depending on changes in availability, the scenarios may need to be modified before the test begins. Also, it should be noted that the scenarios will include variations such as planned errors and supplements to cancel, change an order, or revise due dates. Each Transaction Verification and Validation Test will utilize the scenarios detailed below in parentheses.

Resale (TVV-1, TVV-2, TVV-3, TVV-4, TVV-8, TVV-9)

Activity	Res./ Bus. POTS	Res./ Bus. ISDN	Centrex	Private Line	PBX
Migration from Ameritech "as is"	X	X	X		X
CLEC to CLEC migration	X				
Feature changes to existing customer	X		X		
Migration from Ameritech "as specified"	X	X			
New customer	X	X	X	X	X
Telephone number change	X				
Directory change	X		X		
Add lines/trunks/ circuits	X	X	X	X	X
Suspend/restore service	X				
Disconnect (full and partial)	X	X	X	X	X
Moves	X		X		
Convert line to ISDN		X			
Migrate from CLEC to Ameritech	X				
Convert POTS line to Centrex			X		
Regrade service from residential to business	X				

UNE (TVV-1, TVV-2, TVV-3, TVV-4, TVV-8, TVV-9)

Activity	Res./ Bus. Analog Loop	Res./ Bus. xDSL Capable Loop	Line Share	Bus. DS1 Loop	Inter-office Facility	Dark Fiber	Collocation
Migration from Ameritech without number porting (full and partial)	X	X		X			
Migration from Ameritech with LNP (full and partial)	X	X		X			
Migration from CLEC to CLEC	X	X					
Add new loops to existing customer	X	X		X			

Activity	Res./ Bus. Analog Loop	Res./ Bus. xDSL Capable Loop	Line Share	Bus. DS1 Loop	Inter-office Facilility	Dark Fiber	Collocation
Add new interoffice DS1/DS3 facilities					X		
Purchase loops/pairs for a new customer	X	X	X	X		X	
Disconnect (full and partial)	X	X	X	X	X	X	
Moves	X	X		X			
Standalone directory change	X	X	X				
Standalone LNP	X						
Convert from UNE-P to UNE loop	X						
Convert from Resale to UNE loop	X						
Migrate data service from Ameritech to CLEC			X				
Migrate voice service from CLEC to Ameritech			X				
Purchase dark fiber					X		
Disconnect data service			X				
Disconnect voice service			X				
Order "light-up" from "A" to "Z" where both points are in a metropolitan area						X	
Convert line to ISDN	X						
Order virtual and physical							X

UNE Platform (TVV-1, TVV-2, TVV-3, TVV-4, TVV-8, TVV-9)

Activity	Res./Bus. POTS	Res./ Bus. ISDN
Migration from Ameritech "as is"	X	X
Migrate from CLEC to CLEC	X	
Feature changes to existing customer	X	
Migration from Ameritech "as specified" (full and partial)	X	X
New customer	X	X
Telephone number change	X	
Directory change	X	
Add lines/trunks/ circuits	X	X
Suspend/restore service	X	
Disconnect (full and partial)	X	X
Moves	X	X
Convert line to ISDN		X
Migrate from CLEC to Ameritech	X	
Convert from Resale to UNE-P	X	X

Stand-alone Preorder (TVV-1, TVV-2)

Activity	Residence/ Business
Obtain CSRs	X
Validate customer address	X
Reserve telephone numbers	X
Loop qualification (including xDSL and Remote Terminal Availability)	X
Inquire about product/service availability	X
Determine availability of desired due date (including dispatch information)	X
Obtain Directory Listing information	X
Channel Facility Assignment (CFA) Inquiry	X
Network Channel/Network Channel Interface (NC/NCI) Inquiry	X
Availability of dark fiber	X
Pending order of status	X
CLLI Code (Manual)	X

UNE EEL (TVV-1, TVV-2, TVV-3, TVV-4, TVV-9)

Activity	Res./Bus. DS0	Bus. DS1 Loop
Migrate lines from Ameritech w/o number port.	X	X
Migrate lines from Ameritech with LNP	X	X
Add new lines to existing EEL	X	X
Purchase lines for a new customer	X	X
Convert customer from Resale to UNE EEL	X	
Disconnect (full and partial)	X	X

Stand Alone Maintenance & Repair (TVV-4, TVV-5, TVV-6)

Activity	Res./ Bus. POTS	Res./ Bus. ISDN	Centrex	Private Line	PBX	xDSL UNE - Loop	Line Share
Short on outside plant facility	X				X	X	X
Open on outside plant facility	X	X				X	X
Short on the line within the central office	X		X	X		X	X
Open on the line within the central office	X	X	X	X	X	X	X
Noise on line	X	X				X	X
Echo on line	X					X	X
Customer w/ LNP not receiving incoming calls	X						
Customer receiving incoming calls intended for another customer's number.	X						X
Call waiting not working	X						X
Repeat dialing not working	X						
Customer cannot call 900	X						

numbers							
Calls do not roll-over for customer w/ multiline hunt group	X		X				
Call forwarding not working	X						
Caller ID not working	X						X
Pick-up group order for large centrex customer not functioning properly			X				
DS1 loop MUXed to DS3 IOF not functioning.				X			
Customer's data not operational							X
CLEC requests MLT	X						

Appendix B. Normal and Peak Volume Test Section

A. Purpose

This section provides the methodology the Test Manager will use to define volumes required to evaluate the systems, processes and other operational elements associated with Ameritech's support of the competitive market. The purpose of the volume tests is to evaluate the ability of Ameritech's systems interface to process representative future wholesale transaction volumes to support competitors' entry into the market. These tests are performed at both peak and normal volumes. In addition, stress or capacity tests will be performed to test overall system capacity on selected transactions.

B. Scope

Scope is defined within each appropriate domain section. Statistical analysis of volume data will be performed in accordance with the statistical principles developed during the pre-hearing process and described in Appendix C of this document.

C. Data Development

Overall normal daily test volumes will be developed through a synthesis of information obtained from Ameritech and various CLECs. The Commission has solicited CLEC and Ameritech forecast data and will provide this data to the Test Manager for its analysis. Three volume types will be addressed: pre-ordering, ordering (as part of the TVV2 Evaluation), and maintenance and repair (as part of the TVV 6 Evaluation). The development methodology will be consistently applied to each of the types.

Orders by product/service will be developed using the Ameritech and CLEC forecasts of competitive lines viewed by service and order type. The Test Manager will develop a proportion for each service and order type based on forecasted net adds, and then will extend the normal daily volume figure by that proportion to determine the daily volume by service and order type. The daily order volume of supplements and order changes/disconnects and moves (i.e., churn) will be calculated by applying historic factors to daily volumes by service and order type.

The peak volumes are planned to be 150% of normal volumes. The stress volumes are planned to be 250% of normal volumes.

Appendix C: Statistical Approach

A. Overview

This test will rely on standard statistical methods to evaluate Ameritech performance. Each test will define the data population to be observed, the measurements to be taken, and the statistical tests to be used. Data will be normalized, tabulated, and archived in a way that allows verification of test results and re-analysis of data using additional statistical methods, if appropriate.

B. Measures

The measures (metrics and their associated standards) that will serve as parameters for testing will be listed in Appendix D.

C. Sampling

In instances where sampling is used, sampling will be designed so that samples are sufficiently representative of populations with respect to the measures being studied to ensure that the resulting statistical inferences made about populations are valid. For most tests, simple random sampling will be used.

D. Hypothesis Testing

This test will employ a hypothesis testing approach to frame the analysis of test results. The standard "null" hypothesis will be that Ameritech is performing adequately. The possibility of an error arises if this hypothesis is rejected when it is true (Type I error) or is accepted when it is false (Type II error). An attempt will be made to balance Type I and Type II errors as much as is feasible.

E. Parity Tests and Non-Parity Tests

There are two basic types of tests. Parity tests compare an Ameritech retail average or percentage to a CLEC or test transaction average or percentage. The typical test for this type of comparison is a hypergeometric test for percentages and a two-sample t-test or z-test for averages. For those parity tests where sufficiently large samples can be drawn, hypothesis testing will be done by performing a "z-test" to calculate a "z-score." A z-score is a single number, which indicates the differences between sample data. A low z-score supports the hypothesis of parity (i.e., both CLEC and ILEC performance are from the same "population" in terms of performance). In cases where this test is not appropriate due to small sample size (for tests of averages) or assumption violations, other tests, such as permutation tests, will be performed.

Non-parity tests compare a percentage or average to a fixed standard or benchmark. In this case, the typical test is a binomial test or a one-sample t-test. Once again, alternative statistical tests will be used, where appropriate, based on tests of assumptions and sample sizes.

F. Results

Test results will include a summary of the statistics calculated, the hypotheses postulated for the test, and the conclusion(s) drawn based on the statistical results.

Appendix D: Performance Metrics and Standards

The Performance Metrics and Standards to be used for this test will be determined in accordance with the Orders in docket numbers 6720-TI-120 and 6720-TI-160. Additions and changes stemming from the pre-hearing process and orders will be included as well.

Ameritech's performance measures web site is located at https://CLEC.SBC.COM

Mapping of A-AA Issues to Performance Measures

A-AA From 7/19/00 Order & A-AA Matrix	Performance Measure
A: Facilities Availability Process (7/18/00 Order, p. 5)	See F below
A: Improved Escalation Process Concerning Facilities Assignment (7/18/00 Order, p. 5)	Not Applicable
A: Procedures for Requesting and Receiving by Central Office DLC Loop Percentages (7/18/00 Order, p. 5)	None at this time– Process is not yet defined
A: Facility Problem Notification Within 24 Hours of FOC (See F below) (7/18/00 Order, p. 5)	See F below
B: UNE-P – Proposed Tariff provided to parties (7/18/00 Order, p. 8)	Performance Measures are not applicable for the agreement. However, Performance Measurements for the product is discussed on page 36.
B: UNE-P – Implementation of Resolved Issues (7/18/00 Order, p. 8)	Ameritech provides UNE-P disaggregations in the following PMs: #5 - % FOC returned within X hours #6 – Average time to return FOC #13 – % Order Process Flow Through #13.1 - % Total Order Process Flow Through Provisioning & Maintenance Measures # 27-41
C: Loop Assignment for DSL (7/18/00 Order, p. 5)	#1 - Average Response Time for Pre-order Interfaces (Electronic Loop Make-Up Information) #2 – Percent Responses Received within "X" seconds – OSS Interfaces #57 – Average Response Time for Manual Loop Make-up Information Ordering, Provisioning Maintenance and Repair PMs for Line Sharing are addressed in MI Phase II PM pre-hearing modifications.
D: Sub-Loops – Documentation available (7/18/00 Order, p. 9)	Not Applicable
D: Sub-Loops – Process to identify "Points of Access" (7/18/00 Order, p. 9)	Not Applicable
D: Sub-Loops – Implementation of Resolved Issues (7/18/00 Order, p. 9)	Ameritech to develop disaggregations of 55-69 as required.
E: Dark Fiber – Documentation available – Tariff Filing (7/18/00 Order, p. 9)	Not Applicable
E: Dark Fiber – Implementation of Resolved Issues (7/18/00 Order, p. 9)	Disaggregations for Dark Fiber are included in current PMs: #58 – Percent Ameritech Caused Missed Due Dates #59 – Percent Trouble Reports Within 30(I-30) Days of Installation

A-AA From 7/19/00 Order & A-AA Matrix	Performance Measure
	#60 – Percent Ameritech Missed Due Dates Due To Lack Of Facilities #62 - Average Delay Days for Missed Due Dates Due To Lack Of Facilities #62 - Average Delay Days For Ameritech Caused Missed Due Dates #63 - Percent Ameritech Caused Missed Due Dates > 30 days #65 - Trouble Report Rate #67 - Mean Time To Restore #67 - Percent Out Of Service (OOS) < "24" Hours #69 - Percent Repeat Reports
F: New Firm Order Confirmation (FOC) and Facility Modification Process – Documentation Available (7/18/00 Order, p. 5)	Not Applicable
F: New Facility Modification Process – Identify Facility Problems and Notify CLEC of modification or build options "Simple Modifications" – Ameritech will complete simple modifications within existing interval without notification to CLEC; existing jeopardy and new committed due dates processes will be used if simple modifications are not completed within existing interval "Complex Modifications" – Ameritech will provide to CLEC an initial Complex Notification targeted for two business days of initial FOC; Complex Notification with revised date is targeted for three business days from initial Complex Notification. New Build – Ameritech will provide a New Build Notification targeted for two business days of initial FOC; CLEC and local account team will then discuss possible solutions (7/18/00 Order, pp. 5-6)	Ameritech proposes to measure simple modifications within existing intervals. No notifications will be required or provided. Ameritech proposes to add the following WI #7 - Percent Initial Facility Modification Notifications within Specified Timeframe WI#8 - Percent Complex Modification Classification, Requirements, and Revised Due Date within Specified Timeframe WI#9 - Percent New Build Notifications within Specified Timeframe Ameritech agreed to propose additional measures for FMOD Missed Due Dates, Percent of FMod Notification and Good News Notice. Ameritech reviewing CLEC proposal for comparison to Retail Parity and for FMOD accuracy measure.. Existing PMs will incorporate FMOD orders (Missed Due Dates etc.) Ameritech will exclude initial FOC response (as a missed due date) on PM# 58 – Percent Ameritech Caused Missed Due Dates (UNE)
F: New Firm Order Confirmation Process – Incorporate version numbers and reason codes on revised FOCs (7/18/00 Order, p. 6)	None at this time
G: Hot Cut Procedures (7/18/00 Order, p. 6)	#114 - % Premature Disconnects #114.1 – CHC LNP w/Loop Provisioning Interval #115 - % Ameritech Caused Delayed Coordinated Conversions #115.1 - % Provisioning Trouble Reports #115.2 – Mean Time to Restore Provisioning Trouble Reports MI#3 - Coordination Conversions Outside of Interval Additional measures which may evaluate portions of the Hot Cut process include: #55.2 – Average Installation Interval for Loop with LNP #91-101 – LNP measures

