Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Application of Ameritech Michigan	)	
Pursuant to Section 271 of the	)	
Telecommunications Act of 1996 to	)	CC Docket No. 97-137
Provide In-Region, InterLATA	)	
Services in the State of Michigan	)	
	)	

EVALUATION OF THE UNITED STATES DEPARTMENT OF JUSTICE

Joel I. Klein
Acting Assistant Attorney General
Antitrust Division

Lawrence R. Fullerton
Deputy Assistant Attorney General
Antitrust Division

Andrew S. Joskow
Deputy Assistant Attorney General
Antitrust Division

Philip J. Weiser
Senior Counsel
Antitrust Division

Communications with respect to this document should be addressed to:

Donald Russell
Chief

Carl Willner
Katherine E. Brown
Stuart H. Kupinsky
Luin Fitch
Juanita Harris
Attorneys
Telecommunications Task Force

John B. Hayes
Economist
Competition Policy Section

June 25, 1997

TABLE OF CONTENTS

SUMMARY OF EVALUATION

Based on the record before us, Ameritech's application to provide in-region interLATA service in Michigan should be denied because Ameritech has not yet satisfied the requirements of Section 271 of the Telecommunications Act of 1996.

Ameritech has made significant and important progress toward meeting the preconditions for in-region interLATA entry under Section 271 in Michigan, and has satisfied many of those preconditions, but it has not yet complied with several of the requirements of the competitive checklist. Unbundled switching and unbundled transport are not available in a manner consistent with the 1996 Act and the Commission's regulations, and as a result, local competitors cannot freely combine network elements into a " network platform" and receive access charges in connection with their provision of local service. Ameritech's wholesale support processes, including OSS, have not been shown to be adequate to handle reliably the ordering and provisioning of significant quantities of demand for resold services and unbundled elements by local competitors, although Ameritech has taken the right steps toward establishing the means by which the adequacy of these systems could be resolved in the future and has made some progress toward effective ordering and provisioning of resold services and unbundled elements. Ameritech also has not provided trunking facilities of acceptable quality to ensure nondiscriminatory interconnection.

Granting interLATA entry to Ameritech in Michigan at this time also would be inconsistent with the Telecommunications Act's objective, embodied in the Department's competitive standard, of ensuring that local markets are "fully and irreversibly open to competition." This standard focuses on opportunities for commercial entry to serve both business and residential customers, looking first at actual entry in order to demonstrate that the market is open and that enforceable benchmarks are in place. Local exchange competition in Michigan is still on a very small scale, and the areas in which Ameritech has not fully complied with the competitive checklist constitute tangible obstacles to the growth of local competition. In addition, Ameritech's lack of fully adequate performance measures and enforceable performance benchmarks suggests that the development of local competition in Michigan has not yet been shown to be irreversible. For these reasons, Ameritech's current Section 271 application in Michigan should be denied.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Application of Ameritech Michigan	)	
Pursuant to Section 271 of the	)	
Telecommunications Act of 1996 to	)	CC Docket No. 97-137
Provide In-Region, InterLATA	)	
Services in the State of Michigan	)	
	)	

EVALUATION OF THE UNITED STATES DEPARTMENT OF JUSTICE

Introduction

The United States Department of Justice, pursuant to Section 271(d)(2)(A) of the Telecommunications Act ("1996 Act" or "Telecommunications Act"),[1] submits this evaluation of the application filed by Ameritech Michigan ("Ameritech") on May 21, 1997 to provide in-region interLATA telecommunications services in the State of Michigan.[2]

---

[1]Pub. L. No. 104-104, 110 Stat. 56 (1996)(codified at 47 U.S.C. § 151 et seq.).

[2]Section 271(d)(2)(A) requires the Commission to consult the Attorney General on any Bell Operating Company ("BOC") application to provide in-region interLATA services under Section 271(c)(1) of the Telecommunications Act and also requires that the Commission give any written evaluation by the Attorney General "substantial weight" in its decision. The submission of this evaluation does not affect the independent enforcement responsibilities of the Department under the antitrust laws. See, e.g., United States v. R.C.A., (continued...)

The State of Michigan has been among the leaders in removing legal and economic barriers to local competition. In some urban areas of the state, new entrants have made notable progress, though local competition is still on a very small scale and has not yet reached many areas of the state. Significantly, this emerging local competition has revealed many practical difficulties in developing and implementing the complex processes that will be needed to support competition in an environment where entrants remain dependent on nondiscriminatory access and interconnection arrangements with a dominant incumbent local exchange carrier ("ILEC").

The U. S. Department of Justice ("the Department") set out in detail the standards and criteria that it will apply in evaluating applications under Section 271 of the 1996 Act in our previous filing opposing SBC's application to provide in-region interLATA services in Oklahoma.[3] Applying those standards and criteria to Ameritech's Michigan application, we observe that through its ongoing efforts as well as through its cooperation with the Department, Ameritech has made significant progress toward satisfying the requirements of Section 271, and has already successfully fulfilled many of the 1996 Act's preconditions for in-region interLATA entry. Nevertheless, based on the record before us, we believe that the Commission should deny this application on the grounds that Ameritech has yet to make the necessary showings on two

---

[2](...continued)
358 U.S. 334, 350 n.18 (1959). See also Section 610(b) of the 1996 Act, 110 Stat. 143.

[3]Application of SBC Communications Inc. et al., Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region InterLATA Services in the State of Oklahoma, Evaluation of the United States Department of Justice, CC Docket No. 97-121 (May 16, 1997) ("DOJ Oklahoma Evaluation").

important requirements. First, it has not yet satisfied all fourteen points of the competitive checklist as set out in Section 271(c)(2)(B) of the 1996 Act, a conclusion also reached by the Michigan Public Service Commission ("MPSC"). And second, Ameritech has failed to show that its local markets in Michigan are "irreversibly opened to competition," the competitive standard used by the Department in evaluating Section 271 applications, which in turn means that granting this application would not be in the public interest.

I. The Requirements of Section 271 and the Competitive Objectives of the Telecommunications Act

Section 271 reflects Congress' commitment to the critically important goal of fully opening local telecommunications markets to competition. See Affidavit of Dr. Marius Schwartz ¶¶ 6-24, 154-159 ("Schwartz Aff."), Exhibit 1 to this Evaluation.[4] It is widely understood that the incumbent Bell Operating Companies and other local exchange carriers ("LECs"), broadly viewed, still have virtual monopolies in local exchange services and switched access, and dominate other local markets as well.[5] It is also widely understood that the BOCs'

---

[4]This affidavit has already been filed with the Commission as an exhibit with the DOJ Oklahoma Evaluation in CC Docket No. 97-121, and so an electronic version is not provided again with this filing.

[5]See, e.g., Federal Communications Commission, Telecommunications Industry Revenue: TRS Fund Worksheet Data, at Tables 2, 18, and 19 (Dec. 1996) ("FCC 1996 TRS Data"); Federal Communications Commission, Statistics of Communications Common Carriers, at Table 2.9 (1996) ("FCC 1996 Common Carrier Statistics"); and Schwartz Aff. ¶¶ 30-34, 38-39, 89 and Table 1.

(continued...)

cooperation will be necessary, at least in the short and medium term, to assist in the development of meaningful local exchange competition, and accordingly, the 1996 Act conditioned BOC in-region, interLATA entry on completion of a variety of steps designed to facilitate entry and foster competition in local markets. In order to ensure that the 1996 Act fulfilled its paramount goal of opening of local markets to competition, Congress chose to accept the requisite delay in achieving the benefits of BOC in-region interLATA entry, rather than allowing entry immediately or at a date certain.

Section 271 establishes the basic requirements for in-region interLATA entry.[6] The first three such requirements -- satisfaction of the requirements of Section 271(c)(1)(A) ("Track A") or Section 271(c)(1)(B) ("Track B"), the competitive checklist, and Section 272 -- establish

---

[5](...continued)
A more detailed analysis of data on revenues in local markets on a nationwide basis is contained in the DOJ Oklahoma Evaluation at 5 n.8.

[6]Specifically, Congress required a BOC to show that:

> (A) the petitioning Bell operating company has met the requirements of subsection (c)(1) of this section and -
>
> > (i) with respect to access and interconnection provided pursuant to subsection (c)(1)(A) of this section, has fully implemented the competitive checklist in subsection (c)(2)(B)of this section; or
> >
> > (ii) with respect to access and interconnection generally offered pursuant to a statement under subsection (c)(1)(B) of this section, such statement offers all of the items included in the competitive checklist in subsection (c)(2)(B) of this section;
>
> (B) the requested authorization will be carried out in accordance with the requirements of section 272 of this title; and
>
> (C) the requested authorization is consistent with the public interest, convenience, and necessity.

47 U.S.C. § 271 (d)(3)(1997).

specific, minimum criteria that a BOC must satisfy in all cases before an application may be granted. In addition, Congress called for the exercise of discretion by the Commission in determining whether "the requested authorization is consistent with the public interest, convenience, and necessity." 47 U.S.C. § 271(d)(3)(C)(1997). Finally, Congress provided for a competitive evaluation of the application by the Department of Justice, "using <u>any standard</u> the Attorney General considers appropriate." 47 U.S.C. § 271(d)(2)(A)(1997) (emphasis added). In reaching its conclusion on a particular application, the Commission is required to give "substantial weight to the Attorney General's evaluation." 47 U.S.C. § 271(d)(2)(A)(1997).

II. <u>Ameritech's Compliance with Track A (Facilities-Based Competitor)</u>

Track A, under which Ameritech filed this application,[7] requires a demonstration that the BOC "is providing access and interconnection," pursuant to binding agreements approved under Section 252, to "one or more unaffiliated competing providers of telephone exchange service ... to residential and business subscribers." Moreover, the competing providers must be providing local exchange service "exclusively" or "predominantly over their own telephone exchange service facilities." Section 271(c)(1)(A).

---

[7] Ameritech cannot apply for Section 271 authority in Michigan under Track B, as the MPSC has refused to approve its Statement of Generally Available Terms and Conditions ("SGAT"), finding that competitive local exchange providers made timely requests for access and interconnection. Michigan Public Service Commission, In the Matter of the Application of Ameritech Michigan, Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in Michigan, CC Docket No. 97-137, Consultation, at 2-4 (June 9, 1997) ("MPSC Consultation").

Ameritech contends that its application, based on its approved interconnection agreements with three operational providers, Brooks Fiber ("Brooks"), MFS and TCG, satisfies Track A.[8] In our view, however, Ameritech can only rely on Brooks Fiber to satisfy Track A's requirement of a residential local exchange service competitor. Brooks, MFS and TCG are all competing in some local exchange markets in Michigan for business customers, but only Brooks is actively competing in any residential local exchange markets in Michigan.[9] Ameritech offers no contrary evidence, admitting that it is "unaware whether any of the Michigan customers of MFS or TCG subscribe to residential service." Ameritech Brief at 7. In the absence of residential service, MFS and TCG cannot be considered facilities-based providers that can be used to satisfy Track A of Section 271.

Turning then to Brooks, which is serving both residential and business customers, we observe that Brooks is not serving any of its local customers by resale of Ameritech's services.

---

[8]Brief in Support of Application by Ameritech Michigan for Provision of In-Region InterLATA Services in Michigan, CC Docket No. 97-137, at 2-3, 8-14 (May 21, 1997) ("Ameritech Brief").

[9]Both MFS/WorldCom and TCG have stated that they are not providing local exchange service to residential customers in Michigan. Comments of WorldCom, Inc. in Opposition to Ameritech Michigan Application for InterLATA Authority, CC Docket No. 97-137, at 4 (June 9, 1997) ("WorldCom Comments"); Comments of Teleport Communications Group. Inc., CC Docket No. 97-137, at 39 (June 10, 1997) ("TCG Comments"). The MPSC likewise found that "MFS and TCG apparently serve only business customers in Michigan at this time." MPSC Consultation at 10. See also DOJ Oklahoma Evaluation at 20-21 (certification and tariffs not sufficient to establish residential competition in absence of any customers or active marketing). Brooks, in contrast, does serve some residential customers in Grand Rapids and Holland, Michigan. Opposition of Brooks Fiber Communications of Michigan to Ameritech's Application, CC Docket No. 97-137, at 6 n.18 (June 10, 1997) ("Brooks Opposition").

Ameritech Brief at 12. It provides significant switching and transport of its own, separate from Ameritech, to serve all of its customers, as well as a substantial share of its own local loops for both business and residential customers.[10] While the issue of "predominance" -- as required by Track A -- is necessarily one of degree, we believe that on the specifics of the facts presented, it is reasonable to conclude that Brooks is predominantly a facilities-based provider in Michigan for purposes of Track A.[11]

This conclusion, however, is only the first step of the Section 271 inquiry.

III. Ameritech's Compliance with the Requirements of the Checklist

Section 271(c)(2)(A) requires that a BOC proceeding under Track A provide access and interconnection that meets the requirements of the fourteen-point "competitive checklist" set forth in Section 271(c)(2)(B), pursuant to "one or more agreements." The competitive checklist specifies a minimum set of facilities, services, and capabilities that must be made realistically available to competitors, thereby ensuring that a wide range of entry strategies are open to competitors as a practical matter.[12]

---

[10] See Ameritech Brief at 10; Brooks Opposition at 7, 9; and MPSC Consultation at 10.

[11] Given our conclusion that Track A is satisfied on the basis of Brooks' own facilities, we need not consider Ameritech's suggestion that the leasing of a BOC's unbundled network elements should be considered to be a competitive local exchange carrier's ("CLEC's") facilities for purposes of Track A. See Ameritech Brief at 12-14.

[12] Many of the checklist items expressly require "nondiscriminatory" provision, and in addition the "nondiscriminatory" terms and conditions required by Section 251 apply both to the (continued...)

The 1996 Act provides an opportunity for state commissions to evaluate a BOC's compliance with the checklist. At the same time, the 1996 Act authorizes the Commission to make the final determination of checklist compliance.[13] In the Department's view, the MPSC has raised valid concerns, which have been echoed by other state regulatory authorities in the Ameritech region -- namely, the Public Service Commission of Wisconsin ("PSCW"), in a final decision rejecting Ameritech's SGAT,[14] and the Illinois Commerce Commission ("ICC"), in a

[12](...continued)
LECs' treatment of other competitors and to the LECs' treatment of their own affiliates, so that the LECs must provide unbundled elements at the same level of quality as they do for themselves, to the extent technically feasible. See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order, CC Docket Nos. 96-98 and 95-185, at ¶¶ 217-18 (footnotes omitted) (rel. Aug. 8, 1996) ("Local Competition Order"). Where a BOC relies on the use of "most favored nation" (MFN) clauses to meet checklist requirements and there has been substantial doubt as to what its MFN clauses actually permit, as here, the Commission should carefully scrutinize the BOC's interpretations to ensure both that they are adequate and that they remain fully enforceable after entry authority is granted. See Affidavit of Theodore A. Edwards at Schedule 3 ("Edwards Aff."), attached to Ameritech Brief, Volume 2.3 (construing scope and permitted use of MFN clauses in Ameritech's agreement with TCG); Comments of MCI Telecommunications Corporation, CC Docket No. 97-137, at 9 (June 10, 1997) ("MCI Comments"); and Opposition of the Competitive Telecommunications Association, CC Docket No. 97-137, at 8 (June 10, 1997) ("CompTel Opposition") (arguing Ameritech MFN clauses do not confer true mix and match rights on competing carriers). The MPSC has discussed the difficulties experienced by TCG in seeking to use its MFN clause and Ameritech's further clarification of its present position allowing providers to opt to adopt the rates, terms and conditions of a single contract element rather than only being able to adopt contract sections as a whole, and has said that "application of these clauses will continue to be closely monitored." MPSC Consultation at 7.

[13]Section 271(d)(3) requires the Commission to deny BOC applications unless "it" finds that the statutory requirements have been satisfied.

[14]Ameritech filed its initial SGAT in Wisconsin on October 16, 1996. The PSCW opened Docket No. 6720-TI-120 in order to analyze the offering. On December 12, 1996, the PSCW
(continued...)

proposed order by the Hearing Examiner[15] -- and which suggest that Ameritech has yet to make the necessary showing that it has complied with the competitive checklist.

---

[14](...continued)
issued its First Order finding Ameritech's SGAT deficient in many respects. Ameritech filed revised SGATs in January and March. The PSCW considered all of the issues noted in its First Order and held hearings on some of them, including whether Ameritech's OSS interfaces were "tested and operational." Testimony was submitted by Ameritech, CLECs and other interested parties, and PSCW staff, and cross-examination occurred. Commissioners attended the OSS hearings on March 31-April 1, 1997, heard oral argument on April 2, 1997, and orally decided on April 3, 1997, that Ameritech had not demonstrated that its systems were tested and operational. That decision was later memorialized in the final, written order of May 29, 1997, which rejected Ameritech's March SGATs and all prior SGATs for reasons which included lack of demonstrated OSS and lack of an unbundled common transport offering. Public Service Commission of Wisconsin, Matters Relating to Satisfaction of Conditions for Offering InterLATA Service (Wisconsin Bell, d/b/a Ameritech Wisconsin), Docket No. 6720-TI-120, Findings of Fact, Conclusions of Law and Second Order (May 29, 1997) ("PSCW Second Order"), Exhibit 2 to this Evaluation.

[15]On August 26, 1996, the ICC issued an order establishing Docket No. 96-0404, an investigation into Ameritech's compliance with the requirements of Section 271. The ICC described 30 areas of inquiry, which were addressed by Ameritech, CLECs and other interested parties, and ICC staff in testimony, at hearing, and in briefs. On March 6, 1997, a Hearing Examiner's Proposed Order ("HEPO") was issued, which found Ameritech's compliance deficient in several respects, including the provision of OSS, unbundled transport and unbundled switching. This HEPO also expressed concerns about provisioning delays for unbundled loops. Ameritech then requested the opportunity to supplement the record, which was re-opened in the interests of completeness. Following additional rounds of testimony and hearing, a second HEPO was issued June 18, 1997, and then revised June 20, 1997. See Illinois Commerce Commission, Investigation Concerning Illinois Bell Telephone Company's Compliance with Section 271(c) of the Telecommunications Act of 1996, Docket No. 96-0404, Hearing Examiner's Revised Second Proposed Order (Revised June 20, 1997) ("ICC Second HEPO"), Exhibit 3 to this Evaluation. The only deficiencies cited in this HEPO are that Ameritech has not met the checklist items of unbundled switching and unbundled transport. This second HEPO is subject to briefs on exceptions, after which the matter will be submitted to the ICC.

Although Ameritech is furnishing most items on the checklist to local competitors, the Department concludes that Ameritech has not yet satisfied the competitive checklist on several grounds, including the provision of unbundled switching, unbundled transport, interconnection trunking of adequate quality, and wholesale support systems including OSS.[16]

A. Ameritech Has Not Demonstrated that It Is Providing Access to Local Switching and Transport As Required by Sections 251 and 271 of the Telecommunications Act

Section 271(c)(2)(B)(ii) sets forth the general requirement that the BOC's access and interconnection agreements or statement of terms include "[n]ondiscriminatory access to network elements in accordance with the requirements of sections 251(c)(3) and 252(d)(1)." In addition, the competitive checklist specifically requires the provision of "[l]ocal loop transmission from the central office to the customer's premises, unbundled from local switching or other services" (Section 271(c)(2)(B)(iv)), "[l]ocal transport from the trunk side of a wireline local exchange carrier switch unbundled from switching or other services" (Section 271(c)(2)(B)(v)), "[l]ocal

[16] Questions have been raised by various regulatory authorities in the Ameritech region about whether Ameritech is provisioning poles, ducts and conduits, and E911 services, on an adequate and nondiscriminatory basis. See MPSC Consultation at 34-36, 43-44; Public Utility Commission of Ohio, In the Matter of the Complaint of the Ohio Cable Telecommunications Association et al., Regarding Discriminatory Treatment of Pole Attachments by Cable Television Operators, Case No. 96-1027-TP-CSS, Opinion and Order, at 23, 25 (Apr. 17, 1997); Public Service Commission of Wisconsin, Matters Relating to Satisfaction of Conditions for Offering InterLATA Service (Wisconsin Bell Inc. d/b/a Ameritech Wisconsin), Docket No. 6720-TI-120, Findings of Fact, Conclusions of Law and Order, at 50 (Dec. 12, 1996) ("PSCW First Order"); and PSCW Second Order at 34. The Department does not have sufficient independent information at this time to conclude whether or not these checklist items are being satisfied in Michigan.

switching unbundled from transport, local loop transmission, or other services" (Section 271(c)(2)(B)(vi)), and "[n]ondiscriminatory access to databases and associated signaling necessary for call routing and completion" (Section 271(c)(2)(B)(x)).

Ameritech's application acknowledges that it is not actually furnishing unbundled local switching to any of its local exchange competitors. Ameritech Brief at 15. Some potential competitors, including AT&T, MCI, and LCI, have sought extensive unbundled switching arrangements as part of their requests for interconnection agreements. Ameritech represents that no CLEC has chosen to order unbundled local switching, but that it is making this item available through its interconnection agreements and would provide it if it received an order. In a situation where a BOC is not furnishing a checklist item due to the absence of current orders, it can still "provide" that item by making it available both as a legal matter (i.e., contractually through complete terms in binding approved interconnection agreements that comply with all applicable legal requirements) as well as a practical matter (i.e., it must stand ready to fulfill a competitor's request on demand). Based on this standard, the Department cannot conclude that Ameritech is yet "providing" the checklist elements of unbundled local switching and unbundled local transport.