A-AA From 7/19/00 Order & A-AA Matrix	Performance Measure
G: Hot Cut Procedures-ISDN-xDSL (7/18/00 Order, p. 6)	No specific disaggregations for Service Type, all Hot Cuts measured per item above.
H: Street Address Guide (SAG) to CSR Conversion (abbreviated validation) (7/18/00 Order, p. 6)	Data may be reflected in PM#9, % Rejects
I. Parsed CSRs will be provided	Not applicable
J. Implement industry standard versions of EDI (Version 10) and LSOG (Version 4) for ordering, including all associated functionalities by August 2000.	Not applicable
K. Implement an industry standard version of LSOG (Version 4) for preordering.	Not applicable
L: Directory Assistance/Directory Publishing a. Provide current SBC documentation on its " Retain Current Listing" process (7/18/00 Order, p. 7)	Not Applicable
L: Directory Assistance/Directory Publishing b. Provide current AAS documentation on its Order and Query Process via website (7/18/00 Order, p. 7)	Not Applicable
L: Directory Assistance/Directory Publishing c. Second pre-BOC (Draft Directory) Review (dates are directory specific) (7/18/00 Order, p. 7)	Not Applicable – one time event
L: Directory Assistance/Directory Publishing d. Implement a process to allow CLECs the option to retain current listings, except on partials (7/18/00 Order, p. 7)	Expect current measurements to address issues: #112 - % DA Database Accuracy for Manual Updates #113 - % Electronic Updates that Flow Through without Manual Assistance
L: Directory Assistance/Directory Publishing e. Provide interface (or work-around) for integrated directory listings ordering ability (7/18/00 Order, p. 7)	Process is not yet defined, however expect current measurements to address issues: #110 - % Updates Completed into DA Database w/in 72 hours for Facility Based CLECs #111 - Average Update Interval for DA Database for Facility Based CLECs #112 - % DA Database Accuracy for Manual Updates #113 - % Electronic Updates that Flow Through without Manual Assistance
M: E911 Database Management (confirm parity between Ameritech and CLECs regarding use of SAG) (7/18/00 Order, p. 7)	Texas Measures: #102 - Average Time to Clear Errors #103 - Percent Accuracy for 911 Database updates #104 - Average Timer Required to Update 911 Database
N: Customer Premise Access – Provide Copies of Policy (7/18/00 Order, p. 7)	Ameritech proposes two measures for UNE Loops (all loop types): WI#1 – Percent No Access UNE Loops – Provisioning WI#2 – Percent No Access UNE Loops - Maintenance
O: Replacement of Internal Network Interface Devices (NIDs) (7/18/00 Order, p. 7)	Ameritech proposes new measure : WI# 3 - Percent Installation Trouble Reports for field visit orders which are coded to NID
P: TC/Net Change Process (7/18/00 Order, p. 7)	Not Applicable
Q: LEC Protection (7/18/00 Order, p. 7)	Not Applicable
Q: LEC Protection – LOA Policy (7/18/00 Order, p.	Not Applicable

A-AA From 7/19/00 Order & A-AA Matrix	Performance Measure
7)	
R. Service Order Completion - Identification of actual changes entered	Not Applicable
S: Flow Through (7/18/00 Order, p. 7)	No Performance Measures required for the provision of flow-through documentation. However, Ameritech proposes to measure flow-through by the following measures: PM # 13 Order Process Flow Through PM # 13.1 Total Order Process Percent Flow Through
T. Supplemental Orders - Resubmit whole order, just changes, or whole order with changes added	Not Applicable
U. Preorder/Order Synchronization - Identification of elements that won't synchronize after LSOG4 implementation	Not Applicable
V: Enhanced Extended Links (EELS) - Proposed Tariff provided to parties (7/18/00 Order, p. 9)	Not Applicable
V: Enhanced Extended Links (EELS) - Implementation of Resolved Issues (7/18/00 Order, p. 9)	None at the time.
W: Branded Operator Services (7/18/00 Order, p. 7)	Additional investigation (of Branded OS) in progress, PM's may need modification pending investigation and discussion w/ CLECs. #79 - Directory Assistance Grade of Service #80 - Directory Assistance Speed of Answer #81 - Operator Services Grade of Service #82 - Operator Services Speed of Answer
X: Partial Migrations (7/18/00 Order, p. 8)	Not Applicable
Y: Account Management Process - Edited Ameritech Handbook (7/18/00 Order, p. 8)	Not Applicable
Y: Account Management Process - Coordination Between Account Team and Directory Listing and Directory Assistance (7/18/00 Order, p. 8)	Not Applicable
Z: Collocation Ordering, Rates, Auditing and Record Keeping Processes (7/18/00 Order, p. 8)	For Ordering: PM# 107 % Missed Collocation Due Dates PM# 108 Average Delay Days for Ameritech Caused Missed Due Dates PM#109 Percent of Requests Processed Within Established Timelines PM# MI 4, Average Time to Provide a Collocation Arrangement
AA: LNP 10-Digit Trigger Ordering (7/18/00 Order, p. 8)	#91 - % of Time Old Service Provider Releases Subscription prior to the Expiration of Second 9 Hour Timer (T2) #97 - % Time Ameritech Applies 10-digit Trigger Prior to the LNP Order Due Date

Appendix E: Glossary

Term	Definition
271 Application	An application to offer long distance services from an RBOC to a state or federal regulatory agency. In order to grant this application, the agency must find the applicant is in compliance with the 14 point competitive checklist described in the 1996 Telecommunications Act.
ACIS	Ameritech Customer Information System for resale customers. All customer records are kept in this system.
AEBS	Ameritech Electronic Bill Service which creates monthly billing detail by state.
AEMS	Ameritech Electronic Messaging System. This front end system identifies what type of pre-order transaction was request.
ALPS	Ameritech Listing Publishing Services is the entity that publishes Ameritech's directory listings.
AMA	Automatic Message Accounting. A system that records and documents billing information for (long distance) calls made by a (corporate) subscriber.
ARES	Ameritech Records and Engineering System. This system contains the plant inventory, detailed loop make-up information, and load coil information.
ARIS/EXACT	Ameritech's Access Request Information System. This system receives the ASRs and validates and processes them. ARIS generates the service order formatted with the USOCs and FIDs.
ASC	Ameritech's Access Service Centers.
ASON/ACIS	Ameritech Service Order Negotiation System. The system in which orders are processed for Resale, UNE, and TNs.
ASR	Access Service Request. Form used to order interoffice facilities such as dedicated trunk ports.
Ameritech Pre-Filing Statement	A filing with the State of Wisconsin that lists commitments from Ameritech with regards to Ameritech's 271 Application.
Bill Certification	Process by which Ameritech demonstrates billing process management to its Reseller customers.
Bill Cycle	The grouping of customers for purposes of billing. An end-user normally belongs to one bill cycle. In Wholesale billing, all end-users belonging to the same bill cycle are aggregated onto a single CLEC bill. Assignments of cycle and period are accomplished by Ameritech. Bill cycles enable even distribution of a large number of customers so as to allow efficient use of computing resources and to mitigate risks associated with computer failures.
Bill Cycle Balancing	The procedure by which the charges associated with the inputs of a billing cycle are reconciled with the charges of the outputs of the billing cycle.
Bill Period	The length of time covered by a customer bill. Each end-user has one bill per bill period. CLECs receive one bill per bill period and bill cycle for all end-users belonging to that period and cycle. Assignments of cycle and period are accomplished by Ameritech.
Billing Domain	Tests related to creation of correct carrier bills.
Black Box	Internal processes within Ameritech's systems that are considered out of scope for the purposes of this test plan. Correct functioning of 'black box' systems can be inferred from input and output interface files.
BTN	Billing Telephone Number. The number to which charges from a given telephone service are billed.
BTN Accounts	Billing Telephone Number accounts. These accounts represent "dummy" phone numbers which are used to aggregate a Reseller's charges into a consolidated bill. Reseller's have several separate BTN accounts.

Term	Definition
CABS	Carrier Access Billing System that creates and maintains customer account information, receives service order input from PBSI, applies wholesale rates for elements using USOC rate tables, and creates a monthly bill by state.
CAMPS	Common Ameritech Message Processing System. The system upgrades the usage guide for the TN, accumulates and formats usage for the DUF, and rates resale usage.
CAP	Competitive Access Provider. Facilities-based carrier providing alternative access service.
CSR	Customer Service Record. Details of a customer's fixed monthly charges billed by the local telephone company.
Carrier Bill Code	Each bill format has its own unique code. Particular charges will cause the production of a specific bill format. The code is related to each product, and determines on which bill the product will appear.
Casual Usage	Usage dialed through a calling card or 10XXXXX.
Central Office (CO)	Facility where subscribers' lines connect to switching equipment.
Change Management	The process by which changes are introduced at Ameritech. Important steps include: 1) Advance notification that a change will occur; 2) CLEC input is considered when making changes; and 3) Smooth roll-out of the change.
CLEC	Competitive Local Exchange Carrier.
CLEC Live Data	Production data delivered through interfaces that are already operational for real CLEC customers.
Customer Account Record Exchange (CARE)	Industry standard for formatting exchange of subscription information.
Daily Usage Feed	A daily download of usage data from the switch which is delivered to Ameritech's's message processing system and directly to the CLEC.
Data-Driven Process	Scenarios tested through the creation of generated transactions, operations data, or live data.
DID number block	Direct Inward Dialing. A block of numbers reserved for a Centrex/PBX. DID allows internal dialing by entering only extensions.
Document review	Compilation and review of books, manuals, and other publications related to the process and system under study.
EBTA	Ameritech's Electronic Bonding and Trouble Administration system is where CLECs submit trouble tickets for maintance and repair issues.
EDI	Electronic Data Interchange. A process for exchanging information that is subject to industry standards.
EMI / EMR	Exchange Message Interface / Record. Standard format in which usage data is passed to the Reseller, as specified by Bellcore.
EXACT	Ameritech's Exchange Access Control and Tracking system provides mechanized order entry, control, and tracking support.
Entrance and Exit Criteria	The necessary conditions for starting or completing individual tests described in the Test Plan.
Evaluation Measures	Discrete set of measures to be applied to specific test components.
Existence Criteria Type	These are criteria where only two possible test results can exist (e.g., true/false, presence/absence), such as whether a document exists or does not exist.
Expected Results Worksheet	A report format that lists the expected results for each test while allowing the tester to record the current results of the test. This allows an easy comparison of numbers.
FID	Field Identifier. A code used when administering usage limits on residence and business end users. Also refers to fields of information used in the service order.

Term	Definition
Firm Order Confirmation	A response from the Ameritech Service Order Confirmation that acknowledges a successful receipt of an error-free order from a CLEC and provides a committed due date. Such committed due date may change or be canceled, but only in accordance with the Facility Modification Policy.
Flow-through	An order placed by a CLEC's customer service representative that can be provisioned correctly without manual intervention by Ameritech's service representatives.
GUI	Graphical User Interface. A computer interface that allows users to access programs and enter data.
Good Management Practice (GMP) Guidelines criteria source	This includes benchmarks, performance goals, and guidelines derived from industry and topic area experts, Ameritech and CLEC performance targets, publications, academic journals and other sources.
ILEC	Incumbent Local Exchange Carrier. The local exchange carrier for a particular area as of 1996. Ameritech is the relevant ILEC.
Inspection	Physical reviews of process activities and products, including site visits, walk-throughs, read-throughs, and work center observations.
LATA	Local Access and Transport Area. A geographic area established by law within which a Bell Operating Company may provide telecommunications services.
LFACS/FACS	Ameritech's Loop Facility Assignment Center System and Facility Assignment Center. Ameritech's system that performs order analysis and control functions as well as building outside plant facilities. The system also assigns loop facilities and CO assignments.
LOC	Ameritech's Local Operations Center is the primary point of interfacefor provisioning and maintance issues related to unbundled network elements.
LSC	Ameritech's Local Service Center is responsible for processing the orders, is the interface for issues related to orders, and is the first escalation point for matters relating to orders.
Legal and Regulatory Requirements criteria source	This includes requirements specified by statute and regulation, such as FCC orders, court orders, Commission regulations, federal and state statutes, and other binding requirements resulting from judicial/governmental proceedings.
Logging	Monitoring activities and collecting information by logging process events and products as they happen. Logging can be mechanized or manual.
LPIC	Predesignated Intra-LATA Carrier, or Local Primary Interexchange Carrier. Telephone company chosen by the end user as being the default carrier for calls outside the local calling area, but within the same LATA. These are also known as regional toll calls.
LSR	Local Service Request. Form sent to Local Exchange Carrier requesting local telephone services.
MARCH	Ameritech system component that assigns the Central Office loop translations/line site and activates service based on due date information.
MDF	Main Distribution Frame. The primary point at which outside plant facilities terminate within a Wire Center for interconnection to other telecommunications facilities within the Wire Center.
MOR	Ameritech's Mechanical Order Receipt System is the centralized order translator.
MOR/Tel	Ameritech application which tracks order status and services and is the service center interface. It contains the state specific rules.
MWA	Ameritech's Mechanized Work Assignment system automatically assigns new ASRs to workgroups or individuals.
Maintenance and Repair Domain	Tests related to trouble administration.
Master Test Plan	Identifies the overall framework and structure of the test.