At present, Ameritech is not "providing" unbundled local switching or unbundled local transport as either a legal or a practical matter to CLECs in Michigan. As a legal matter, Ameritech has refused to provide carriers purchasing unbundled switching with true shared local transport (or "common transport" as it is often described). In addition, Ameritech has, as a legal matter, not allowed users of unbundled local switching to collect the access charges for long distance service they provide through unbundled network elements, if the CLEC's calls are transported from an interexchange carrier's point of presence ("POP") to the unbundled switch over trunks that also carry Ameritech customers' calls. In our view, these restrictions are inconsistent with Ameritech's obligations under Sections 251 and 271 and the relevant orders of the Commission. Ameritech argues that these restrictions cohere with the Commission's Local Competition Order, explaining that it would drop them if the Commission rejects its position in a pending motion for clarification and reconsideration. Moreover, Ameritech has offered to "true up" any balance of accounts between itself and a CLEC purchasing these items once the Commission has clarified the legal status of common transport, i.e., whether it is a required unbundled network element. Whatever the merits of these interim accommodations -- the need for which should be obviated once the Commission rules on the common transport issue -- the fact remains that, at this point, Ameritech still has not made the necessary showing that it possesses the technical capability of successfully provisioning unbundled local switching and transport. Given that fact, we conclude that Ameritech is not yet "providing" these items within the meaning of the checklist.

1. Ameritech Refuses to Provide Shared Local Transport

Ameritech has failed to satisfy the requirement that it provide local transport as required by the Commission's Local Competition Order. This failure stems from Ameritech's legal position that it is not required to provide "common transport" as well as dedicated transport. Ameritech has only recently begun to engage in inter-carrier testing of common transport as a network element, and, thus, at the present time is unable to demonstrate a technical ability to provide access to this network element. Since the provision of common transport requires network capabilities that are not used in connection with other network elements or functionalities, such a demonstration will be necessary before any determination could be made that Ameritech is "providing" common transport.

Ameritech's affiant Daniel J. Kocher describes the local transport options that Ameritech is willing to sell to purchasers of unbundled switching. Affidavit of Daniel J. Kocher ¶¶ 65-68 ("Kocher Aff."), attached to Ameritech Brief, Volume 2.5. Under the first option, named Network Platform-UNE, competitors may purchase unbundled interoffice transport at Total Element Long Run Incremental Cost ("TELRIC")-based prices. Under this option, however, the unbundled local switching ("ULS") customer would not be able to have its calls routed over the same trunk groups that carry Ameritech's traffic. Rather, this option requires that such competitors establish their own separate routing tables to be placed in the switch, which must route the competitors' calls over circuits that are separate from the trunks carrying Ameritech's traffic. Ameritech claims that this arrangement satisfies the requirement for shared transport since such dedicated circuits could reside in the same cable sheathing or carrier system as Ameritech's facilities. But unless the CLECs' traffic is permitted to travel over the same individual circuits as the incumbent's traffic, the trunking efficiencies from the use of the same switch can not be achieved.

Ameritech argues that routing traffic over the same circuits amounts to "common transport" and that since this involves both transmission and switching it should be regarded as a "service" as opposed to a network element. Kocher Aff. ¶¶ 67-68. Thus, Ameritech offers a second local transport option to purchasers of unbundled local switching. This option, called Network Combination Transport Service, permits a competitor to combine unbundled switching with a wholesale usage service (the price of which is not based on TELRIC). Under this option, competitors are not entitled to collect originating or terminating access charges. Id.

As noted above, Ameritech views "common transport" as a wholesale service rather than an unbundled element, because, among other things, "common transport" involves the interaction of two network elements: switching and transport. This rationale, however, is not supported by the 1996 Act, the Commission's regulations, or the rulings of the MPSC.[17] Section 251(c)(3) of the 1996 Act specifically provides that requesting telecommunications carriers may obtain unbundled network elements and that the incumbent LECs must provide them "in a manner that allows requesting carriers to combine such elements." Moreover, the Commission's implementing regulations that are in effect -- i.e., have not been stayed in judicial proceedings -- require that such combinations of elements be provided, stating that "[e]xcept upon request" the BOC cannot separate "requested network elements that the incumbent LEC currently combines." 47 C.F.R. § 51.315(a), (b) (1997). Thus, as the Commission has emphasized,[18] the ability of new entrants to compete with incumbent LECs ("ILECs") by using combinations of network elements, including the ILEC's shared transport networks, is an important mode of entry provided by the 1996 Act that should increase the speed with which competitors can enter the

---

[17] See MPSC Consultation at 38.

[18] Local Competition Order at ¶ 441.

market. The Commission's Local Competition Order specifically allowed new entrants to "purchase all interoffice facilities on an unbundled basis as part of a competing local network," or "combine its own interoffice facilities with those of the incumbent LEC."[19] This requires BOCs to provide what has often been referred to as the "network platform." Noting the competitive significance of the "network platform," both the MPSC and the PSCW have rejected Ameritech's refusal to provide common transport.[20]

As outlined in Part V, the Department agrees that the "platform" concept provides an important mode of CLEC entry and, as both Ameritech and the CLECs have recognized, this concept is most feasibly based upon the use of common transport. Thus, unless the Commission decides in the pending motion for clarification on this issue that Ameritech is not obligated to provide common transport, Ameritech cannot receive Section 271 authority unless it makes

---

[19] Id. In so doing, the Commission explicitly determined that it was necessary for new entrants to be able to take advantage of the economies of scale that exist in the local networks. See id. at ¶ 11.

[20] The MPSC also "determined on the issue of shared versus common transport that AT&T's proposal was appropriate and the prices resulting therefrom should apply." MPSC Consultation at 38 (citing November 26, 1996 Order in Case Nos. U-11151 and 11152). The PSCW also determined that "Ameritech's proposal only offers dedicated unbundled transport and does not offer shared unbundled transport as required by 47 CFR §51.319(d). . . .
Shared transport must use Ameritech's routing tables and not require engineering or dedicated ports." PSCW Second Order at 44-46. In rejecting the argument that a network element must be a discrete facility that could be dedicated to a user, the PSCW invoked the Commission's concept of "functionality," see Local Competition Order at ¶ 258, explaining that the purchase of "shared facilities such as common transport" is "essentially purchasing access to a functionality of the incumbent's facilities on a minute-by minute basis." PSCW Second Order at 48. Accordingly, the PSCW found Ameritech's transport offering deficient and directed it to "offer shared transport with the meaning of shared transport being that it uses Ameritech's routing tables and it does not require separate engineering or dedicated ports." Id. at 49.

common transport available, in conjunction with both unbundled switching and the "network platform," as both a legal and a practical matter.

2. Ameritech Has Imposed Improper Restrictions on The Ability of Unbundled Local Switching Customers to Collect Access Charges for Calls Carried by Their Unbundled Elements

The Department also concludes that Ameritech has not provided access to the unbundled local switching element in accordance with the Commission's regulations because it has failed to clearly allow ULS purchasers to receive access charges. Like Ameritech's position on the "common transport" issue, Ameritech's legal position here is, in our view, not consistent with the 1996 Act's requirements as interpreted in the Commission's regulations. The Commission has ruled that purchasers of unbundled elements have the right to provide access to the customer served by those unbundled elements.[21] 47 C.F.R. § 51.309(b) (1997). Moreover, the Commission's recent decision reforming access charges reaffirmed that ILECs may not collect

[21] Local Competition Order at ¶ 363 n.772; Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Order on Reconsideration, CC Docket Nos. 96-98 and 95-185, FCC 96-325, at ¶ 11 (rel. Sept. 27, 1996) ("Thus, a carrier that purchases the unbundled local switching element to serve an end user effectively obtains the exclusive right to provide all features, functions, and capabilities of the switch, including switching for exchange access and local exchange service, for that end user."). In addition, the Commission's regulations provide that "[a] telecommunications carrier purchasing access to an unbundled network element may use such network element to provide exchange access services to itself in order to provide interexchange services to subscribers." 47 C.F.R. ¶ 51.309(b) (1997). See also 47 C.F.R. ¶ 51.307(c) (1997). This part of the Commission's rules was not subject to the temporary stay issued by the Court of Appeals.

such interstate access charges where the service is provided by purchasers of unbundled network elements. Access Charge Reform, Second Report and Order, CC Docket No. 96-262, at ¶ 337 (rel. May 21, 1997).[22]

Ameritech describes the conditions under which it would permit purchasers of unbundled switching to collect access charges in the Kocher and Edwards Affidavits. Ameritech's position is that competitors purchasing the Network Combination- Common Transport Service would not be entitled to collect access charges.[23] This restriction appears to mean that such purchasers of unbundled switching will not be able to collect access charges for traffic originating or terminating on their line ports unless such traffic is also routed to a POP over trunks that do not also carry Ameritech subscribers' traffic. This position is apparently based on Ameritech's theory that the trunk port through which its access calls travel should be exclusively dedicated to Ameritech.[24] Under this approach, competitors are barred from collecting any of the access

[22]In neighboring states where Ameritech has advanced its same arguments against the platform both Illinois and Wisconsin have also rejected these claims and have ordered that Ameritech permit purchasers of network elements to collect the relevant access charges. PSCW Second Order at 43-50; Illinois Commerce Commisssion, Investigation Concerning Illinois Bell Telephone Company's Compliance with Section 271(c) of the Telecommunications Act of 1996, Docket No. 96-0404, Hearing Examiner's Proposed Order, at 36 (Mar. 6, 1997) ("ICC First HEPO"). The second Illinois HEPO concludes that, since the date of the first HEPO in March 1997, the contested issues associated with access have been resolved by the Commission's access charge reform order. ICC Second HEPO at 77.

[23]Kocher Aff. ¶¶ 66, 68; Edwards Aff. ¶ 116.

[24]Kocher Aff. ¶¶ 67-69, 77-78. See Affidavit of Robert V. Falcone and Robert A.Sherry ¶ 72, attached to AT&T Comments, Exhibit J. In effect, it appears that Ameritech is asking that the Commission reverse its decision that the local switching element includes the "line side and
(continued...)

charges where Ameritech provides the transport segment.[25] This restriction (1) denies to entrants crucial economies of scale in the trunking network between the switch and the POP, and (2) effectively negates the Commission's policy of allowing competitors using unbundled network elements to compete for the provision of exchange access service. Thus, unless the Commission decides that Ameritech's restrictions on the receipt of access charges by ULS purchasers are appropriate, Ameritech must allow the purchasers of ULS to collect access charges without restriction in order to receive Section 271 authority.

As a practical matter, Ameritech's restrictions on the ability of ULS customers to self-provide or collect access charges effectively deter the purchase of ULS.[26] Accordingly, Ameritech cannot point to any actual commercial use to demonstrate that it would be able to provision the ULS element. In the case of ULS, it is important to observe actual commercial use, or at least convincing testing evidence, because this element requires significant network capabilities that are not used in the provision of other network elements. Thus, unless the

---

[24](...continued)
trunk side facilities plus the features, functions, and capabilities of the switch." Local Competition Order at ¶ 412.

[25]Edwards Aff. ¶ 116.

[26]As the PSCW observed, "[a]ccess revenues constitute a significant portion of a local exchange carrier's total revenues. If competitors are unable to provide access services, and therefore do not have an opportunity to tap into this revenue stream, the competitor is unlikely to be able to succeed." PSCW Second Order at 59. The PSCW found that Ameritech's proposal for ULS would permit it to get "access revenues in all cases where access services are provided jointly." Id. at 60. Thus, it found this position "unreasonable and discriminatory" and in violation of §251(c)(3) of the 1996 Act. Id.

Commission significantly narrows the ULS element from what the Department and several state regulatory commissions understand it to represent, Ameritech cannot be found to have made the necessary showing that ULS is being "provided" as required by the checklist.

3. Ameritech Has Not Yet Demonstrated the Capability to Provide Unbundled Switching and Transport in a Reliable Manner.

In its application, Ameritech states that if it is ordered by the Commission to provide common transport as a network element it will do so in accordance with billing settlement procedures set forth in the Kocher Affidavit, at ¶¶ 70, 73, 77. These settlement procedures would be necessary because Ameritech has not yet developed the capability to measure and record the call data needed for the provision of common transport or to permit the CLECs to bill access charges. In addition, Ameritech proposes to offer a combination of local switching and transport with the capability to perform a "true up" that would account for the different revenue flows that would occur if the AT&T version of the platform were adopted by the Commission after it approved Ameritech's Section 271 application. Stated simply, this proposal, which would become effective on the date that Ameritech is authorized to provide interLATA services in Michigan, calls for Ameritech to bill CLECs for transport at the wholesale usage rate and collect the access revenue for itself, but to maintain the appropriate records of this usage and the relevant access charges until the Commission rules on the pending motion for clarification and reconsideration of Ameritech's position on interoffice transport. If Ameritech's position were to be rejected by the Commission, it would "true up" its balance of accounts with the CLECs by offering a credit for the access revenue and for the overcharges for transport. Ameritech further states that, at that time, it would begin developing a long-term solution for the appropriate billing systems to allow CLECs to bill the appropriate access charges. Kocher Aff. ¶¶ 75-78. Whatever merits it might otherwise have, this "true-up" proposal still does not deal with the other critical issue here -- i.e., Ameritech's failure to demonstrate its technical ability to provide this element.

In order to provide new entrants with a combination of local switching and transport as required by the Commission's regulations, Ameritech will have to configure its switches and support systems in a manner that is not used for its own services or for the resale of its services. In addition, it will have to establish systems and procedures for the ordering and provisioning of these elements. Ameritech has not yet demonstrated that it possesses the technical capability to do so in a reliable, commercially acceptable manner. Ameritech has, however, begun a technical trial to provide evidence that it can provision these elements.

To demonstrate that it will eventually be in a position to provide shared transport and to allow ULS purchasers to bill access if ordered to do so, Ameritech's application includes an outline of an ongoing technical trial with AT&T. As described in the Affidavit of Daniel J. Kocher,[27] this trial would proceed in two phases. The first phase of the trial would employ a single switch in Chicago and would involve the receipt of orders from AT&T for 20 lines using the EDI interface.[28] The single switch trial is intended to test the ordering process and several

[27]Kocher Aff. ¶¶ 71-74.

[28]The test plan for phase one is Attachment 7 to the Kocher Affidavit.

functions of the switch which are needed for the platform, such as customized routing and the recording of call detail needed for the platform customer to bill end users but not other carriers.

Ameritech's submission also describes its proposal for the second phase of the trial using multiple switches.[29] In its comments, AT&T proposes a substantially more robust second phase trial designed to determine whether the platform is ready for commercial use. Specifically, AT&T's experts assert that it is necessary to conduct testing which includes, among other features, orders with a larger number of line class codes, and switches located in different states.[30] The Department understands that the parties are still in the process of attempting to agree upon a test plan for the phase two trial, which would obviously be relevant to making a determination of Ameritech's practical ability to provision the network platform. Thus, Ameritech has yet to demonstrate its practical ability to provide these elements as required by the checklist.[31]

[29] Kocher Aff. ¶¶ 72-73.

[30] Affidavit of Robert V. Falcone and Maureen E. Gerson ¶¶ 29-30, attached to AT&T Comments, Exhibit I.

[31] Without a completed trial to review, the Department cannot assess the technical capability of Ameritech's systems or the saliency of other commenters' concerns. See, e.g., Comments of LCI International Telecom Corp. in Opposition to Ameritech Michigan's Section 271 Application, CC Docket 97-137, at 7-9 (June 10, 1997) ("LCI Comments") (noting that Ameritech's technical trial does not allow for full participation of other carriers).

B. Wholesale Support Processes for Provision of Unbundled Network Elements and Resale Services

Efficient wholesale support processes -- those manual and electronic processes, including access to OSS functions, that provide competing carriers with meaningful access to resale services, unbundled elements, and other items required by Section 251 and the checklist of Section 271 -- are of critical importance in opening local markets to competition. Where high volumes of transactions are expected for particular processes, the Department has highlighted two general areas where automation is likely to be necessary to a practical offering: the interfaces between a BOC and competing carriers; and, to a great extent, the interaction of these interfaces with a BOC's OSSs. Experiences in local competition to date make it clear that successful commercial operation is by far the most persuasive evidence that these wholesale support processes provide needed functionality and will operate at forecasted volume levels.

The Department finds that, while Ameritech has clearly made progress in this area, it has not yet fully complied with the competitive checklist's standard for the wholesale support processes necessary to provide adequate resale services and access to unbundled elements. Appendix A to these comments provides a more detailed analysis of Ameritech's wholesale support processes, but we provide below a general overview of that analysis.

As an initial matter, the Department agrees that Ameritech has generally followed what we believe to be the appropriate approach for demonstrating that it can provide adequate resale services, unbundled elements, and other checklist items -- i.e., Ameritech has sought to provide concrete evidence, rather than paper promises. Thus, in its application, Ameritech provides detailed internal and carrier-to-carrier test results of automated processes, allowing all interested parties to lend their expertise to the Commission's analysis. In many cases, Ameritech has actively sought out testing with competing carriers and worked through problems as they have inevitably occurred. In particular, Ameritech has identified shortcomings in the operation of its automated and manual processes, the absence of which at this nascent stage would itself raise suspicions, and provided detailed assessments of their causes and proposed solutions.

Ameritech's approach is clearly a desirable, procompetitive way to proceed. The Department would urge other BOCs to adopt the same approach. In order to facilitate competition effectively, complex systems must work in practice, not merely in theory, a point that Ameritech's extensive efforts clearly reflect. Nevertheless, on the basis of the evidence currently in the record, Ameritech has not satisfied its burden of demonstrating the successful operation of its POTS resale preordering, ordering, and provisioning processes. Further commercial use and clearer reporting of the results of such use, when supported by the type of detailed evidence Ameritech has already provided, will be needed to establish that Ameritech has satisfied the competitive checklist with regard to providing adequate resale services.

With respect to its provision of unbundled local loops, Ameritech's performance is the subject of considerable dispute. While Ameritech has been able to provision a significant number of loops, and competitors have been able to compete to a limited degree in a few local markets using such loops, Ameritech's largest loop customer, Brooks Fiber, disputes Ameritech's ability to meet due dates and installation intervals. It is the Department's understanding, however, that Ameritech and Brooks are progressing in establishing a clearer understanding of Ameritech's performance, which should permit a better assessment of Ameritech's performance at a later date.

Finally, as is reflected in the discussion above in Section III.A, the Department believes further testing and operation of Ameritech's ability to provide local switching in combination with other elements is necessary. The results of trials currently underway or planned should shed important light on Ameritech's abilities in this area. Further discussion of these and other remaining issues is provided in Appendix A as well as in Section V.B.

C. Adequacy of Interconnection Trunking Facilities

The competitive checklist requires BOCs to provide "[i]nterconnection in accordance with the requirements of sections 251(c)(2) and 252(d)(1)," which set forth the relevant technical and pricing standards. Section 271(c)(2)(B)(i). In light of the concerns outlined below, we conclude that Ameritech has failed to provide sufficient evidence to demonstrate that it is providing adequate interconnection in accordance with the technical standards set forth in the 1996 Act.

It is undisputed that Ameritech is exchanging significant volumes of traffic with CLECs through end office integration trunks. It is disputed, however, whether Ameritech provides interconnection "that is at least equal in quality to that provided by the local exchange carrier to itself..." (Section 251 (c)(2)(C)) and "on rates, terms and conditions that are just, reasonable, and nondiscriminatory" (Section 251 (c)(3)) as required by the 1996 Act. The MPSC found that Ameritech provides interconnection, in that it exchanges traffic with CLECs pursuant to interconnection agreements, but it made no determination as to whether the interconnection provided satisfied the quality and nondiscrimination requirements of the 1996 Act and the Commission's Local Competition Order.[32] Other relevant regulatory proceedings have similarly failed to resolve whether Ameritech is providing interconnection at parity.[33]

Ameritech's interconnection performance data clearly show that the end office integration (EOI) trunks used by CLECs to interconnect with Ameritech experience higher blocking rates than do the trunks used within Ameritech's own network. During March and April of 1997, 9.4% of the EOI interLATA trunk groups were blocking more than 2% of the traffic routed to the group. Over the same period, 6.6% of the EOI trunk groups used to transport local and intraLATA calls exceeded the 2% threshold that Ameritech reports.[34] The comparable blocking rate for Ameritech retail was 1.5%. Mickens Aff. ¶ 49.

Because the record is clear that the EOI trunk groups are blocked more frequently than Ameritech's retail trunks, the relevant question is whether the difference between the

---

[32]Local Competition Order at ¶¶ 221-225. The MPSC specifically noted that Brooks Fiber disputes the quality of the interconnection it is receiving from Ameritech, but it did not provide any evaluation of this dispute. MPSC Consultation at 12. Further, it found that Ameritech's performance measures for interconnection are inadequate because they "do not distinguish things over which Ameritech has control so deviations from the goal can be explained away." Id. at 23-24, 26.

[33]In finding that Ameritech is providing interconnection, the Illinois HEPO provided no discussion of Ameritech's interconnection performance. ICC Second HEPO at 23-24. Likewise, the order from the PSCW evaluating Ameritech's SGAT in that state does not address performance issues. PSCW Second Order at 13-14.