Term	Definition
NSDB	Ameritech's Network Services Database system which receives assigned service orders and stores them in the network service database.
OCN	Operating Company Number. A 4 character code to identify any service provider. Specifically used to identify the Reseller on usage detail records.
Operational Analysis	Operational analysis focuses on the form, structure, and content of the business process under study. This method is used to evaluate day-to-day operations and operational management practices.
OSS	Operation Support Systems. Systems used to perform pre-ordering, ordering, provisioning, maintenance and repair, and billing.
PAWS	Ameritech's Provisioning Analyst Workstation is an error manager for FACS.
PBSI	Ameritech's Provisioning and Billing System Interface communicates with FACS and CABS.
PIC	Primary Interexchange Carrier. The long distance company to which traffic is automatically routed when an end user dials 1+ in equal access areas.
PTE	Ameritech's Post TUF Editor system edits service order formats.
Parity Criteria Type	These are criteria that require two measurements to be developed and compared, such as whether external response time is at least as good as internal response time.
Performance and Capacity	Methods used to evaluate the performance and capacity of selected elements within the four domains. Relates to tests to determine if Ameritech's OSS can handle quantities of orders matching a reasonable forecasted demand.
Port	Point of access into a network.
Pre-Ordering, Ordering, and Provisioning Domain	Tests related to CLEC's acquisition of customer information, placing orders, and ensuring correct and timely provision and notification of order status.
Provisioning	The act of supplying telecommunications service or UNEs.
PSC	Public Service Commission of Wisconsin. A state regulatory agency responsible for telecommunications companies.
Qualitative Criteria Type	These criteria set a threshold for performance where a range of quality values is possible, such as level of customer satisfaction.
RBS	Ameritech's Resale Billing System. The system receives ACIS extract and applies wholesale rates to non-usage elements using the resale USOC rate table. It also receives rated usage from CAMPS and reformats.
RID	Ameritech's Reseller Information Desktop system applies term/volume discounts, performs installment billing calculations, and assesses late charges.
Recognized Standards Criteria Source	This includes widely recognized standards and guidelines promulgated by sanctioned industry and governmental organizations and other bodies.
Relationship Management and Infrastructure Domain	Tests relating to activities, processes and documents that are focused on the establishment and maintenance of the CLEC/ILEC relationship.
Report Review	Reviews and analysis of historical data, reports, metrics, and other information in order to assess the effectiveness of a particular system or business function. This includes performance measurement reports and other management reports.
Resource Center	Ameritech's center for CLEC OSS Interface trouble referrals.
SAG	Ameritech's Street Address Database.
SAM	Ameritech's Service Access Manager is a middleware system that provides a common way to interface with all systems. This system finds and formats the data from the legacy systems.
SOAC	Ameritech's system for Service Order Assignment and Control. The system receives service orders and routes the work components to the other provisioning systems.
SOD	Ameritech's Service Order Distributor. The system distributes errors and completion notices through MOR and then out to the CLECs.

Term	Definition
SWITCH	Ameritech's Central Office Physical Switch Inventory System. The system provides activation and provisioning services for Central Office equipment and interfaces with MARCH for physical switch programming translations.
Scalability	The degree to which an application can be scaled to accommodate order of magnitude increases in transaction volumes and users.
Supplements	A change to an order taken after the original order was submitted, but before the order has been executed. Order execution should include all supplements.
Suspend for Non-Payment	Collection Activity including suspension of outgoing calls (one-way), or both outgoing and incoming calls (two-way).
TC Online	Ameritech's internet website that contains the documentation CLECs need to conduct business in the Ameritech region.
TIRKS	Ameritech's Trunk Intergrated Records Keeping System which receives service orders and local assignments and reviews critical dates to determine priorities. TIRKS also tracks all jeopardies.
TN	Telephone number.
TUF	Ameritech's translator of USOCs and FIDs, translates ASRs into service orders.
Test Bed	A set of fictitious customers that are designed to assist with testing. The test bed consists of working lines and provisioned products, although the owning customer is fictitious. The test bed is used to test all Ameritech system functions. KPMG Consulting will build a test bed to meet testing requirements.
Test Call Matrix	A list of call types and the quantity of calls for each type that should be included in a particular test.
Test Domain	A specific testing area with defined targets, measures, scenarios, evaluation methods, and test processes.
Test Scenario Coverage Matrices / Traceability Matrices	A list of products or processes that are involved with each scenario. Describes how testing elements are traced from the compliance requirements through the test process.
Test Scenario Index	Master list of scenarios from which specific scenarios will be selected to be used in the testing.
Test Scenario to Metrics Analysis Index Cross Reference	For each scenario, a list of metrics that are examined during the test.
Test Scenarios	Scenarios describe realistic situations in which CLECs purchase wholesale services and network elements from Ameritech for resale to the CLEC's end-user customer on a retail basis.
Test Target	A discrete set of measures to be applied to specific test components.
Transaction Driven - GUI Cases	The GUI test method is applied to test cases that use the GUI approach in real-world actions.
Transaction-Driven System Analysis	Transaction driven system analysis relies upon initiation of transactions, tracking of transaction progress, and analysis of transaction completion results to evaluate the automated system under test.
Transaction Generation	Transaction generation is the use of live, historical, and/or generated data and data processing capability to evaluate an automated and/or manual system under test.
Unbundled Access	Ability of other LECs to access and use Ameritech network components to fill in gaps where these providers' networks do not have their own facilities.
Unbundled Loop	A transmission channel between an end user location and LEC central office that is not a part of, or connected to, other LEC services.
Unbundled Port	An interface on a local switching system that is not bundled with a loop or transport facility, and provides access to and from the switch and the functionality of the local switching system.
UNE	Unbundled Network Element.

Term	Definition
USOC	Universal Service Order Code. A 3-5 character alphanumeric code that represents a product or service.
Verification and Validation	Methods used in the evaluation of activities and processes not amenable to data-driven testing, but which require verification and validation.
WTN	Working Telephone Number.

Appendix F: Negotiated Modifications and Enhancements

Modifications and enhancements have been negotiated between Ameritech and CLECs. These modifications and enhancements are documented in PSCW Case No. 6720-TI-160, which is hereby incorporated by reference. The following table summarizes the negotiated modification and enhancements.

Modifications and Enhancements to be Tested

Type of Modification and Enhancement	Brief Description
Functionalities, processes and procedures to be deployed (Note that letters in parentheses refer to the issue as described in Appendix F)	– Facilities Availability Process (A) – PPR9, TVV4 – Improved Escalation Process Concerning Facility Assignment (A) – PPR9 – Procedures for Requesting and Receiving by Central Office DLC Loop Percentages (A) – N/A – Facility Problem Notification Within 24 Hours of FOC (A) – PPR9, TVV1, TVV4 – Loop Assignment for DSL (C) – PPR9, TVV1, TVV4 – New Firm Order Confirmation (FOC) and Facility Modification Process – Documentation Available (F) – PPR9, TVV4 – New Facility Modification Process – Identify Facility Problems and Notify CLEC of modification or build options (F) – PPR9, TVV4 – New Firm Order Confirmation Process – Incorporate version numbers and reason codes on revised FOCs (F) – TVV1 – Hot Cut Procedures (G) - PPR9, TVV4 – Hot Cut Procedures – Integrated Services Digital Network (ISDN)-xDSL (G) – PPR9, TVV4 – Street Address Guide (SAG) to CSR Conversion (abbreviated validation) (H) – TVV1 – Directory Assistance/Directory Publishing (L) – TVV1 – Provide current SBC documentation on its " Retain Current Listing" process (L) – TVV1 – Provide current AAS documentation on its Order and Query Process via website (L) – N/A – Implement a process to allow CLECs the option to retain current listings, except on partials (L) – TVV1 – Provide interface (or work-around) for integrated directory listings ordering ability (L) – TVV1, TVV4 – E911 Database Management (confirm parity between Ameritech and CLECs regarding use of SAG) (M) – N/A – Customer Premise Access – Provide Copies of Policy (N) – PPR9 – Replacement of Internal Network Interface Devices (NIDs) (O) – N/A – TC/Net Change Process (P) – PPR1 – LEC Protection (Q) – TVV1 (if offered) – LEC Protection – LOA Policy (Q) – TVV1 (if offered) – Flow Through (S) – TVV3 – Branded Operator Services (W) – PPR9 – Partial Migrations (X) – TVV1 – Account Management Process – Edited Ameritech Handbook (Y) – PPR2 – Account Management Process – Coordination Between Account Team and Directory Listing and Directory Assistance (Y) – PPR2 – Collocation Ordering, Rates, Auditing and Record Keeping Processes (Z) –

Type of Modification and Enhancement	Brief Description
	PPR6 – LNP 10-Digit Trigger Ordering (AA) – TVV 1
Products and services made available for ordering and provisioning in commercial quantities	– UNE-P (B) - TVV1, TVV4 – Line Sharing (C) - TVV1, TVV4 – Line Splitting (C) – TVV1, TVV4 – Digital Subscriber Line (DSL) (C) – TVV1, TVV4 – Sub-Loops (D) - TVV1, TVV4 – Dark Fiber (E) – TVV1, TVV4 – Enhanced Extended Links (EELS) (V) – TVV1, TVV4
Modifications to Ameritech's OSS and interfaces to provide functionality in conformance with industry standards for Ameritech's machine-to-machine interface and its graphical user interface providing such functionality	– Graphical User Interface (GUI) for Ordering (A, B, C, D) – TVV1, TVV2, TVV3 – Parsed (Fielded) Customer Service Record (CSR) (I) - TVV1 – Service Order Completion Notices (R) - TVV1, TVV4 – Conform To ATIS Standards For Pre-Ordering And Ordering At The Local Service Ordering Guideline, Version 4.0 Level (J & K) – N/A – Accept Full Refresh Supplemental Orders (or mutually agreed upon work around) (T) – TVV1 – Synchronized Pre-Order And Order Data Elements (U) – TVV1 – Enable CLEC Use Of Frame Due Time Specification On UNE Loop Orders (G) – TVV1 – Retain Current Listing On All Order Types (L) – TVV1

September 20, 2000

Mr. Scot Cullen
Public Service Commission of Wisconsin
610 North Whitney Way
P.O. Box 7854
Madison, WI 53705-7854

Re: Docket 6720-T1-160

Dear Mr. Cullen:

This letter is filed in response to the letters filed on September 11, 2000, by Mr. Gardon, on behalf of Birch Telecom, Inc., McLeodUSA Telecommunications Services, Inc., TDS Metrocom, Inc., and Time Warner Telecom (the "Competitive Providers"). It also represents Ameritech's final Interim GUI offering including the suggested changes on behalf of the Competitive Providers as set forth in Mr. Gardon's letter of September 11, 2000. Ameritech will continue to work with the parties to ensure that the interim GUI is made available no later than October 1, 2000.

As represented in Mr. Paulson's letter to you on August 18, 2000, and as reaffirmed during the collaborative workshop on August 30, 2000, Ameritech remains unable to accelerate to October 1, 2000, the deployment of its graphical user interface (GUI). Moreover, Ameritech is unable to accelerate such deployment to December 2, 2000, and accordingly we will pursue all available options to modify the Illinois Order that is discussed in Birch's letter. In short, the representation made to this Commission on July 18, 2000, that Ameritech's GUI can not be deployed until the March, 2001 planned release date remains accurate. It is Ameritech's understanding that this issue would be determined to be resolved pending implementation.

As discussed in my August 18 letter, under the terms of Paragraph 11 of the Commission's July 18, 2000 Order, interested CLECs were required to notify Ameritech within one week of the effective date of the Order, or by July 26, 2000. Ameritech received letters from: AT&T, Birch, Covad, McLeod, Mpower, Northpoint, TallGrassDSL, TDS MetroCom, RCN/21st Century, Rhythms Links, Sprint, TimeWarner and WorldCom. Additionally, each CLEC was required to submit a forecast of the number of orders it planned to submit to the third party GUI provider on a five-state basis. Originally, this forecast was requested by August 9, 2000. On August 14, 2000, CLECs were permitted to submit any revisions on or before August 16, 2000. To date Ameritech has received forecasts from: AT&T, Birch, Covad, McLeod, Mpower, Northpoint, TDS Metrocom, Time Warner and Worldcom.
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Based on the above, Ameritech makes the following final interim GUI offer:

1. Ameritech shall pay on behalf of a CLEC that has submitted a forecast the charges from Mantiss for orders such CLEC has placed with Ameritech using the Mantiss GUI service arrangement, in an amount up to the forecasted volumes such CLEC has provided to Ameritech as of August 17, 2000. Such payments shall apply to forecasted electronic orders using Mantiss submitted to Ameritech on or after October 1, 2000, and shall end after March 2001, or when the Ameritech permanent GUI is in production, whichever occurs later.