[34]Affidavit of Warren Mickens ¶ 49 ("Mickens Aff."), attached to Ameritech Brief, Volume 2.10. The Department notes that the some of the charts and underlying raw data presented in Schedule 17 of Mickens proprietary testimony are inconsistent.

competitors' experience and Ameritech's own retail blocking rate is sufficiently significant as to deviate from Section 251(c)(2)'s mandate that CLECs be afforded interconnection arrangements on "nondiscriminatory" terms. On this point, Ameritech asserts that EOI traffic tends to be more volatile than Ameritech's retail traffic and concludes that because of this volatility, the disparity between EOI trunk blocking rates and Ameritech's retail blocking rates is not a "cause for concern." Id. This response alone does not address our concern, especially in light of the fact that lower target trunk blockage rates have been established through negotiations with CLECs,[35] . cite[36] and that two of the three CLECs that Ameritech relies upon in this proceeding, Brooks Fiber and TCG, have offered specific complaints about excessive trunk blockage.[37] To the extent that Ameritech's characterization of the varying nature of the CLECs' calls or trunk groups might explain the different rates of call blockage, the record currently contains no evidence in support of this claim -- i.e., that Ameritech's internal performance standards vary by

[35]The AT&T contract, which Ameritech also relies upon in this proceeding, calls for blocking rates of less than 1%. AT&T Interconnection Agreement at Schedule 3.8-1 ("AT&T/Ameritech-Michigan Interconnection Agreement"), attached to Ameritech Brief, Volume 1.2. Importantly, there is nothing in the contract to suggest that higher blocking rates are acceptable while traffic volumes are low.

[36]In fact, the AT&T contract calls for interconnection that is "equal in quality" to that provided by Ameritech to itself, and defines "equal in quality" to mean "the same technical criteria and service standards" that Ameritech uses within its own network. Id. at §3.6. Ameritech has not attempted to demonstrate that the relatively high blocking rates CLECs have experienced satisfy the technical criteria and service standards that Ameritech uses internally.

[37]TCG Comments at 4-8; Affidavit of Michael Pelletier ¶¶ 10-24 ("Pelletier Aff."), attached to TCG Comments, Exhibit A; Brooks Opposition at 28-29; and Response to Ameritech Michigan's Submission of Additional Information in MPSC Case No. U-11104 by Brooks Fiber Communications of Michigan, Inc., at 3 (Apr. 15, 1997).

the volatility of traffic on the trunk group. Consequently, the Department cannot conclude, based upon the record in this proceeding, that Ameritech has satisfied the checklist standard for providing adequate interconnection.

Ameritech further states that CLECs have been reluctant to provide forecast data and that their failure to do so explains much of the blocking data disparity. The Department agrees that EOI trunk blocking rates could potentially be reduced with improved traffic forecasts, and we would urge CLECs to provide such data to the fullest extent possible. Nonetheless, we recognize that accurate prediction is not always possible, and, in those situations where predictions are unavailable or are inaccurate and blocking occurs, there should be a timely, successful resolution. The Mayer affidavit states that Ameritech's procedures for provisioning EOI trunks are being changed.[38] With only a cursory description of those changes in the record, and no performance data to show a lasting improvement in blocking rates, however, it is too early to determine whether these changes will be sufficient to establish compliance with this checklist item.

IV. Ameritech's Compliance with Section 272

Section 272 prohibits Ameritech from providing in-region interLATA service unless it does so through a separate affiliate for at least three years after entry, and also complies with various nondiscrimination obligations. These requirements are necessary (though not sufficient)

[38]Affidavit of John B. Mayer ¶ 40 ("Mayer Aff."), attached to Ameritech Brief, Volume 2.8.

conditions to protect against anticompetitive behavior by the BOC upon its entry into the interLATA market.[39]

Ameritech asserts that it has complied and will continue to comply fully with the requirements of this section, including both accounting and non-accounting safeguards. Commenters, however, have pointed out apparent inconsistencies between Ameritech's representations in this docket and representations it previously has made in other dockets in Michigan and other states in its region.[40] These comments note the lack of information available regarding transactions between Ameritech and its long-distance affiliate, ACI.[41] This lack of information raises questions about whether Ameritech has sufficiently documented the affiliated transactions to allow detection of discrimination, cross-subsidization, or any other anticompetitive behavior.

---

[39] See Reply Comments of the United States Department of Justice, CC Docket No. 96-149, FCC 96-489, at 1-4 (Aug. 30, 1996).

[40] See, e.g., TCG Comments at 27-39; Comments of AT&T in Opposition to Ameritech's Section 271 Application For Michigan, CC Docket 97-137, at 37-39 (June 10, 1997) ("AT&T Comments"); and CompTel Opposition at 31-34.

[41] Affidavit of Lila K. McClelland and Douglas K. Goodrich ¶¶ 24-25 ("McClelland and Goodrich Aff."), attached to AT&T Comments, Exhibit O (quoting Letter from Lynn S. Starr, Ameritech to Regina Keeney, FCC, dated Apr. 21, 1997); id. at ¶¶ 32-33 [citing Affidavit of Paul LaSchiazza ¶ 11 ("LaSchiazza Aff."), attached to Ameritech Brief, Volume 2.7 and Affidavit of Richard E. Shutter ¶ 19, attached to Ameritech Brief, Volume 2.14.]. The business of ACI and all Ameritech telephone operating companies is controlled by Ameritech . Petition to Deny by Sprint Communications Company L.P., CC Docket 97-137, at 25 (June 10, 1997) ("Sprint Petition"); TCG Comments at 31-32, 34.

With regard to at least one aspect of its relationship with ACI, Ameritech has made a commitment that the Department finds to be significant. In the affidavits of Patrick J. Earley and Paul V. LaSchiazza, Ameritech states that although certain customers have authorized Ameritech Michigan to share Customer Proprietary Network Information (CPNI) with Ameritech affiliates, it has not disclosed any CPNI to ACI and that it will refrain from disclosing CPNI to ACI unless and until (1) ACI has itself obtained customer authorization to receive the information and/or (2) the FCC rules in its pending CC Docket No. 96-115 [CPNI] that such information may be shared. Affidavit of Patrick J. Earley ¶ 48 ("Earley Aff."), attached to Ameritech Brief, Volume 2.2; LaSchiazza Aff. ¶¶ 22, 35. Moreover, Ameritech commits to not using CPNI on any outbound joint marketing it may do for ACI, unless one of the two above conditions apply.[42] We support this commitment and believe it to be necessary given the present circumstances.

V. Evaluation under the Department's Standard

The Department has concluded that BOC in-region interLATA entry should be permitted only when the local exchange and exchange access markets in a state have been fully and

[42]Given Ameritech's announced intent to market for ACI, this corollary commitment is necessary in order for the underlying promise to have effective meaning. See McClelland and Goodrich Aff. ¶ 39 (The ACI/Ameritech Michigan Marketing and Sales Agreement "states that Ameritech Michigan may identify potential customers who may benefit from subscribing to and using ACI's products. If Ameritech utilizes its own Customer Proprietary Network Information (CPNI) to identify such potential customers, how does Ameritech intend to establish and charge ACI for the fair market value of this data?").

irreversibly opened to competition.[43] This standard seeks to ensure that the barriers to competition that Congress sought to eliminate in the 1996 Act have in fact been fully eliminated and that there are objective criteria to ensure that barriers are not imposed after BOC entry into in-region interLATA services. The Department will evaluate, among other things, whether a BOC's wholesale support systems will permit the effective provisioning of resale services and unbundled elements, and whether the continued nondiscriminatory operation of these systems can be assured after approval of a Section 271 application. Ameritech itself recognizes that "[o]ne of the goals of the 1996 Act . . . is to open local exchange service to competition." Ameritech Brief at 62.

In applying this standard, the Department will consider whether all three entry paths contemplated by the 1996 Act -- facilities-based entry involving construction of new networks, use of the unbundled elements of the BOC's network, and resale of the BOC's services -- are fully and irreversibly open to competitive entry to serve both business and residential consumers. To do so, the Department will look first to the extent of actual local competition as evidence that local markets are open, and whether such entry is sufficiently broad-based to support a presumption of openness. If broad-based commercial entry involving all three entry paths has not occurred, the Department will examine competitive conditions more carefully, and consider whether significant barriers continue to impede the growth of competition, focusing particularly

[43] This open market standard and its relationship with the Commission's public interest inquiry is explicated more fully in the DOJ Oklahoma Evaluation at vi-vii and 36-51, and in the Schwartz Affidavit.

on the history of actual commercial entry. We will assess the import of such entry as a means of demonstrating whether the market is open and establishing relevant performance benchmarks, but not as a way of requiring any specific level of local competition. Our standard thus seeks to ensure that competitors presently receive -- and regulators can continue to expect (based on established performance benchmarks) -- a meaningful opportunity to compete.

While a limited amount of entry is occurring today under all three entry paths in local exchange markets in Michigan, there is not yet enough local competition in Michigan to warrant a general presumption of openness. Rather, it is necessary to investigate carefully whether any remaining barriers would impede the growth of local competition in Michigan. From the preceding evaluation of checklist compliance, however, it appears that some barriers remain in Michigan. In addition, as discussed below, Ameritech's lack of fully adequate performance measures and enforceable performance benchmarks suggests that any opening to local competition in Michigan may not yet be properly described as being irreversible.

A. Competition Exists in Local Exchange and Exchange Access Markets in Michigan But Is Not Yet Sufficient to Warrant any Presumption that Local Markets are Fully and Irreversibly Open

As Ameritech explains, Michigan took its first steps to authorize local competition in 1991, and in 1995, a year before the passage of the Telecommunications Act, when it substantially amended its own telecommunications laws to open local markets and impose certain unbundling and resale obligations on Ameritech. Mich. Comp. Laws, §§ 484.2103, .2355-60, .2363 (1996). These legal reforms, coupled with the market-opening measures of the

1996 Act and the steps Ameritech has taken, have produced encouraging signs of competitive entry on a small scale, as reviewed in more detail in Appendix B. Twenty-two competitive providers have been certified as local carriers, and other applications are pending. Ameritech Brief at 74.[44] The Department has identifed seven firms that are operational competing providers of local exchange service in Michigan, on either a facilities or resale basis, serving business and in some cases residential subscribers. It appears from the evidence provided by Ameritech and its competitors that total lines actually served by competitive providers in Michigan are still no more than 70,000-80,000. A substantial part of this total represents separate facilities of competitors, although most customer lines are served through a combination of the competitors' separate facilities and Ameritech's unbundled elements, or by resale of Ameritech's services. The local competitive entry to date is primarily located in the two largest urban areas, Grand Rapids and Detroit, but competitors have facilities in several other communities, including Lansing, Ann Arbor, and Traverse City.

Ameritech remains, however, by far the dominant provider of local exchange services, with a near monopoly in its service areas.[45] Most parts of Michigan still have no local competition, save possibly on a resale basis, since such CLEC competition as exists in Michigan is overwhelmingly concentrated in parts of the cities of Grand Rapids and Detroit and is

---

[44]See also MPSC Consultation at 9 ("the MPSC has now authorized twenty-four applicants to provide basic local exchange service").

[45]Comparative data analyzing Ameritech's market position and that of its competitors in Michigan is contained in Appendix B.

primarily focused on business customers. The greatest degree of local competition exists in the Grand Rapids metropolitan area, where Brooks Fiber and its predecessor, City Signal, have been operating for several years.