2. The types of electronic orders that are included in this interim GUI offer include: unbundled loops, with or without number portability, resale services supported by Mantiss, and CPO/UNE-P as offered by Ameritech (or "Orders"). Ameritech will provide to Mantiss appropriate documentation and technical assistance to allow the ordering of CPO/UNE-P no later than October 1, 2000. If additional order types, including but not limited to line sharing orders, are added to the functionality of this interim GUI offering, in any state of the Ameritech region, during the time this interim GUI offering is in effect, Ameritech shall make all such additional order types available for use by the CLECs in this proceeding.

3. If a CLEC wishes to use this interim service arrangement, but does not have an existing contract arrangement with Mantiss, it will be required to enter into a contract relationship with Mantiss. Such contract with Mantiss will detail the terms and conditions of the GUI service offering, including necessary performance obligations associated with the GUI service offering. Ameritech shall undertake reasonable efforts necessary to assist CLECs in entering into the contractual relationship with Mantiss. The pricing provisions of such contract will reflect the fact that forecasted Orders will be paid for by Ameritech. Once the Order is received by Ameritech all existing terms and conditions between Ameritech and such CLEC, including performance obligations, will apply.

4. If a CLEC has an existing contract arrangement with Mantiss the charges otherwise applicable for Orders within the scope of this interim GUI offer will be waived and Ameritech will pay charges associated with such forecasted Orders to Mantiss.

5. Ameritech shall pay to Mantiss, on behalf of the CLECs that provided forecasts to Ameritech by August 17, 2000, and that do not have an existing relationship with Mantis, a $10,000 one time setup fee to establish an account with Mantiss. This will provide the CLEC with up to 50 user licenses. Ameritech agrees to pay the set-up, if required, on behalf of AT&T, Birch, Covad, McLeod, Mpower, Northpoint, TDS Metrocom, and Time Warner. In order to qualify for Ameritech's payment of the one-time setup fee of $10,000, the CLEC will be required to establish a single point of contact that will be responsible to administer the CLEC's user identifications and authorizations with Mantiss.

6. If a CLEC's Orders exceed the forecasted amount during the time period of October 2000 through March 2001, the CLEC will be responsible for the per order charges to Mantiss. The amount of such per order charge for Orders beyond the forecast can be negotiated between Mantiss and the CLEC. Ameritech has obtained a proposal

for the CLEC's review of $10.00 per Order for loop and resale Orders and of $9.00 per line for CPO/UNE-P Orders.

7. If Ameritech's permanent GUI will not be in production and functional by the end of March, 2001, Ameritech will provide CLECs advance notice at the earliest time it is known that the March, 2001 release date will not be made, consistent with the process and procedures in the applicable Change Management Process. In that event, CLECs will be permitted to submit revised forecasts from the period of time from such notice to the end of March 2001. These revised forecasts will replace the forecasts provided on or before August 17, 2000. In addition, CLECs will be permitted to submit additional forecasts for the period of time between March 2001 and actual deployment. Ameritech will continue to be responsible for the charges from Mantiss up to such revised and additional forecasted Orders during such time. Nothing stated in this offer shall relieve Ameritech of the obligation to deploy the permanent GUI on or before March 2001.

8. As discussed above, this offer requires the CLEC to enter into a contract relationship with Mantis for the provision of the interim GUI service offering from Mantiss to the CLEC. As a result of Ameritech's payment for the CLEC's use of the services provided by Mantiss, Ameritech shall not be liable for any CLEC's claims, losses or damages, relating to or arising from CLEC's use of the services provided by Mantiss, or Mantiss's performance under its contract with CLEC, and in consideration of such payment by Ameritech, CLEC agrees not to pursue or seek to impose liability against Ameritech for such CLEC claims, losses or damages. This limitation of liability, however, will not apply to the extent such CLEC claims, losses or damages are caused by Ameritech's breach of this interim GUI offer, or its gross negligence or willful misconduct, and such limitation of liability shall not apply to Ameritech's failure to perform its obligations relating to the CLEC orders received by Ameritech from Mantiss pursuant to this interim GUI offer.

9. To the extent additional CLECs that are parties to this docket indicate a good faith interest in using the interim GUI, Ameritech agrees to discuss the terms and conditions that would apply to such CLEC. If such discussions reach an impasse, Ameritech would advise the temporary ALJ in this matter.

If you have any clarifying questions regarding the terms of this revised and final interim GUI offer, please let us know.

Very truly yours.

Rhonda J. Johnson

DRAFT
Account Management
General Responsibilities and Operating Guidelines

Special Markets

Special Markets represents the wholesale business unit SBC has established to serve Competitive Local Exchange Carriers (CLEC). Special Markets is composed of two entities – Industry Markets and Interconnection Services.

Industry Markets

Industry Markets is the marketing group established within Special Markets and consists of the Account Management, including Service Management, Marketing, Collocation Services, and Interconnection Negotiations functions. Overall responsibilities of these functions include the management of CLEC accounts; the development and marketing of wholesale products and services; and the management of the 251/252 interconnection negotiation process.

Interconnection Services

Interconnection Services represents the operations group within Special Markets and includes the Local Service Center (LSC), Local Operations Center (LOC), Access Service Center (ASC), Resource Center (CLEC Help Desk), and I/T Area Management functions. A brief description of these groups' roles, responsibilities and support provided to the Account Team is included as Attachment A to this document. Additional information is also contained in the Account Management Escalation Operating Guidelines. A summary of the responsibilities of the various groups established within Interconnection Services include Operation Support Systems (OSS) implementation and on-going support; wholesale order processing and related escalations; and wholesale provisioning and maintenance issues. The sundry groups within Interconnection Services support the Industry Markets' Account Management function in its support and management of CLEC accounts.

Industry Markets Interconnection Negotiations

The Interconnection Negotiations organization is responsible for negotiating interconnection and Unbundled Network Element agreements with CLECs and for ongoing contract management. Resale-only agreements may be negotiated by Interconnection Negotiations, or by an Account Manager, depending on the specific request. Upon receiving a request to negotiate, or to adopt another agreement, a lead negotiator is assigned to work with the CLEC. A negotiations team meets with the CLEC to discuss agreement content, and resolve differences. Once an agreement is reached, the signed agreement is provided to the Account Manager for implementation.
The Interconnection Negotiations Team is also responsible for ongoing contract management. This organization maintains a complete library of agreements, and tracks compliance with such agreements.

Industry Markets Account Management

The Industry Markets Account Management Team will consist of some combination of the following positions established to assist the CLEC in implementation and day-to-day activities. The actual make-up will vary by Account Team, but each individual CLEC will be provided with a specific organization chart identifying the individuals that will support their account and their responsibilities.

- Account Manager
- Service Manager
- Collocation Account Manager
- Regional Service Manager
- Director of Account Management
- Director Collocation Services

Account Manager

Once an agreement is negotiated and signed, the Account Manager represents the primary point of interface for the CLEC into the Special Markets organization and is responsible for the overall management of the CLEC account. The Account Manager coordinates the implementation of various CLEC resale and facilities-based implementation activities with other functional groups within Industry Markets and Interconnection Services. An important role of the Account Manager is to serve as an advocate for the CLEC within SBC/Ameritech. As such, the Account Manager is responsible for addressing day-to-day issues related to the management of the CLEC account and is responsible for facilitating the resolution of CLEC operational problems and/or disagreements. This responsibility includes facilitating issues, if requested, between the CLEC and Ameritech Advertising Services (AAS). Account Managers report directly to the Director of Account Management

Service Manager
The Service Manager is a member of the Account Management Team and provides an additional interface into the Special Markets organization for the CLEC for issues regarding ordering, provisioning and maintenance situations involving the LSC or LOC. Service Managers report to the Regional Service Manager.

Regional Service Manager
Also a member of the Account Management Team, the Regional Service Manager is responsible for staffing and managing the activities of the Service Manager function. The Regional Service Manager reports to the Director of Account Management.

Director of Account Management
An additional member of the Account Management Team, the Director of Account Management is responsible for the staffing and directing the activities of the Account, Service, and Regional Service Manager functions. As such, the Director of Account Management has the responsibility and authority to balance the work load by redistributing CLEC accounts and reassigning Account Managers as the needs of the business and/or work performance dictates. CLEC feedback on Account Manager performance will be considered in assessing the Account Manager. The Director of Account Management will be the escalation point for CLEC requests for a change of Account Manager, but before any changes are made, all such requests will be thoroughly evaluated by the Director with input from all appropriate and involved parties. The Director of Account Management reports to the Vice-President of CLEC Sales and Service and has overall responsibility for the service levels provided to CLECs.

Collocation Account Manager
The Collocation Account Manager represents another member of the Account Management Team and is responsible for managing CLEC collocation initiatives and related issues. The Collocation Account Manager reports to the Director Collocation Services.

Director Collocation Services
The Director Collocation Services, also considered a member of the Account Management Team, is responsible for staffing and directing the activities of the Collocation Account Manager function. The Director Collocation Services reports directly to the Executive Director, Industry Markets.

Account Management – General Responsibilities

The Account Manager acts as the primary point of contact for CLECs for matters other than daily operational issues (e.g., ordering, provisioning, maintenance and billing issues) handled by the Local Service Centers (LSC) and Local Operating Centers (LOC) and issues addressed by

the Service and Collocation Account Managers (see below). The primary responsibilities of the Account Manager in managing a CLEC account encompass:

- Implementation
- Day-to-Day Issues and Communications
- Notifications and Announcements – Products and Processes
- Training and Forums
- Escalation and Dispute Resolution.

Implementation

The Account Manager is responsible for implementation of a signed agreement. As part of implementation, the Account Manager receives and coordinates the processing of the CLEC Resale and Unbundling questionnaires and subsequent changes to these questionnaires. The CLEC Resale and Unbundling questionnaires are used to capture key information necessary to establish a CLEC in SBC resale and unbundling preordering, ordering, provisioning, and maintenance systems. Additional information on the Resale and Unbundling questionnaires can be found on CLEC Online at:

https://clec.sbc.com/

Manages the process associated with CLEC implementation of preordering, ordering, provisioning, and maintenance OSS, including the issuance of passwords and digital certificates to gain access to the various OSS. The Account Manager manages this process with the support of the Information Technology (I/T) Area Managers – CLEC Support group, a specialized SBC group that manages CLEC OSS implementation.

Manages the pre- and post-implementation interconnection activities. These activities include planning and chairing the initial preplanning interconnection meetings; securing from the CLEC trunking forecasts, network information sheet and NPA/NXX code administration information; and scheduling and facilitating subsequent joint network interconnection planning meetings. The Account Manager also facilitates the establishment of the business relationship with the Collocation Account Manager to address any collocation issues associated with interconnection, as well as facilitates meetings required to address the implementation of ancillary interconnection matters – 911, OS/DA, SS7, etc.

Discusses ancillary services offered by SBC and provides appropriate contracts and/or questionnaires for these services (e.g. Meet Point Billing/CMDS questionnaire, Dual Party Relay, TC View).

Day-to-Day Issues and Communications

Schedules and facilitates periodic resale, unbundled network elements, and interconnection service review meetings, where issues may be identified. Includes LSC and LOC groups in the meetings to ensure the CLEC sufficiently understands LSC and LOC operating processes and procedures, including escalation procedures.

Addresses day-to-day and emergency communications through the following general guidelines:

- Returns CLEC telephone calls within 8 business hours to acknowledge the CLEC call, and provide the estimated time required to address the request. Every effort should be made to return calls within 4 business hours, when possible.

- Returns pages within 1 hour during normal business hours. If pages are received after normal business hours, they are to be returned as soon as possible or no later than 9am the following business day.

- Acknowledges receipt of correspondence directed to the Account Manager verbally and/or by e-mail within 8 business hours or if a written response is required/requested, within seven (7) business days of receipt of written correspondence. The written response will also include an update on actions taken to answer and/or resolve issues or requests.

- Provides pager access to customer by providing pager number, as well as leaving pager number on personal voice mailbox.

- Provides updated voice mail message and pager access when not available by phone.

Designates a person to act as an alternate Account Manager during a period of extended absence (vacations, training, illness, etc.,). This person may be a peer within the group or a supervisor. The expected period of absence and who will be available for assistance will be included in the Account Manager's voice mail greeting so that all callers will be informed of the absence and alternate coverage available. Generally, if an absence is going to be for an extended period and planned in advance, Account Managers may also advise their active accounts of their plans in the normal course of doing business.

Coordinates the investigation of post-implementation OSS issues with the assistance of the CLEC OSS Resource Center. Communicates procedures for reporting post-

implementation OSS trouble reports to the CLEC. Provides key OSS Resource Center contact information and escalation procedures.

Provides a summary of billing claims process with the LSC. Provides key contact information for billing claims.

Manages the processes associated with special requests received from the CLECs, including Bona Fide Requests (BFR), Requests for Designs (RFD), and project management requests, as applicable. Obtains appropriate project management resources or, depending on the nature of the request, provides personal project management support. Oversees review of request by appropriate groups and manages delivery of a response on schedule as agreed to with the CLEC. Oversees the proper allocation of resources in project management situations, monitors progress through agreed-upon status meetings with the CLEC, and escalates projects in jeopardy.

For special requests requiring SBC action or accommodation:

- Evaluates the complexity of the request, develops the schedule for a response and promptly communicates the estimated response date to the CLEC. Thereafter, if the response will take more than two weeks, reports status at periodic intervals.

- Presents the request to all involved SBC organizations, communicating all CLEC requirements, and strives for a proper and timely resolution by escalating within internal organizations as necessary.

- Communicates SBC response to the CLEC and, if applicable, starts planning for implementation of the special request. If there is disagreement about the special request and SBC response, the Account Manager explains the response and level at which the decision was made and, upon request, the escalation process that the CLEC may follow to pursue the disagreement within SBC.

Training

Manages the scheduling of SBC-provided workshops and training classes for resellers, facilities-based carriers and operations support systems (OSS) for CLECs, including obtaining an executed Memo of Agreement from the CLEC. The Memo of Agreement is required from the CLEC to reserve seats for workshops and resale, facilities-based, and OSS classes. Additional information on the training classes offered to CLECs can be found on CLEC Online at:-

https://clec.sbc.com/

Provides schedules and enrollment procedures for SBC-sponsored seminars, workshops, forums, and conferences offered to CLECs.

Notifications and Announcements – Product and Processes

Ensures the CLEC has access to information and documentation, including general ordering, provisioning, maintenance, and billing operating procedures, as well as notifications concerning updates to products and services, through the establishment of CLEC Online access.

Escalation and Dispute Resolution

Manages CLEC disputes and dispute resolution process per contract provisions.

Ensures the CLEC has appropriate escalation lists and procedures covering various SBC groups. Escalation procedures and lists for the SBC groups supporting CLECs will also be posted to the CLEC's password protected website.

More detailed information on Escalation and Dispute Resolution may be found in the document titled *Account Management- Escalations Operating Guidelines*.

Service Management – General Responsibilities

The Service Manager represents an additional member of the Account Management Team and additional point of contact within SBC for the CLEC. The Service Manager functions in a support role to the Account Manager. The Service Manager is experienced in Ameritech maintenance and provisioning processes and serves as the CLEC's ombudsman in interfacing with the Ameritech installation and maintenance departments. Responsibilities of the Service Manager include:

- Quality Assurance
- Post-Conversion Order Analysis and Process Improvement
- Network Implementation,
- Project management
- Customer training
- Day-to-Day Issues and Communications

Quality Assurance

Strives to insure that day-to-day quality service levels are provided to the CLEC and at parity with service provided to all CLECs.

Post-Conversion Order Analysis and Process Improvement

Reviews situations where the CLEC feels that service being provided by SBC is not meeting expected service standards and initiates appropriate actions to correct the situation, if required. This post-conversion analysis results in process improvement recommendations within both the CLEC and SBC organizations.

Network Implementation

Coordinates network interconnection implementation meetings and related activities. Depending on the interconnection requirements of the CLEC, coordinates CLEC sub-system interconnection requirements, including directory assistance, Signaling System 7 (SS7), and E911. These sub-systems require their own interface between SBC and the CLEC. Conducts joint meetings with technical experts from both the CLEC and SBC to ensure that the implementations are completed in accordance with the timeframes agreed upon between SBC and the CLEC.

Obtains the appropriate forecasts from CLECs for resale, unbundled network elements, and interconnection trunking and forwards them to the appropriate SBC groups.

Project Management

Manages complicated customer conversions requiring project management treatment. Generally, projects that are large, involve multiple locations, involve multiple DS1s or any DS3 circuit, or are completed outside of normal business hours, may be considered a project. The Service Manager insures that all required departments have all the necessary paperwork to ensure a quality conversion.

Customer Training

Enrolls and schedules the CLEC in the many training courses designed to educate the CLEC about SBC ordering processes, products, and business tools.

Day-to-Day Issues and Communications

Addresses day-to-day and critical communications with the CLEC through the same guidelines established for Account Managers:

- Returns CLEC telephone calls within 8 business hours to acknowledge the CLEC call, and provide the estimated time required to address the request. Every effort should be made to return calls within 4 business hours, when possible.
- Returns pages within 1 hour during normal business hours. If pages are received after normal business hours, they are to be returned as soon as possible or no later than 9am the following business day.

- Acknowledges receipt of correspondence directed to the Account Manager verbally and/or by e-mail within 8 business hours or if a written response is required/requested, within seven (7) business days of receipt of written correspondence. The written response will also include an update on actions taken to answer and/or resolve issue or request.

- Provides pager access to customer by providing pager number, as well as leaving pager number on personal voice mailbox.

- Provides updated voice mail message and pager access when not available by phone.

Designates a person to act as an alternate Service Manager during a period of extended absence (vacations, training, illness, etc.,). This person may be a peer within the group or a supervisor. The expected period of absence and who will be available for assistance will be included in the Account Manager's voice mail greeting so that all callers will be informed of the absence and alternative coverage available. Generally, if an absence is going to be for an extended period and planned in advance, Account Managers may also advise their active accounts of their plans in the normal course of doing business.

Collocation Account Management – General Responsibilities

The Collocation Manager acts as the primary point of contact for the CLEC for matters related to the application for, pricing of, and access to collocation space in an SBC Central Office. The primary responsibilities of the Collocation Manager encompass:

- Primary Liaison to the CLEC for Collocation Issues
- Process Collocation Pricing Quotes
- Provides Space Availability Information
- Processes SBC ID and Access Requests
- Assists in First Time Collocation Walk-through

Primary Liaison to the CLEC for Collocation Issues

The Collocation Manager is SBC's primary liaison to the CLEC for all matters related to collocation. The Collocation Manager is responsible for ensuring that the CLEC understands their responsibilities in collocating in a SBC central office, as well as providing all necessary forms and questionnaires the CLEC would need to complete in order to successfully collocate.

The Collocation Manager addresses day-to-day and critical communications with the CLEC through the same guidelines established for Account Managers:

- Returns CLEC telephone calls within 8 business hours to acknowledge the CLEC call, and provide the estimated time required to address the request. Every effort should be made to return calls within 4 business hours, when possible.

- Returns pages within 1 hour during normal business hours. If pages are received after normal business hours, they are to be returned as soon as possible or no later than 9am the following business day.

- Acknowledges receipt of correspondence directed to the Collocation Manager verbally and/or by e-mail within 8 business hours or if a written response is required/requested, within seven (7) business days of receipt of written correspondence. The written response will also include an update on actions taken to answer and/or resolve issues or requests. Provides pager access to customer by providing pager number, as well as leaving pager number on personal voice mailbox.

- Provides updated voice mail message and pager access when not available by phone.

Designates a person to act as an alternate Collocation Manager during a period of extended absence (vacations, training, illness, etc.,). This person may be a peer within the group or a supervisor. The expected period of absence and who will be available for assistance will be included in the Collocation Manager's voice mail greeting so that all callers will be informed of the absence and alternate coverage available. Generally, if an absence is going to be for an extended period and planned in advance, Collocation Managers may also advise their active accounts of their plans in the normal course of doing business.

Process Collocation Pricing Quotes

The Collocation Manager receives and processes all requests for collocation by the CLEC. The Collocation Manager responds to the CLECs request with a pricing quote, provided space is available, and initiates the collocation process if the CLEC accepts the quote. This includes, but is not limited to, providing all appropriate forms and assisting the CLEC in the completion of

said forms, coordinating with appropriate SBC groups to establish a timeline for occupancy of the collocation space by the CLEC, processing of the ID card requests, etc.

Provides Space Availability Information

The Collocation Manager responds to CLEC situation/location specific requests for information on the availability of collocation space within SBC central offices. This includes but is not limited to providing the appropriate forms for a Space Availability inquiry, receiving completed forms, and providing a formal response to the CLEC.

Processes SBC ID and Access Requests

The Collocation Manager receives and processes CLEC requests for SBC ID's for the purposes of obtaining access to their collocation. The Collocation Manager will process the requests, ensure activation of the resulting SBC ID's and provide the ID's to the CLEC.

Assists In First Time Collocation Walk-through

The Collocation Manager will make every effort to be present for the walk-through of a first time collocator to answer any questions the CLEC may have regarding the collocation, central office policies, collocation access, etc.

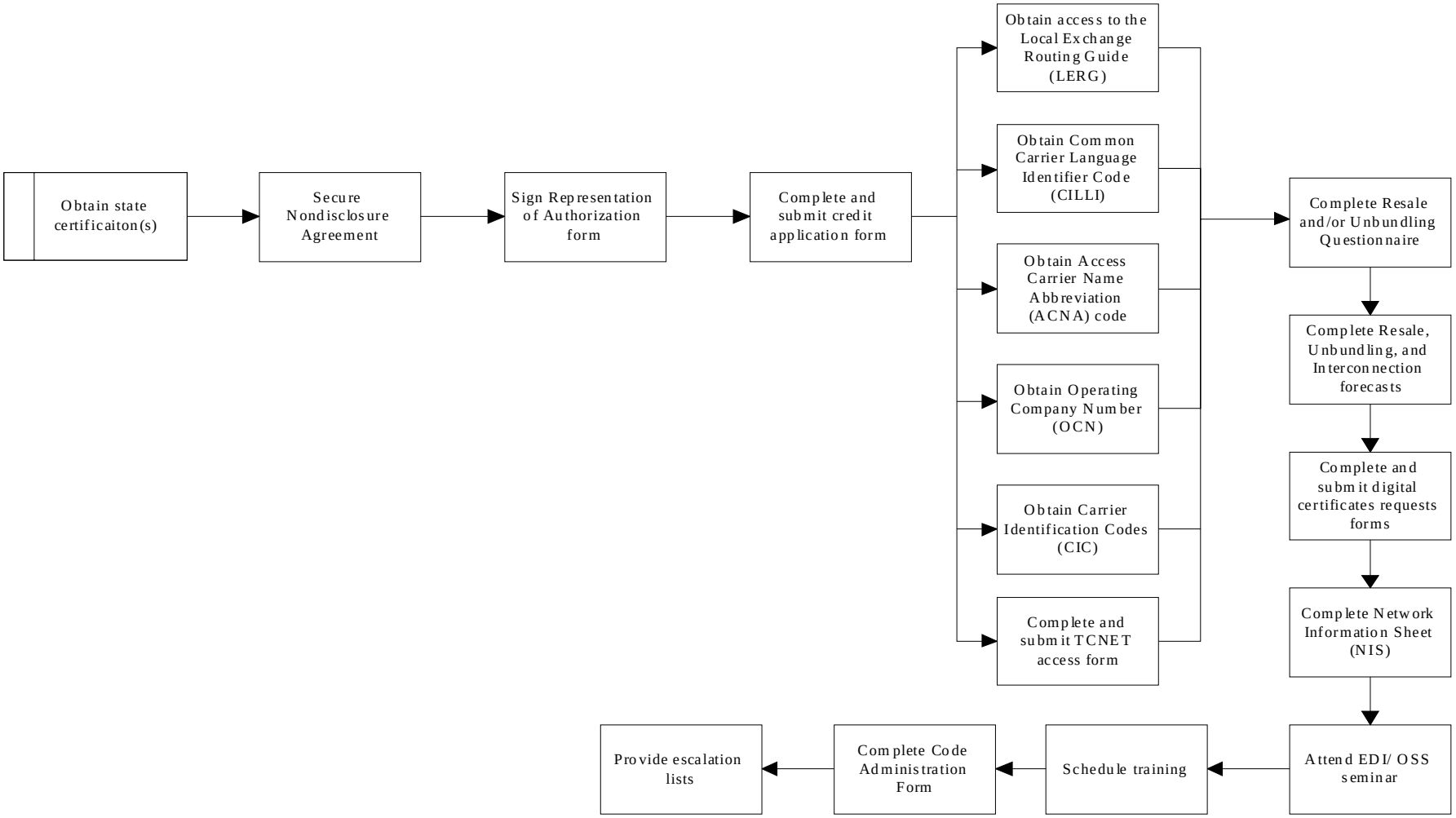
Establishing an Account Relationship with New CLECs

For interconnection and Unbundled Network Element (UNE) agreements, an Account Management Team is assigned to a CLEC once the agreement is signed. If there is a need, an Account Manager may be assigned during negotiations. For resale-only agreements, the Account Manager is typically assigned when a request is received. Account and Service Manager assignments are the responsibility of the Director of Account Management and Regional Service Manager, respectively. Collocation Account Manager assignments are completed by the Director Collocation Services.

If a CLEC has requested the negotiation of an initial agreement covering resale, unbundled services, and interconnection, the Account Manager explains the contract negotiation process and, if requested, participates in the negotiations. For Interconnection or UNE agreements, the actual contract negotiations are handled by the Interconnection Negotiators within Industry Markets and not by the Account Manager. The Account Manager obtains a copy of the executed agreement including critical items and related dates and manages the overall implementation of the agreement with the CLEC. CLECs also have the opportunity to purchase products and services via tariff (where available). Dependent upon the content of the requested tariff, the agreement negotiation process may not be required.

The Account Manager also describes the pre-implementation related activities that are the responsibility of the CLEC. These activities are summarized in the following flowchart:

CLEC Pre-Implementation Responsibilities



The Account Manager obtains detailed information covering the CLEC's operating profile through the completion of the Resale and/or Unbundling questionnaire(s). The completed questionnaire is obtained from the CLEC coincident with the CLEC's contract negotiations or request to order services available under tariff. The CLEC profile captured in the questionnaire includes, among other things, a listing of the customer's switch addresses and type; Access Carrier Name Abbreviation (ACNA), Carrier Identification, and Common Language Location Identifier (CLLI), codes; Operating Code Number (OCN); billing account requirements, key contact information, etc. The Account Manager passes the CLECs completed questionnaire to the appropriate SBC groups to establish the CLEC in numerous SBC preordering, ordering, maintenance, and billing databases. SBC requires 30 days to process both the completed Resale and Unbundling questionnaires.