Given this level of competition, we cannot presume that no barriers to entry exist. At the same time, given the successful small-scale entry that has occurred using all three paths, we cannot presume that the local markets necessarily remain closed either. In such cases, the Department's standard calls for a more careful analysis of opportunities for competitors' future entry and expansion.[46]

B. Need for Further Measures to Open Local Markets

The competitive entry that has occurred in Michigan, though limited in scope, has been helpful to the process of opening local markets in Michigan. Many of the legal issues that will affect competitive opportunities have been resolved. Ameritech and several of the new entrants have finalized access and interconnection agreements and developed processes through which most of the competitive checklist elements have been furnished to the entrants to some limited extent. The initial experience with competition has also contributed to the development and improvement of the wholesale support processes that will be needed to sustain competition in the future. Indeed, the initial commercial use of Ameritech's wholesale support processes to provide and maintain unbundled elements and resale services has revealed the kind of real-world

[46] DOJ Oklahoma Evaluation at 44.

shortcomings that can be expected to arise in developing the necessary processes, and has allowed Ameritech to make many of the necessary corrections.

Despite this progress, the record submitted by Ameritech does not demonstrate that local markets in Michigan are fully and irreversibly open to competition. The obstacles to competitive entry and expansion that remain could readily impede the growth of competition in Michigan. Specifically, building on our analysis thus far, we identify the following remaining obstacles: (1) the unavailability of unbundled switching and shared transport, which are needed to support entry through the "network platform"; (2) continuing performance problems with respect to some of Ameritech's wholesale support systems, which could limit the ability of entrants to obtain resale services and unbundled elements at reasonably foreseeable levels of demand; (3) inadequate performance measures of some of Ameritech's wholesale support systems, which both preclude a determination that those systems are adequate today, and which will hamper efforts to ensure continued acceptable performance after Section 271 authority has been granted to Ameritech; and (4) troublesome indications of high blockage rates in end office integration trunks, which potentially could impair the quality of service offered by facilities-based competitors.

The Department has already discussed the compliance problems with respect to most of these issues in detail in Part III and Appendix A. It is important to appreciate, however, the competitive significance of the failure to provide these items, which precludes a determination that approval of Ameritech's application would be consistent with the public interest. With respect to unbundled switching and shared transport (as defined by the relevant orders of the

Commission and the MPSC), Ameritech's failure to make these checklist requirements practically available to its competitors forecloses an important entry vehicle involving the "network platform." Given the economic and technical opportunities afforded by this entry strategy, the "network platform" provides an important entry vehicle for several potential competitors.[47]

The Department is also concerned about Ameritech's failure to provide adequate trunking facilities for interconnection, because inadequate interconnection is likely to disproportionately disadvantage CLECs in a competitive market. Only a small fraction of the incumbent's calls require transport through an interconnection trunk, while a much larger fraction of CLEC calls require such transport. Therefore, interconnection performance is of much greater consequence to the business success of CLECs than to the incumbent provider. Absent regulatory requirements, Ameritech has little or no incentive to adequately provision interconnection trunks to CLECs.[48]. Mayer Aff. at 22.[49] It follows that special emphasis should

[47]For example, as the PSCW put it, "[u]nbundled network elements provide a competitive restraint on the incumbents' retail rates. With unbundled network elements priced based on cost, if Ameritech raises its retail rates excessively, competitors can chose to purchase unbundled elements and charge lower rates. In rural areas where facilities-based competition will likely be inefficient, the availability of unbundled network elements based upon cost may serve as an important restraint on retail rate increases." PSCW Second Order at 46.

[48]Local Competition Order at ¶ 218. Thus, the Department does not assume with Ameritech that "it is in the best interests of both Ameritech and the CLEC to ensure that there are sufficient facilities to handle traffic to and from the interconnected networks." Mayer Aff. ¶ 49.

[49]On the contrary, poor interconnection performance is likely to make CLECs' services less attractive to consumers, providing a competitive advantage to incumbents such as Ameritech.
(continued...)

be placed on establishing satisfactory performance standards for interconnection trunks, and determining that the BOC is able to meet its own standards in actual competitive conditions, before Section 271 authority is granted.

The provisioning of wholesale support systems is central to the 1996 Act's promise of facilitating local competitive entry, since these systems are essential to enable the BOCs' competitors to perform the necessary ordering, repair and billing functions to compete on any significant scale. The competitive significance of Ameritech's failure to demonstrate the adequacy of some of the wholesale support systems that will be required to provide adequate resale services and unbundled elements, at needed volumes and at acceptable levels of quality and timeliness, is, as discussed below, implicitly demonstrated by Ameritech's own competitive analysis.

Ameritech asserts that current market share data understate the competitive significance of CLECs because the existing facilities in Michigan, including the number of collocations in Ameritech end offices, indicate that a large share of Ameritech's customers are already "addressable" by competitors. According to Ameritech, this means that the local market is already sufficiently open to provide meaningful competitive pressure on the BOC. Joint Affidavit of Robert G. Harris and David J. Teece at 38-39 ("Harris and Teece Aff."), attached to Ameritech Brief, Volume 3.3. Ameritech's affiants argue that collocation in an Ameritech end office gives the collocator the ability to compete for every access line served by that end office,

---

[49](...continued)
See Pelletier Aff. ¶ 24.

id. at 29-39, and based on this assertion, they claim that by the end of July competitors will be collocated in central offices that serve 42% of Ameritech Michigan's business lines (768,269 lines) and 29% of Ameritech Michigan's residential lines (948,221 lines).[50]

Ameritech's "addressable market" argument assumes that CLECs have the "capacity to serve" all access lines served by collocated offices. Id. at 33. But capacity in this context is dependent not only on the capabilities of the CLECs, but also on the ability of Ameritech to provision unbundled loops in the collocated offices. Ameritech has not yet sufficiently demonstrated its ability to do so reliably and in significant volumes. In short, to establish that a large portion of the market is "addressable," Ameritech must first demonstrate that its processes for provisioning unbundled loops are reliable and scalable to levels substantially greater than current demand.[51] Ameritech's testimony shows, however, that the vast majority of the

---

[50]Harris and Teece Aff. at 35, Table III.2. As of April 30, 1997, CLECs were collocated in 37 Ameritech end offices and are expected to be in 42 by the end of July. These figures represent virtual collocation only, and the Department is unaware of any physical collocations currently established in Michigan.

Harris and Teece also assert that 52% of Ameritech Michigan's customers are addressable from fiber rings. Id. at 41, Table III.4. They reach this estimate by counting the share of access lines that lie within 4 miles of CLEC fiber rings. Harris and Teece's estimate lacks any foundation in actual business practice. Experience shows that extensions to fiber rings are only economically viable for the very largest customers. The decisions of both TCG and MFS (the CLECs with the most extensive networks in Detroit) to concentrate on large customers in on-net buildings provides evidence of the difficulty and expense of extending the reach of a fiber ring. Such high use customers comprise a relatively small share of Ameritech's total access lines.

[51]Without such scaleability, CLECs will be able to serve only a small fraction of the market that Ameritech describes as "addressable." As of March 1997, Ameritech Michigan had provisioned 21,321 unbundled loops, which represents only 2.4% of the 895,458 lines served by (continued...)

unbundled loops provisioned to date were ordered through manual processes,[52] which may be able to handle a very small volume of orders, but which are inherently unsuitable for dealing with large-scale competitive demand. At present, Brooks, the principal user of unbundled loops, is using ASR (an electronic interface) to place orders, but it continues to have problems with sending orders and receiving firm order commitments. Thus, the analysis in Part III and Appendix A shows that Ameritech's systems have not yet been proven to be able to meet the levels of customer demand that Ameritech's affiants assume in claiming that the Michigan local markets are "addressable."

Finally, there are two additional issues implicated in the Department's competitive assessment that have not already been considered in Parts III and IV: inadequate performance measures and pricing. We discuss each below in more detail.

1. Inadequate Performance Measures

Performance benchmarks serve two important purposes: (1) demonstrating that the market is currently open to competition, and (2) facilitating meaningful post-entry oversight that

---

[51](...continued)
offices in which competitors were collocated as of February 1997. Harris and Teece Aff. at 28, Table III.1, and 35, Table III.2. According to Harris and Teece, id. at 28, Table III.1, 2452 unbundled loops were provisioned from January to March 1997, a rate of 1226 per month. At this pace, it would take 23 years (280 months) to cut-over 20% of the 1.7 million lines Harris and Teece identify as "addressable" by the end of July.

[52]Ameritech's data shows that only about 20% of the loops in service region-wide were ordered using ASR. Mickens Aff. ¶ 23, Tab 25, Section 2, at 6.

ensures that the market opening is irreversible.[53] To serve these twin purposes, the BOC must define the relevant measures, report the appropriate data on a regular basis, and derive the applicable benchmarks from the performance so measured. That is, performance measures must be defined to cover the critical functions and defined with sufficient specificity so that the thing measured can be understood. The benchmarks, or specific levels of performance, can then be derived from a track record of reliable service established by the BOC, from analogy to the BOC's own retail operations, or perhaps from some other alternative that would ensure a consistent level of performance. As Ameritech itself understands, without "concrete, detailed performance standards and benchmarks for measuring Ameritech's compliance with its contractual obligations and impos[ing] penalties for noncompliance," Ameritech's statutory nondiscrimination obligations are only "abstractions." Ameritech Brief at 85.

---

[53] Application of SBC Communications, Inc., et al. Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region InterLATA Services in the State of Oklahoma, Addendum to the Evaluation of the U.S. Department of Justice, CC Docket No. 97-121, at 4-5 (May 21, 1997). See also Schwartz Aff. ¶ 70 ("Absent meaningful benchmarks, penalty threats are problematic, because regulators and courts lack the information about what are reasonable implementation lags for new systems"); Id. at ¶ 77 ("[once] a track record is created for what constitutes 'good performance[,] [p]ost-entry safeguards -- regulatory, antitrust and contractual -- then become more effective at countering BOC attempts to reduce cooperations, since the performance benchmarks can help enforcers to prevent future backsliding and to extend these arrangements to other regions or other entrants.").

In its comments to the Commission, the MPSC agreed with the above principles,[54] and defined a set of 12 criteria by which performance standards can be developed. MPSC Consultation at 31-32. The MPSC concluded that "complete and appropriate performance standards have not as yet been adopted which would permit determinations to be made regarding nondiscriminatory access to OSS and other unbundled network elements." MPSC Consultation at 33-34.[55] Although we agree with the MPSC that Ameritech's progress in this regard is incomplete, it is important to note that Ameritech has proposed and begun reporting a set of performance measures that addresses many of the important criteria covering both the operation of the interfaces and the operation of the OSS and provisioning systems.[56] We fully endorse Ameritech's commitment to measuring and reporting its performance and find its efforts to be significant, especially because Ameritech appears to have implemented specific business policies

---

[54]The PSCW, in its recent order rejecting Ameritech's SGAT, also recognized the importance of performance reporting, stating: "The Statement does not, however, yet specify actual performance benchmarks or parity reports. Lack of finality on these items may not in and of itself be sufficient reason to reject a Statement, although significant inadequacies in performance benchmarks and parity reports would be sufficient. The Statement under review is still too vague to meet the Commission's performance benchmark requirement." PSCW Second Order at 26-27.