The Account Manager or Negotiator supplies several tools to the customers to assist it in addressing start-up issues, including access to CLEC Online. CLEC Online is the SBC website developed for CLEC customers and provides information covering resale and unbundling products and services; start-up procedures; operational support systems (OSS); and ordering, provisioning, billing, and maintenance procedures. Access to CLEC Online is provided to a CLEC upon execution of a non-disclosure agreement by the CLEC.

The Account Manager requests, secures, and distributes internally within SBC, requisite forecasts to be provided by the CLEC at the time of initial implementation with the CLEC. These forecasts include, but are not limited to, interconnection trunking forecasts associated with interconnection implementation activities.

During initial implementation, the Account Manager addresses the CLEC's OSS implementation requirements. This responsibility encompasses the attendance by the CLEC at an SBC OSS seminar; the assignment of an I/T Area Manager to assist the CLEC in various OSS implementation activities; and the completion of an OSS implementation meeting between the CLEC and SBC to define CLEC OSS requirements.

The Account Manager also schedules various implementation meetings (resale, unbundling, collocation, and interconnection) with the LSC and LOC to discuss various operational and procedural issues associated with the products and services that will be ordered by the CLEC. In addition to LSC and LOC personnel, the Service Manager is a key participant in these meetings.

If the CLEC is requesting interconnection with SBC, the Account Manager schedules and facilitates the initial joint network interconnection meeting. The Service Manager also participates in these meetings.

If the CLEC is ordering collocation, the Collocation Account Manager reviews collocation start-up procedures and issues with the CLEC, including ordering requirements, central office collocation operating practices and security requirements.

The Account Manager provides escalation lists for the LSC, LOC, Resource Center (CLEC Help Desk), and Account Management Team, along with related escalation procedures, to the CLEC during initial implementation.

The Account and Service Managers monitor the placement of the initial test orders and other transactions placed by the CLEC at the LSC and LOC. The I/T Area Manager, along with LSC and LOC personnel, also support this activity.

Also during the initial implementation stage, the Account Manager provides the CLEC with an understanding of the billing claims process established at the LSC, along with dispute escalation procedures.

A summary of CLEC start-up implementation activities and the Account Management groups involved in these activities are summarized in the table below:

Resale	Unbundling	Activity	Who
✓	✓	Secure Nondisclosure Agreement	Interconnection Negotiator
✓	✓	Assign account manager	Director, Account Management, Sales & Service
✓	✓	Assign service manager	Director, Account Management, Regional Service Manager
✓	✓	Obtain credit application, if required	Negotiator
	✓	Negotiate Contract	Negotiator
	✓	Sign and Execute Contract	Negotiator
✓	✓	Obtain and distribute Representation of Authorization Form	Account Manager
✓		Obtain and distribute resale questionnaire	Account Manager
	✓	Obtain and distribute Unbundling questionnaire	Account Manager
✓	✓	Request access to CLEC Online	Account Manager or Negotiator
	✓	Obtain forecasts from customers	Account Manager
✓	✓	Request assignment of I/T Area Manager for OSS implementation	Account Manager
✓	✓	Coordinate CLEC attendance at OSS seminar	Account Manager
✓	✓	Conduct OSS implementation meeting	Account Manager, I/T Area Managers
✓	✓	Manage OSS implementation	I/T Area Manager
✓	✓	Coordinate CLEC training	Account Manager, HR Training
✓		Schedule implementation meetings with LSC and LOC	Account Manager, Service Manager, LSC, LOC, IT Area Manager
	✓	Schedule unbundling and interconnection implementation meetings with LSC and LOC	Account Manager, Service Manager, LSC, LOC, IT Area Manager
	✓	Schedule initial joint network interconnection preplanning meeting	Account Manager, Service Manager
	✓	Manage CLEC collocation activities	Account Manager
✓	✓	Monitor test orders	Account Manager, Service Manager, LSC, LOC
✓	✓	Provide escalation lists and related processes	Account Manager, Service Manager, LSC, LOC
	✓	Review billing claims and reconciliation process	Account Manager, LSC

	✓	Review dispute resolution processes	Account Manager

LOCAL SERVICE CENTER (LSC)

Roles and Responsibilities

The LSC is the single point of contact for processing CLEC service order requests in accordance with Interconnection Agreements, tariffs or regulatory requirements. This includes expedites and escalations. In addition, the LSC processes collocation applications, requests for end office integration trunking, billing inquiries, claims resolution, and Facility Modification forms.

The LSC supports the account management team by working with them to resolve CLEC specific issues concerning their service orders requests, participating on regularly scheduled operations review meetings and/or conference calls with CLECs, and assisting the Account Team in resolving escalated issues.

For Resale and UNE-P issues, CLECs should call the Resale and UNE-P LSC at 1-616-257-1888.

For all other inquiries, CLECs should call the Unbundling LSC at 1-888-729-1458.

Service Levels Guidelines

Managers in the LSC are expected to respond to telephone calls that impact customer service within 2 business hours and non-customer service issues respond within 8 business hours. The timeframes for responding to e-mail, and written correspondence will vary based on the specifics of each issue. The Escalation Procedures for the LSC are posted on TCNet which identifies our commitment to respond to telephone call within 2-hours.

Hours of Operation

The LSC business hours of operation are 7am to 5pm, Central, Monday through Friday. The centers accept EDI orders 7am to 10pm Monday through Friday and 7am to 7pm on Saturday (Central) and faxed orders are accepted seven days a week, 24 hours a day.

LOCAL OPERATIONS CENTER (LOC)

Roles and Responsibilities

The Local Operations Center (LOC), in Milwaukee, WI, serves as the single point of contact for provisioning and maintenance of Ameritech Unbundled products, other than HI-CAP, for Certified Local Exchange Carrier (CLECs). Any questions or concerns related to the status of an order (after it has been issued) or a trouble report should be referred to the LOC.

The LOC coordinates with other work groups in Ameritech so that service is installed on time, and service problems are resolved in a timely manner. The LOC handles accurate turn-up, testing and trouble clearance for Unbundled products.

The LOC Service Managers assist the account team in resolving operational issues, network provisioning problems, repetitive service complaints, provides diagnostic evaluations and provides overall coordination for CLEC orders.

The specific services and functions provided by the LOC include:

Coordination of installation activities
Installation of services
Receipt of trouble reports
Coordination of repair activities
Resolve trouble report to satisfaction of CLEC

The Customer line for the LOC is 1-800-730-8815. (All of the above information is on TC Net and the 13 state CLEC website)

Service Levels Guidelines

As described in the escalation procedures posted on the CLEC website, managers in the LOC are expected to respond to a page within one hour. After normal business hours, the assigned duty manager is obligated to return pages and respond to calls within one hour.

E-mail requests are generally not considered as urgent as a page or service effective and are to returned within three business days.

Responding to telephone calls are negotiated at the time a manager receives a call from a CLEC. For example, if a CLEC calls a manager to inquire about a service order the manager will normally let the CLEC know when to expect a call back i.e. by noon, by end of business, tomorrow etc.

Hours of Operation

The LOC Maintenance operates 24 hours a day seven days a week The LOC Provisioning operates 7am to 12 midnight (Central) Monday through Friday.

INFORMATION SYSTEMS (IT) CALL CENTER
(CLEC HELP DESK)

Roles and Responsibilities

The IT Call Center provides support to CLECs for issues related to system availability, (for example slow responses, outages, digital certificates), userids, connectivity and ordering and preordering support.

CLECs may contact the IT Call Center by dialing 1-877-681-2271.

Service Levels Guidelines

The IT Call Center will refer the CLEC trouble to the appropriate group for resolution within 24 hours of receiving a trouble report. For system outages, the IT Call Center will engage the appropriate resolver within 1 minute for a Priority 1 outage and within 5 minutes for a Priority 2 outage.

Hours of Operation

The IT Call Center is available to CLECs 7am to 7pm Monday through Friday and on-call emergencies are handled 24 hours a day, seven days a week.

OSS SUPPORT

Roles and Responsibilities

The OSS Implementation Support groups assist CLECs with establishing electronic preordering and ordering functionality. This involves the following four basic phases:

1) Pre-implementation—initial communications and account establishment
2) Connectivity—establishing communication between trading partners
3) Implementation—customer OSS testing
4) Production—migration to production environment

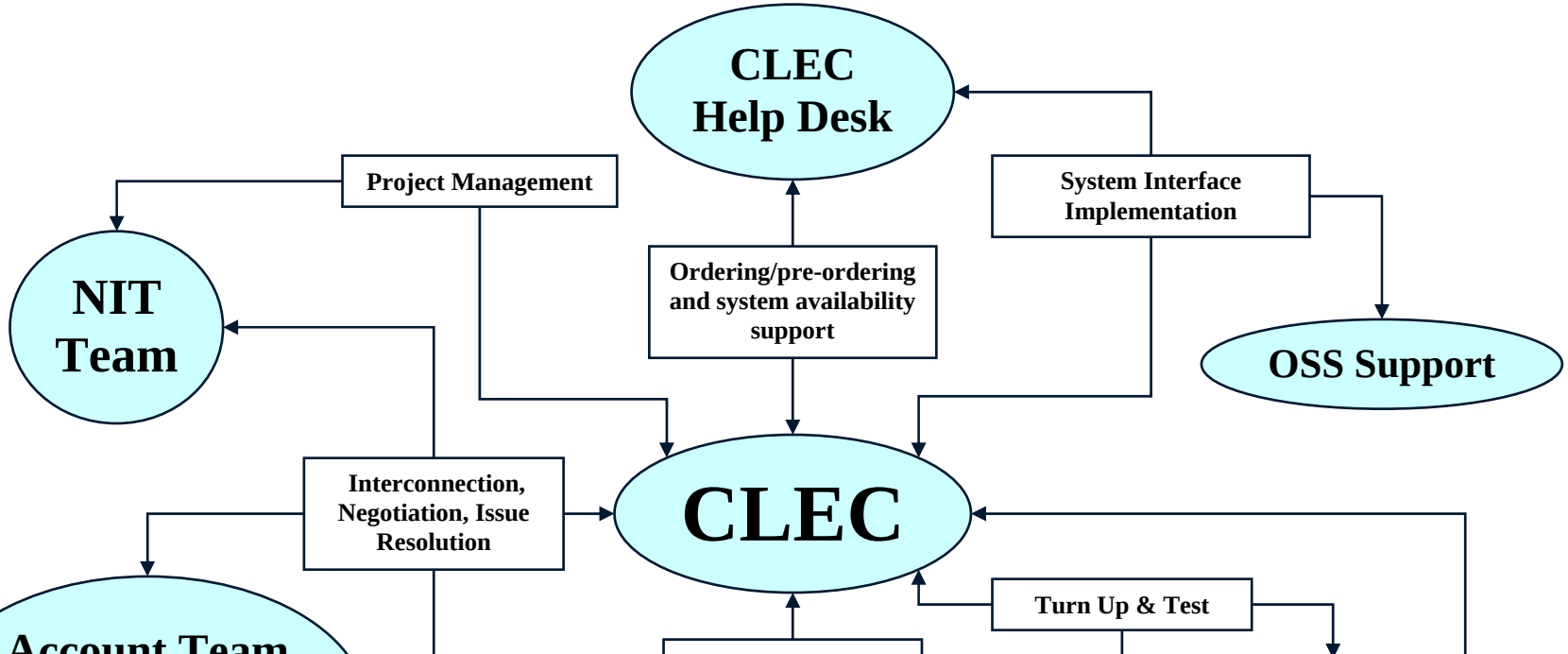
These groups are the single point of contact for all OSS ordering and pre-ordering communication with Ameritech and have the responsibility for addressing any OSS issues raised by the CLEC during the phases leading up to production. As a part of the above phases, the OSS Implementation Support groups will explain the requirements necessary to connect, test and electronically do business with Ameritech. In addition, the instructions to access the CLEC website will be explained as well as the importance of the information on the website.

Service Levels Guidelines

The OSS managers are expected to return telephone calls within 8 business hours to acknowledge the CLEC call and discuss the nature of the request or issue. Exceptions may occur due to extended implementation meetings and/or testing schedules. E-mails and written requests for information are to be acknowledged within 8 business hours and an estimate of the time required to respond to the request is to be provided. The goal is to provide a written response to the request within 7 business days, however, if this is not practical due to the nature of the request, an appropriate response date will be negotiated with the CLEC. Pages are to be returned within 2 hours during normal business hours. If pages are received after normal business hours, they are to be returned as soon as possible or no later than 9am the following business day.

Hours of Operation

The OSS Support managers are available Monday through Friday, 8:30am to 5:00pm Central Time.


CLEC
Help Desk
Project Management
System Interface
Implementation
NIT
Team
Ordering/pre-ordering
and system availability
support
OSS Support
Interconnection,
Negotiation, Issue
Resolution
CLEC
Turn Up & Test

HOT CUT PROCESS

STEP	DESCRIPTION
1.1	CLEC issues ASR and LSR with Related Purchase Order Numbers (RPONs) on both orders. Also, checks the CHC box for coordination. Minimum 5 day DD interval i.e. 5 business days form LSR submission..
1.2	AIT LOC receives order DD-X. In addition, the Central Office Frames receives the order on RID (Record Issue Date) which is DD-3 based minimum 5 day DD interval.
1.3	AIT LOC conducts order review DD-2 for SO accuracy, service address, related order consistency, IDLC, cable pair match to related order (if LNP). Etc. "Screener Functions"
1.4	Is existing service found on an IDLC (Integrated Digital Loop Carrier) or other non-conforming loop for CLEC-requested service e.g. DSL. Also does order request Cooperative Acceptance Testing for xDSL? **NOTE**: For the Hot Cuts Process, Cooperative Acceptance Testing for xDSL Capable Loops is available to DSL providers who are converting an existing AIT ISDN line to DSL. See Accessible Letter CLECAMS00-018
1.5	Did AIT LOC receive cut sheet for orders no later than noon, Central Time, DD-1 via fax? CLEC forwards (fax) a cut sheet to the LOC containing all the orders expected to be worked the following business day. All loop orders to be cut must be noted on the Cut Sheet. If CLEC does not want line(s) coordinated, they will submit cut sheet with notation on those lines marked as "anytime".
1.6	YES – AIT LOC reviews cut sheet, confirms receipt of listed orders in WFA/C, flags orders with pending facility assignments, reconfirms order accuracy (from Screener Date) and notifies CLEC of receipt/accuracy via fax by 3 pm
1.7	AIT LOC sends a cut ticket to the Central Office by 3 PM DD-1. If ISDN reuse also sends ticket to AIPC.
1.8	AIT CO will schedule/plan force load to support Hot Cut for requested date/time.
1.9	OPTIONAL – AIT will perform Dial Tone/ANI test at CLEC's request consistent with their interconnection agreement. DT Test sheets (Exhibit A) should be provided no later than DD-1. AIT will check for dial tone at the MDF CP jumper wired to CFA. If NDT – will check directly at CFA. DT/ANI results, including mismatched TNs, will be faxed back to the CLEC based on receipt. If DT/ANI test requested prior to noon – results will be provided by close of business, same day. If DT/ANI request received after noon, results will be provided by noon the following business day.
1.10	At scheduled cut time CLEC contacts AIT

HOT CUT PROCESS

1.11	Is contact made within 30-minute window?
1.12	NO – CLEC must issue supplemental order request to change due date. If supplemental request not received the original service order will be cancelled in 30 days.
2.1	YES - If IDLC/ other non-conforming facility is found assigned to the order or CLEC has requested Cooperative Acceptance Testing, AIT will notify the CLEC by 3 PM DD-2 that line(s) cannot be part of ***scheduled*** coordinated hot cut.
2.2	AIT will dispatch installation technician (IT) on HOT CUT DD to perform simple FMOD and/or any required FMOD to move service to compatible loop assigned on the service order or Cooperative Acceptance Testing.
2.3	IT will call LOC prior to field visit
2.4	LOC will notify CLEC IT on the way
2.5	For FMOD work - IT notifies LOC to confirm work start: completes LST or other required FMOD and notifies LOC immediately when complete.
2.6	For FMOD work - LOC coordinates continuity and conformance testing from the reused terminating point to the central office with the IT and CO Technician. For Cooperative Acceptance Testing – IT notifies when on site. LOC will coordinate testing with CLEC and IT.
3.1	AIT LOC contacts CO personnel to initiate cut
3.1.1	AIT LOC contacts AIPC for ISDN work if required
3.1.2	AIPC completes ISDN conversion work
3.1.3	AIPC notifies LOC of completion
3.2	AIT CO ANIs the current TN at the AIT cable pair on the MDF
3.3	AIT CO ANIs the advanced (tied in) jumper at the AIT MDF
3.4	Was there DT at the advanced CFA jumper?
3.5	YES – Does TN match the AIT CP?
3.6	YES - AIT CO personnel complete cut work and notify LOC – Complete WFA Cut Ticket. (See Performance Measurement 114.1) NOTE: In case of “partial” dial tone orders, AIT will complete entire cut. Partial dial tone orders are those orders, which have multiple lines, and dial tone is only available on some of those lines.
3.7	LOC contacts CLEC of completion. NOTE: Critical to the process is that CLEC provides complete/accurate contact info on LSR/ASR.
3.8	NO – Recheck DT/ANI at CFA. NOTE: For those orders which do not port all AIT TNs but reuse loop for CLEC native TN, the LOC and CO forces will coordinate to ensure CLEC TN validated.
3.9	Found OK (FOK)?
3.10	YES - AIT checks CO wiring and fixes discrepancies
3.11	NO – AIT will notify LOC of NDT or ANI discrepancy condition and

HOT CUT PROCESS

	close Hot Cut Ticket.
3.12	LOC will notify CLEC of NDT status and advise must issue supplemental order request to change due date. If supplemental request not received the original service order will be cancelled in 30 days.
4.1	CLEC reports trouble report on Hot Cut order
4.2	Is it within 1 business day after cut?
4.2.1	NO- follow normal maintenance processes
4.3	YES - CLEC contacts AIT LOC - Provisioning
4.4	LOC – Provisioning opens tracking ticket
4.5	Is AIT trouble found?
4.6	YES - AIT fixes trouble and closes out the ticket. AIT LOC notifies CLEC trouble cleared.
4.7	NO - Close ticket. Advise CLEC No trouble found.
5.0	End user out of service within 1 business day after CHC. NOTE: Out of service means the end user cannot either receive or make calls. This process is not used for restoring customers whose features do not work.
5.1	Is the service order complete in the Ameritech systems?
5.1.1	NO- CLEC contacts LOC for restoral of end user service
5.1.2	LOC coordinates Ameritech activities required to restore end user service
5.1.3	CLEC issues either a sup to change DD or a cancellation by noon the next business day
5.2	Is the restoral request made within normal business hours?
5.2.1	NO – CLEC contacts LOC to initiate end user restoral
5.2.2	CLEC provides “LOA Restoral Form” (Exhibit B) to LOC
5.2.3.	LOC restores end user and insures required service orders are issued. CLEC must issue a “disconnect” to the NPAC to restore default routing.
5.3	YES – CLEC faxes “LOA Restoral Form” to LSC
5.4	CLEC contacts LSC
5.4.1	LSC issues “expedited” service orders to restore end user. NOTE: Restoration will not be completed until LOA Restoral Form is received. CLEC must issue a “disconnect” to the NPAC to restore default routing.
5.5	If CLEC wishes to restore end user to their facilities – they will have to initiate normal ASR/LSR process

Assumptions:

- LSR/FOC process successful. I.e. CLEC receives FOC in time
- after hours cuts are included in this process
- residence orders will be part of Hot Cut process
- CLECs will try to provide cut sheets as soon as possible e.g. DD-2

HOT CUT PROCESS

- ANAC at CLEC CFA can be performed only if universal 800 ANAC available

HOT CUT PROCESS

GLOSSARY OF TERMS

AIPC	Ameritech ISDN Provisioning Center
AIT	Ameritech
ANI	Automatic Number Identification
ASR	Access Service Request
CFA	Connecting Facility Access
CLEC	Competitive Local Exchange Carrier
CP	Cable Pair
CO Tech	Central Office Technician
DD	Due Date
DT	Dial Tone
FMOD	Facilities Modification
FOK	Found OK
IDLC	Integrated Digital Loop Carrier
ISDN	Integrated Services Digital Network
IT	Installation Technician
LSC	Local Service Center
LSR	Local Service Request
LST	Line & Station Transfer
LOC	Local Operations Center
SP	Service Provider
SUP	Supplemental Order

EXHIBIT A
DIAL TONE TEST SHEET

DATE: _____ **#of Lines: _____**
CLLI: _____

TXNU	CFA	Tel. No.	AIT Test Results

CLEC Contact Name: _____ AIT Contact Name: _____
CLEC Contact TN : _____ AIT Contact TN _____
CLEC FAX # : _____ AIT FAX # _____

EXHIBIT B

Letter of Authorization to Ameritech for Notification of Restoral

Fax to: (414) 227-6917

Date: _____
CLEC Provider: _____ CCNA: _____
Initiator (LCON): _____
Initiator's Contact Number: _____

Enduser Name: _____
PON Number(s): _____
Phone Number(s) Effected:
_____
Service Order Number(s) Effected: _____
_____

Reason For Restoral:
_____
_____
_____

Authorization to reestablish Ameritech service for the above customers information is hereby authorized by: _____

AMERITECH FMOD PROCESS

STEP	DESCRIPTION
1.0	CLEC submits LSR – BAU
1.1	Ameritech issues internal service order
1.2	Ameritech provides FOC – BAU
1.3	Ameritech service order (SO) flows thru to the Ameritech facility provisioning systems
1.4	Can the Ameritech facility provisioning systems electronically assign and design the CLEC requested service order
1.5	Can CPC/LAC obtain spare facilities?
1.6	NO – There are not facilities readily available. Can the Ameritech Facility Resolution Center (AFRC) issue a simple modification e.g. Line & Station Transfer (LST), to provide facilities?
	NO – Proceed to B
1.7	LSC sends[1] "Facility Modification Delay Notification " -Form A to CLEC within 48 business hours of FOC.
1.8	The LSC sends the "Facility Modification Delay Notification" – Form A- to the CLEC within 48 business hours[2] of FOC issuance.
1.4.1	Do the available facilities qualify for the requested service?
1.4.2	YES- If the request is for a particular service which requires specific facilities and the type of facilities required are available, the service order flows through and FOC data should be valid
	NO – Proceed to A
2.0	A- Does the existing loop facilities meet the technical requirements for the requested service with conditioning?
2.1	YES – Engineering will provide conditioning requirements to the LSC via email.
2.2	The LSC will enter the conditioning info and the revised Due Date on the "Complex Facility Modification Notification" Form B and send[1] this info to the CLEC within 72 business hours of receipt of Form A.
2.3	Does the CLEC respond to the Conditioning Notification within 10 business days?
2.4	NO – LSC will cancel the service order – the process ends
2.5	YES – Does the CLEC accept the terms for conditioning?
2.6	YES - Ameritech will supplement the service order with the new due date upon completion of the conditioning work.
	NO - go to 2.4
2.7	NO – Engineering will notify the LSC of non-compliance
2.8	LSC will enter info on the "Non-Compliance Notification" – Form C, cancel the service order and send[1] the info to the CLEC within 72 business hours of receipt of Form A.
3.0	B –Ameritech Engineering assesses whether facilities can be made via modification
3.1	Can a simple modification be implemented to provide requested facilities?
3.2	YES – Ameritech engineering will notify AFRC to issue simple modification e.g. LST for facilities

[1] Ameritech currently sends these notification via FAX. Effective 11/15/00 Ameritech will have the capability to provide these notification via email. EDI capability is yet to be determined (TBD).
[2] Business Hours are defined as normal business days excluding weekend and holidays
1
1

3.3	LSC will be notified of simple modification
3.4	LSC notifies[1] the CLEC that original negotiated Due Date is OK via "Facility Update Notification" – Form E
3.5	NO – If simple modification cannot be used the engineer next determines whether the current facilities are IDLC/RSU?

[1]

	YES – Proceed to C

3.6	NO – Since a simple modification could not be used and the facilities are not IDLC/RSU the engineer determines the type of complex modification work that is required. The engineer notifies the LSC of required work.
3.7	LSC inputs data provided on the "Complex Facility Modification Notification" – Form B and provides[1] to the CLEC within 72 business hours of receipt of Form A.
3.8	Does the "Complex Facility Notification" Form B require a response from the CLEC to proceed?
	YES - Go to step 2.3
4.0	Engineer sends IDLC/RSU info to the LSC
4.1	LSC sends "IDLC and RSU Notification" – Form C to the CLEC within 72 business hours of Form A receipt
4.2	Has the CLEC responded the IDLC/RSU notification within 24 hours of receipt providing authorization to proceed with quote?
4.3	NO- LSC cancels service order
4.4	YES – LSC places the service order in a "HOLD" state
4.5	LSC forwards quote authorization
4.6	CLEC will be provided with a cost quote and a proposed service order due date within 30 days of authorization receipt.
4.7	Does the CLEC accept the quote within 10 business days of receipt?
4.8	YES - Service order due date will be changed in the Ameritech systems and the service will be provisioned
	NO- go to 4.3
	END

1

FORM A

Ameritech
Information Industry Services

Facility Modification Delay Notification

Date Sent:

Customer Name:
Fax Number:

Purchase Order Numbers: Service Order Numbers: Original Service Order Due

This notification is alerting you of a potential delay occurring for the above order(s). The order(s) may require work beyond Simple Modifications. More specific details will be provided within 72 business hours[1].

Relief:_____

For Questions Call: 1- 888 729-1458

[1] Business hours are defined as continuous hours starting Monday 8:00am CST and ending Friday 5:00pm CST, excluding holidays.

DRAFT

FORM B

Ameritech
Information Industry Services

Complex Facility Modification Notification

Date Sent:

Ameritech is sending this form as formal notification that the existing facilities do not meet the technical specifications to provision the requested loop(s) or require other complex modifications.