[55]Although Ameritech asserts that its "standards, benchmarks and reporting requirements [were] carefully reviewed and approved during Section 252 arbitrations by the MPSC," Ameritech Brief at 85, the MPSC's Consultation makes it clear that the standards, benchmarks and reporting requirements have <u>not</u> been approved for purposes of Section 271. <u>See</u> MPSC Consultation at 33-34.

[56]Indeed, the Department cited Ameritech's set of measures favorably compared with SBC's in its previous comments on SBC's Oklahoma application. <u>See generally</u> DOJ Oklahoma Evaluation; Affidavit of Michael J. Friduss ("Friduss Aff."), Tab D to DOJ Oklahoma Evaluation.

consistent with that commitment.[57] Moreover, Ameritech has committed to continuing its measuring and reporting obligations into the indefinite future. Nevertheless, as discussed in Appendix A, there are important gaps in the measures proposed by Ameritech -- namely, (1) a lack of sufficient clarity in certain of the definitions presented, and (2) a failure to measure and report actual installation intervals for resale, installation intervals for unbundled loops, comparative performance information for unbundled elements, and repeat reports for the maintenance and repair of unbundled elements. Thus, although Ameritech's performance measures appear adequate in other respects, Ameritech has yet to establish all of the necessary performance benchmarks to satisfy the Department's competitive assessment.[58]

2. Lack of Final Cost-Based Pricing

Compliance with the cost-based pricing standards of the Telecommunications Act in Section 252(d) is also relevant to the Section 271 entry process, as Congress's repeated references to Section 252(d) in the checklist items of Section 271(c)(2)(B) makes plain. For the most part Ameritech's prices in Michigan are still interim and have not been finally determined to be cost-based, though a proceeding to set final prices is already well underway and a decision

---

[57] See Mickens Aff. ¶ 34 ("As other products and services develop, Ameritech will continue to modify its existing reports to incorporate additional performance measures and tracking reports.").

[58] In highlighting the need to measure and set appropriate benchmarks for actual installation intervals for resale, installation intervals for unbundled loops, comparative performance information for unbundled elements, and repeat reports for maintenance and repair of unbundled elements, we do not mean to suggest that a particular numerical performance measure is necessary to satisfy our concern. But Ameritech has failed to provide any effective mechanism for measuring levels of performance and establishing benchmarks for some of the critical wholesale support processes that will enable us to conclude that the market has been irreversibly opened.

could issue in the near future.[59] See MPSC Consultation at 8-9. Ameritech's interim prices determined through arbitration in Michigan are for the most part relatively low compared with those of other BOCs and ILECs, and have not generated the volume of complaints about rate levels encountered in some other regions.[60] Questions have been raised, however, about some of Ameritech's prices, including certain non-recurring charges for components of the service platform and charges for physical collocation,[61] as well as the accuracy and completeness of Ameritech's cost studies. The most important pricing issue raised by numerous commentors, however, is the lack of any final determination of cost-based rates in Michigan.[62]

---

[59]Michigan Public Service Commission, On the Commission's Own Motion, to Consider the Total Service Long Run Incremental Costs and to Determine the Prices of Unbundled Network Elements, Interconnection Services, Resold Services, and Basic Local Exchange Services for Ameritech Michigan, Case No. U-11280 (initiated Dec. 12, 1996). See also Permanent Interconnection Arrangements, MPSC Case No. U-10860.

[60]A comparison with the FCC's proxy prices, though these are stayed on appeal, illustrates the relatively favorable interim prices that have been adopted for some key elements in Michigan. For example, Ameritech's Michigan AT&T agreement has recurring prices for a two-wire analog loop range from $9.31 to $14.67, compared with an FCC loop proxy of $15.27 per month. Rates for end office local termination are .3637 cents per minute, below the FCC's maximum proxy price of .4 cents per minute. See Local Competition Order at Appendix D; AT&T/Ameritech-Michigan Interconnection Agreement at Pricing Schedule - Michigan (AM-1-020258 - 266). Ameritech had proposed substantially higher loop rates, ranging from $15.61 to $21.33, but these were rejected by the Michigan arbitrator in the AT&T arbitration as unreasonably high. Decision of Arbitration Panel at 8 (Oct. 28, 1996), Application Vol. 4.1, AM-4-003637 [cited in Opposition of KMC Telecom, Inc. to Application of Ameritech Michigan to Provide InterLATA Services in Michigan, CC Docket No. 97-137, at 9 n.8 (June 10, 1997) ("KMC Opposition")].

[61]See, e.g., MCI Comments at 24-25.

[62]See, e.g., Motion to Dismiss by the Association for Local Telecommunications Services, CC Docket No. 97-137, at 19-22 (June 10, 1997); AT&T Comments at 28-29; Brooks Opposition at 10; CompTel Opposition at 14-16; KMC Opposition at 4-9; Comments of the Michigan Consumer Federation in Opposition to Ameritech Michigan's Application, CC Docket No. 97-137, at 9 (June 10, 1997); MCI Comments at 23-25; Sprint Petition at 13-17; TCG Comments at
(continued...)

Cost-based pricing for BOC facilities and services needed by competitors, such as interconnection, transport and termination and unbundled elements, is relevant to the Department's evaluation of any BOC entry application under Section 271. We are particularly concerned where only interim prices that have not been found to be cost-based are available.[63] Competitors will be reluctant to commit their resources to enter a state on a large scale if the economic conditions they will face are highly uncertain and there are incentives for backsliding on the part of the BOC once interLATA relief is granted if final prices have not already been set. In the present circumstances, however, this pricing issue need not be resolved. As we have noted, there are other grounds for denying Ameritech's application, and, consequently, the Commission can await the results of the ongoing Michigan pricing docket, which should soon reach a decision,[64] and which may resolve the concerns raised with regard to Ameritech's pricing of its wholesale inputs.

Conclusion

Ameritech has not yet fully complied with all of the requirements of the competitive checklist, nor has it taken all measures needed to ensure, consistent with the public interest, that local markets in Michigan are irreversibly open to competition. For these reasons, Ameritech's

---

[62](...continued)
13-17; Opposition of the Telecommunications Resellers Association, CC Docket No. 97-137, at 36-37 (June 10, 1997); Comments of Time Warner Communications Holdings, Inc., CC Docket No. 97-137, at 4-7 (June 10, 1997); and WorldCom Comments at 42-43.

[63]See DOJ Oklahoma Evaluation at 61-63.

[64]See MCI Comments at 23.

application for in-region interLATA entry in Michigan under Section 271 of the Telecommunications Act should be denied.

Respectfully submitted,

____

Joel I. Klein
Acting Assistant Attorney General

Antitrust Division

Andrew S. Joskow
Deputy Assistant Attorney General
Antitrust Division

Lawrence R. Fullerton
Deputy Assistant Attorney General
Antitrust Division

Philip J. Weiser
Senior Counsel
Antitrust Division

Donald J. Russell
Chief

Attorneys
Telecommunications Task Force

John B. Hayes
Economist
Competition Policy Section

Antitrust Division
U.S. Department of Justice
555 4th Street, N.W., Room 8104
Washington, DC 20001
(202) 514-5621

June 25, 1997

Carl Willner
Katherine E. Brown
Stuart H. Kupinsky
Luin Fitch
Juanita Harris

APPENDIX A

Wholesale Support Processes and Performance Measures

In this Appendix, we examine Ameritech's wholesale support processes—the automated and manual processes required to make resale services and unbundled elements, among other items, meaningfully available to competitors—and performance measures under the criteria outlined in the Department's Evaluation regarding SBC's Section 271 Oklahoma application, filed on May 16, 1997.[1]

A. Wholesale Support Processes Overview

In evaluating BOC applications under Section 271, the Department considers whether a BOC has made resale services and unbundled elements practicably available by providing them via wholesale support processes, including the critical access to OSS functions required by the Commission's rules, that: (1) provide needed functionality; and (2) are demonstrated to operate in a reliable, nondiscriminatory manner at reasonably foreseeable volumes, providing entrants with a meaningful opportunity to compete.[2] Ameritech echos this standard in its application, and in particular with reference to OSS access: "Ameritech should be required to show that its OSS interfaces are operational, i.e., that they have undergone sufficient testing or use to provide reasonable assurance that competitors can obtain, upon request, access to the OSS functions they need to enter the marketplace and serve customers successfully at reasonably foreseeable

[1] See DOJ Oklahoma Evaluation at 26-30, Appendix A and Exhibit D (Affidavit of Michael J. Friduss).

[2] Appendix A to DOJ Oklahoma Evaluation at 68-71.

demand levels." Affidavit of Joseph A. Rogers ¶ 15 ("Rogers Aff."), attached to Ameritech Brief, Volume 2.13.

Depending on the volume of orders expected, BOCs will have to automate in two areas to make resale services and unbundled elements meaningfully available at reasonably foreseeable volumes. First, BOCs will have to automate many of the interfaces between a BOC and its competitors through which information is exchanged regarding such services and elements. Application-to-application interfaces in particular allow competing carriers to build their own software for processing transactions with a BOC. In some instances, though, such application-to-application interfaces might be too expensive for smaller carriers who cannot afford such customized software development. In those instances, terminal emulation or graphical user interfaces (GUIs) may be appropriate. SBC, for example, is developing multiple interfaces, for small and large carriers, to support almost every automated wholesale support function.[3]

Second, BOCs will need to automate, to varying degrees, the interaction of these interfaces with their internal OSSs. Such automation often will be critical to the meaningful availability of resale services and unbundled elements. The Commission's nondiscrimination requirement obligates BOCs to provide automated interaction between interfaces and OSSs where such access is automated analogously for the BOCs' retail operations, or where the lack of such automation would cause significant barriers to entry, denying competitors a meaningful opportunity to compete. Thus, while we generally concur with Ameritech's "cost-benefit"

[3] Appendix A to DOJ Oklahoma Evaluation at 74 ("SBC claims to offer multiple interfaces through which CLECs eventually will be able to perform most functions, including resale ordering functions. This approach, when operational, may fulfill the needs of both large and small competitors and comply with the Commission's complementary "nondiscrimination" and "meaningful opportunity" requirements . . . .").

approach to determining when to mechanize order processing, as the MPSC correctly pointed out,[4] we disagree with Ameritech's position that "manual processing of certain orders, after they are received through the appropriate electronic interface, has absolutely no bearing on compliance with the checklist and the Commission's [rules]." Rogers Aff. ¶ 42. Manual processing that results in the practicable unavailability of services or elements at foreseeable demand levels can impede the development of competition, and thus obviously has a direct bearing on compliance with the competitive checklist and the Commission's rules.