REASON: ☐ **Conditioning of Loop Required** ☐ **Complex Modification Required**

Customer Name:
Fax Number:
Originator:
Purchase Order Number:
End user:
Service Order Number:
Original Service Order Due Date:
Loop Type (if applicable):
Loop Length (if applicable):
New Due Date (if applicable):

☐ Complex Modification ☐ No Charges ☐ Charges $_____

☐ Conditioning – See Interconnection Agreement or applicable tariff

Conditioning or other Complex Modifications Required:

Required for Conditioning or Complex Modification with charges:

If Ameritech receives acceptance by _____, the new due date will be _____. If you would like Ameritech to proceed with this order, please sign the acceptance line below and send the completed form back to the AIIS Customer Service Center.

Accepted by:_____ Date: _____
Declined by: _____

If Ameritech AIIS Customer Service Center does not receive your response in ten business days, your order will be cancelled.

Relief:_____

For Questions Call: 1- 888 729-1458

DRAFT

FORM C

Ameritech
Information Industry Services

Integrated Digital Loop Carrier (IDLC) and Remote Switching Unit (RSU) Notification

Date Sent:

Ameritech is sending this form as formal notification that there are no spare physical loops to provision the requested service order.

Customer Name:
Fax Number:
Originator:
Purchase Order Number:
End user:
Service Order Number:
Original Service Order Due Date:

In order to proceed with this request, construction work is required to provide the necessary facilities. This construction work can be completed at additional cost. Ameritech will provide a quote of what the additional charges will be within 30 days of receipt of this authorization.

If you would like Ameritech to proceed with this process, please sign the acceptance line below.

Authorized by:_____ Date: _____

If Ameritech AIIS Customer Service Center does not receive your response within 24 hours of sending of this notification, your order will be cancelled.

Relief:_____

For Questions Call: 1- 888 729-1458

DRAFT

FORM D

Ameritech
Information Industry Services

Facility Update Notification

Date Sent:

Ameritech is sending this form to provide additional information on the order listed below.

Customer Name:
Fax Number:
Originator:
Purchase Order Number:
End user:
Service Order Number:
Original Service Order Due Date:
New Due Date (if applicable):

☐ After further review, it has been determined that facilities are available. Your original due date will be met.

☐ After further review, it has been determined that facilities have become available. Your new due date is _____.

Relief:_____

For Questions Call: 1- 888 729-1458

DRAFT

FORM E

Ameritech
Information Industry Services

NEW BUILD NOTIFICATION

Date Sent:

Ameritech is sending this form as formal notification that new construction is required because there are NO EXISTING FACILITIES.

REASON:

Customer Name:

Fax Number:

Originator:

Purchase Order Number:

End user:

Service Order Number:

Original Service Order Due Date:

Loop Type (if applicable):

Loop Length (if applicable):

Charges (if applicable):

This order will be cancelled.

Ameritech is offering to work with you to determine how to provision your order.

Or

There is an existing project planned to build facilities in this area. Expected due date for completion of this work is _____.

Relief: _____

For Questions Call: 1- 888 729-1458

DRAFT

Unbundled Network Element Facility Modification & Construction Policy

The following UNE Facilities Modification and Construction Policy will replace existing UNE Special Construction Policies being used in

Illinois, Indiana, Michigan, Ohio, Wisconsin

This policy will apply except to the extent that there are existing obligations that are inconsistent with the new policy

- Statutory – Laws that may govern the modification of facilities
- Regulatory – Tariffs and or Public Service Commission orders
- Contractual – CLEC contract agreements

Mission of Facilities Modification Policy

- Significantly reduce the number of canceled CLEC UNE orders due "no facilities available"
- Improve ability to communicate with CLECs concerning no facilities situations and intervals to provision UNEs
- Use existing processes as much as possible
- Improve customer service where possible
- New policy is <u>not</u> intended to fix all existing order, provisioning and maintenance issues
- To ensure no discrimination between retail and wholesale customers

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SBC will make modifications and engage in construction to provision UNEs according to the following categories.

1. Simple Modifications of facilities

Represents an effort above and beyond routine activities to provision a UNE

Examples:

- Line and Station Transfer (LST)
- Clear Defective Pair (CDP)/ Defective Pair Recovery (DPRO)
- Install plugs/cards (where repeater cases are in-place)
- Wire out of limits (WOL)
- Break connect through (BCT0)

2. Complex Facilities Modification

Modification of existing facilities that requires

- Design engineering
- Equipment ordering, delivery, and installation

Examples:

- Conditioning for ISDN and xDSL compatible loops
- Reroute of facilities (requires engineering and physical work in field to provision order)
- Addition of electronics to provide additional capacity over an existing facility to provision a UNE element (requires engineering, ordering and physical installation of new equipment, and possible rerouting of existing retail services)
- Where existing physical facilities are in place to provide communications services, but are not available in a sufficient amount to provision an unbundled loop.

3. New Build

The New Build process in this policy is designed to address only those situations where there is no communications system in place. Construction of a new communications system to a physical location is required because there are **no existing physical facilities in place or planned to be in place to provide communications services to Ameritech retail or wholesale services.**

Orders for Unbundled Network Elements (UNEs) where no facilities exist because of "New Build " situations will be sent back to the CLEC with a notice requesting the CLEC order services to the new location utilizing the current retail construction policies relating to new buildings, business, and residential developments

"Greenfield" situation examples:

- New building or buildings
- New business or residential development

Construction of a new building -- No communications systems exist to the new building location

Therefore,

- The "Existing Facilities Modification Policy" does not apply
- The building developer (CLEC can be considered developer) or owner negotiates with SBC/Ameritech retail division to have network communications systems brought into the new building
- Once communications facilities into the building and are available for service, CLECs can issue orders for UNEs to the new building

Construction of a new business development -- No communications systems exist

Therefore,

- The "Existing Facilities Modification Policy" does not apply
- The building developer (CLEC can be considered developer) or owner negotiates with SBC Ameritech retail division to have network communications systems brought into the new business development

- Once communications facilities into the development are available for service, CLECs can issue orders for UNEs to the new building development

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Associated charges for facility modifications by UNE:

Voice Grade Loops

- SIMPLE MODIFICATIONS -- no separate charge to the CLEC
- COMPLEX MODIFICATIONS – no separate charge to the CLEC

OC-N loops, ISDN, DSL, & DS-1 Loops

- SIMPLE MODIFICATIONS – no separate charge to the CLEC
- COMPLEX MODIFICATIONS – Specific non-recurring charges will apply. Conditioning falls into this category and will continue to have a separate charge.
- NEW BUILD - Build out situations will be evaluated using the UNE facilities construction quote guidelines and processes.

Interoffice Facilities

- SIMPLE MODIFICATIONS – no separate charge to the CLEC
- COMPLEX MODIFICATIONS - Specific non-recurring charges may apply.

DS-3/OC-N Loops & DS3/OC-N Entrance Facilities

- SIMPLE MODIFICATIONS – no separate charge to the CLEC
- COMPLEX MODIFICATIONS – Specific non-recurring charges for complex modifications will apply. Installation of new electronics to expand capacity will be considered a complex modification.
- NEW BUILD - Build out situations will be evaluated using the UNE facilities construction quote guidelines and processes.

Policy Guidelines

- Where any additional equipment, media or other facility must be added, SBC will select the medium, equipment and facility.
- Where this policy indicates there is no separate charge, SBC reserves the right to review its cost studies and prices and seek recovery through revisions to its recurring prices for any costs not included in those prices.
- SBC believes Simple and Complex Modification and New Build work goes beyond our obligation under the law however, SBC currently plans to implement this policy
- All changes to this policy will follow existing change management procedures consistent with current practice utilizing the CLEC User Forum.

Performance Measures

New performance measures that relate to this policy have been developed and will be put in place by xx/xx/xx

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Facilities Modification Communications Process

The following is an overview of the communications process that will take place between a Competitive Local Exchange Carrier and Ameritech under the new UNE Facilities Modification Policy effective xx/xx/xx.

The overall goal of the communications process guidelines:

- Establish clear, concise, and timely notifications of UNE order status to CLEC and Ameritech organizations working to provision UNE orders

1. CLEC issues order for an Unbundled Network Element (UNE) to Ameritech Local Service Center (LSC) • LSC issues service order through company systems to Network Services • LSC sends a Firm Order Confirmation (FOC) concerning the CLEC UNE order	
2. Network Operations begins UNE order provisioning processes • Network operations provisioning processes evaluate the availability of facilities • Voice Grade and Digital Loop provisioning processes • Voice Grade and Digital Unbundled Transport provisioning processes • Network operations evaluation finds that a "No Facilities Available" situation exists	
3. If a potential "no facilities" situation is determined: • LSC sends Facility Modification Delay Notification [1](Form A) containing the following message: *This notification is alerting you of a potential delay occurring for the above order(s). The order(s) may require work beyond Simple Modifications. More specific details will be provided within 72 business hours.* Delay Notification does not contain a due date	Target time to deliver Facility Modification Delay Notification is 48 business hours[2] from initial FOC

[1] Currently all Forms A-E are sent via fax. Ameritech will be able to send these forms via email no later than November 15, 2000. Ameritech is currently unable to send these forms via EDI and does not have a date by which we will be able to do so.

[2] Business hours are defined, for purposes of this policy, as continuous hours starting Monday 8:00am CST and ending Friday 5:00pm CST, excluding holidays.

4. If facilities can be made available through a simple modification, which was determined after the CLEC received Form A, CLEC will be notified through a <u>Facility Update Notification</u> (Form D)	
5. Network operations determines complex modification classification and internal requirements to provision UNE **Network operations sends notification of whether the facility work required is Complex, IDLC served, or New Build to the LSC. LSC forwards the appropriate notification to the CLEC <u>Complex Facility Modification Notification</u> (Form B), <u>IDLC/RSU Notification</u> (Form C), or <u>New Build Notification</u> (Form E).** **<u>Complex Facility Modification Notification</u>, Form B contains**: **1. Complex Modifications at No Charge Service** In this case Ameritech will have determined that the Service Order does not have available facilities but facilities will be made available at no cost to the customer. Ameritech will proceed with the modifications to be completed on the following due date_____ unless notified to cancel the order. **2. Complex Modifications that will have charges associated with the modifications**: In this case Ameritech will have determined that the Service Order does not have available facilities. However, there will be a charge to complete the Complex Modification. Ameritech will modify current facilities to provision your order once the CLEC agrees to the identified charges. Message will also contain a request to CLEC to confirm receipt of message by either accepting or rejecting the terms of the offer. **<u>Integrated Digital Loop Carrier (IDLC) and Remote Switching Unit (RSU) Notification,</u> Form C contains:** *Ameritech is sending this form as formal notification that there are no spare physical loops to provision the requested service order.* *In order to proceed with this request, construction work is required to provide the necessary facilities. This*	Target time to deliver <u>Complex Facility Modification Notification</u> is within 72 business hours of <u>Facility Modification Delay Notification</u> CLEC accept/reject response required in 10 business days Target time to deliver <u>Integrated Digital Loop Carrier (IDLC) and Remote Switching Unit (RSU) Notification</u> is within 72 business

construction work can be completed at additional cost. Ameritech will provide a quote of what the additional charges will be within 30 days of receipt of this authorization. The Service Order will be held open pending receipt of the signed Form C requesting a quote for the work. **<u>New Build Notification</u>, Form E contains:** *Ameritech has determined that Service Order ####### does not have available facilities. Ameritech is offering to work with you to determine how to provision your order. Please contact your local account team to discuss possible solutions.* This Service Order will be cancelled. If there is an existing planned project to build facilities in the area, the expected completion date will be included on this Form E	hours of <u>Facility Modification Delay Notification</u> CLEC required to respond within 24 business hours Target time to deliver <u>New Build Notification</u> is within 72 business hours of <u>Facility Modification Delay Notification</u>
6. CLEC evaluates Facilities Modification Required Message and sends Facilities Modification Accept/Reject message to LSC If CLEC grants permission to proceed LSC sends positive confirmation to Network Operations to proceed with modifications • Network Operations implements Facilities Modification Plan • CLEC UNE order is completed on the due date based on interval established in Facilities Modification Required Message If CLEC rejects offer to modify existing facilities, LSC cancels CLEC UNE order	CLEC has 10 business days to respond

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Modification Classifications

Facilities Modification Classifications are the physical modifications that will be completed to provision a UNE order in a no facilities available situation.

Example:

- Complex Modifications (Modification Category)
- Activating Pairs at Existing Terminal (Modification Classification)

The following chart describes the first set of classifications of Complex Modifications that will be used to communicate the work that is being physically completed to provision a UNE order. It is anticipated that there will be situations that will require multiple classifications of modification to be completed to provision an order. New classifications will be added as additional complex situations are identified.

Complex Modification

Classifications	Voice Grade	xDSL	ISDN	Data Sub-Rate (64Kbs & below)	DS-1
Remove Bridge Tap, Loads, Low Pass Filters		X	X	X	X
Add/ Remove Repeaters		X	X	X	X
Place Cable	X	X	X	X	X
Cable Rearrangement	X	X	X	X	X
Remove Multiples / (Half-Taps)		X	X	X	X
Activating Pairs at Existing Terminal	X	X	X	X	X
Placing Terminal	X	X	X	X	X
Placing Apparatus Case		X	X	X	X
Placement of Pair Gain Devices	X	X	X	X	X
Expanding Existing Electronics	X	X	X	X	
Modification of Underground or Buried Facilities	X	X	X	X	X