In addition to automation in general, adherence to industry standards for interfaces between carriers in particular will generate further economic benefits both for CLECs and incumbents. Committees of the Alliance for Telecommunications Industry Solutions (ATIS) recently finalized standards for ordering resale services and some unbundled elements via electronic data interchange (EDI), and the Department will ordinarily expect BOCs to adhere to such standards following a reasonable period of development in cooperation with competing carriers wishing to use the standardized interface.[5]

Finally, proper performance measures with which to compare BOC retail and wholesale performance, and to measure exclusively wholesale performance, are a necessary prerequisite to demonstrating compliance with the Commission's "nondiscrimination" and "meaningful

---

[4] MPSC Consultation at 24-25.

[5] ATIS noted at a recent FCC Forum on OSS access that some ATIS committee standards are usually stable enough at initial -- as opposed to final -- closure to allow carriers to begin interface development at such time. ATIS Presentation at the FCC Forum on Operations Support Systems, May 28, 1997. This indicates that in some instances BOCs should be initiating development efforts even prior to ATIS final closure in accordance with the needs of competing carriers.

opportunity to compete standards." Moreover, without a track record of performance described by comprehensive measures, it will be difficult -- if not impossible -- for competitors and regulators to detect backsliding of performance after in-region interLATA entry is authorized.

B. Ameritech's Wholesale Support Processes

Ameritech has made significant progress in improving the functionality and operability of its wholesale support processes, both manual and automated. Ameritech has generally been forthcoming about early problems with its processes, and has made good faith efforts at finding solutions to many such problems. In addition, Ameritech has attempted to place in this and in state records detailed internal testing results, carrier-to-carrier testing results, commercial performance statistics (including error rates), and, in most cases, internal retail performance results, thereby allowing competitors and regulators to examine and comment on such evidence and compare retail and wholesale performance.

Detailed comments regarding each wholesale support process Ameritech claims to provide are provided below. In each instance, we review the functions Ameritech purports to provide and the testing and operational evidence supporting such functionality. Because Ameritech's processes are generally operated on a regional, rather than state-wide basis, our analysis is not limited to Michigan activities unless there is evidence of state-specific operating problems. Similarly, if a problem exists with Ameritech's processes in another state, we assume that the problem exists in Michigan unless shown otherwise.

1. Obtaining Preordering Information for Resale Services and Unbundled Elements

Ameritech provides CLECs with manual and automated processes for obtaining preordering information. The latter is provided primarily through an EDI interface, and thus

Ameritech has generally anticipated the direction ATIS committees have taken in this regard.[6] Ameritech provides five primary preordering functions: customer service record retrieval; telephone number selection and reservation; due date selection and reservation; address validation; and feature availability. These functions appear to provide CLECs with at least the basic functionality required to provide competitive POTS services to end users. The first three functions are provided in near-real-time over the EDI interface, while the last two are provided as file downloads and are updated nightly. There is little or no evidence in the record to indicate that this division of functions between real-time and file transfer is competitively unreasonable, particularly in light of the relatively static nature of the address and feature availability data.

Ameritech's EDI preordering interface has undergone significant internal testing, and some, albeit insufficient, carrier-to-carrier testing and commercial use. First, Ameritech asserts that internal testing of the interface by Ameritech alone was completed in November and December 1996, and that the interface has been available since then. Rogers Aff. ¶ 25. Ameritech also presents the details of internal testing at the direction of Andersen Consulting personnel. By analyzing both previous Ameritech testing and current projections of preordering transactions, personnel from Andersen Consulting and Further Inspection, an information technology firm, created a set of benchmark transactions that represented the expected "mix" of preordering transactions. Affidavit of Robert H. Meixner ¶¶ 25-27 ("Meixner Aff."), attached to Ameritech Brief, Volume 2.9. Using these benchmark transactions, Ameritech and Further Inspection personnel then ran tests on the preordering system involving 906 transactions and six simultaneous users. The results are reported in Schedules 9 and 10 of Meixner's affidavit. The

[6] ATIS committees are currently developing EDI-based preordering guidelines.

reported results claim a capacity of 945 preorder transactions per hour, or 307,000 per month, well above Ameritech's projected volumes for 1997.

The results also claim an average response time for these transactions of approximately 8.2 seconds, roughly corroborated by 9.5 second response times in tests using USN's interface for retrieving CSRs. Ameritech also corroborates these results through submission of a study by Further Inspection comparing Ameritech's retail and wholesale preorder response times further broken out by state.[7] It is unclear whether the data depicted is a breakout of the tests described above or separate tests. Meixner Aff. ¶¶ 25-31. The Further Inspection bar graphs indicate that, for Michigan and most other states, wholesale preorder response times are approximately 10 seconds or less and retail response times are approximately 2-4 seconds. While there is limited evidence in the record indicating that such a difference in response time is competitively significant,[8] Ameritech does not reveal the source of the retail performance data, the conditions under which it was obtained, or the basis for its goal of providing wholesale access in 10 seconds.[9]

---

[7] Apparently the PSCW did not have this comparative data at the time it closed the record for its May 29 decision rejecting Ameritech's preordering interface, as it stated that "Ameritech was not able to provide comparisons to Ameritech customer service representatives for any of the pre-ordering functions." PSCW Second Order at 19.

[8] See e.g., Affidavit of Betty L. Reeves ¶ 7 ("Reeves Aff."), attached to Sprint Petition. Mr. Connolly of AT&T points out that multiple preordering inquiries per customer will have a multiplier effect on any differences in response time. Affidavit of Timothy M. Connolly ¶ 203 ("Connolly Aff."), attached to AT&T Comments, Exhibit F.

[9] The MPSC noted Ameritech's testimony that "since Ameritech retail did not use the actual interfaces that CLECs use to access OSS, the operation of the interfaces could not be compared to Ameritech's own experience." MPSC Consultation at 26.

On cross-examination in the Illinois Corporation Commission hearings, Meixner of Andersen Consulting indicated that he had not examined a series of problem logs associated with Ameritech's EDI interface.[10] In its application, however, Ameritech reviews the preordering entries in at least one such log, indicating that none of the error entries associated with preordering functions was caused by a deficiency in Ameritech's systems. Some parties, however, assert several other reasons why Meixner's testimony, particularly regarding resale ordering, discussed below, should be discounted, including that Andersen personnel did not consult CLECs regarding their experience using the EDI interface. The Department agrees with some of these criticisms with respect to resale ordering;[11] regarding preordering, however, Andersen Consulting's personnel did consult and test with USN, the only commercial user of the preordering interface, and Ameritech indicates that its inquiries with MFS, the only other carrier to test the interface, went unanswered.

Carrier-to-carrier testing of all three EDI functions (CSR, due dates, and telephone numbers) was performed with USN in January 1997, and with MFS in April 1997. The tests with MFS consisted of 305 transactions involving all three EDI preordering functions, resulting in 44 or 14% "errors" according to Ameritech. While Ameritech indicates that these errors may have been due, at least in part, to MFS' systems, no breakout of the errors is provided, and Ameritech apparently requested feedback from MFS without response. Rogers Aff. ¶ 26.

---

[10] Illinois Commerce Commission, Investigation Concerning Illinois Bell Telephone Company's Compliance with Section 271(c) of the Telecommunications Act of 1996, Docket No. 96-0404, Transcript of Proceedings, at 1777 (May 6, 1997).

[11] Perhaps the most serious deficiency, cited by AT&T, was Andersen Consulting's failure to examine the interaction of the EDI interface with Ameritech's OSSs. See Connolly Aff. ¶ 188.

Ameritech does not provide details of the USN testing, although since January USN has employed the CSR retrieval function commercially, accessing about 4,000 CSRs a week, for example, in April. It appears that no other commercial use has been made of the EDI preordering functions. The file transfer functions, however, are apparently in commercial use by several carriers. Rogers Aff. ¶¶ 27, 29.

Finally, Ameritech submits a letter from Telesphere Solutions, an interface software developer, stating that Telesphere was able to build a test interface to Ameritech's preordering interface. Rogers Aff. at Schedule 3. Telesphere now offers CLECs its software in the form of both a GUI and application-to-application interface to transact with Ameritech's EDI preordering interface. Rogers Aff. at Schedule 4.

In all, it appears that Ameritech has made significant progress with its preordering processes. Because of the relationship between due dates or telephone number reservations and ordering functions, however, further evidence that these functions will operate in a nondiscriminatory manner at increased volumes, and in conjunction with the ordering of services or elements, would provide greater assurance of their operation. While actual commercial use of these functions may not be necessary to a demonstration of their proper operation, i.e., if a BOC establishes that no CLEC is interested in using or testing the interface, experience with Ameritech's (and other carriers') EDI ordering interface suggests that it is extremely difficult to ensure such operation even with the significant testing Ameritech has conducted to date. Thus, particularly with regard to EDI-based due date and telephone number functions, further carrier-to-carrier testing and/or commercial use appears necessary to enable Ameritech to make the necessary showing.[12]

2. Ordering and Provisioning of Resale Services

Ameritech's ordering and provisioning functions have incurred the most commercial use of Ameritech's wholesale support processes. As of its application date, Ameritech had installed over 18,000 resold lines region-wide in 1997. In addition to conventional, manual methods of ordering resale services, Ameritech provides an EDI-based ordering interface which is currently in commercial use by several carriers.[13]

Orders received by Ameritech via facsimile are manually entered into Ameritech's OSSs for processing. In contrast, orders received through the EDI interface are often processed in a fully automated fashion, requiring immediate, electronic interaction between the interface and Ameritech's OSSs. Some orders received via the EDI interface, however, are either reviewed or edited manually prior to being processed by Ameritech's OSSs.

---

[12] See, e.g., Reeves Aff. ¶ 12.

[13] Well in advance of national standards for carrier-to-carrier ordering of resale services, Ameritech implemented an EDI interface to accept high volumes of such orders pursuant to the limited standards that existed at the time. Ameritech has since agreed to conform its EDI interface, within 120 days or at the latest January 1, 1998, to the new standards recently adopted by ATIS for resale ordering. Ameritech provides the most convincing evidence—commercial operation—that the interface is functioning properly. Currently AT&T, MCI, and USN, among others, are using the interface commercially, and there appears to be little dispute that the interface itself, one of the two key automated steps of providing resale services, is functioning adequately at least for communicating orders for POTS services. Further, Ameritech's performance using its current EDI interface can serve as a benchmark during its transition to an interface compliant with ATIS EDI SOSC Issue 7.0, which Ameritech has agreed to implement within 120 days of issuance.

As would be expected of a new and complex automated process, Ameritech's resale interface and back-office processes encountered some early problems. In view of these initial problems, the PSCW found that, as of April 1, 1997, Ameritech's resale ordering interfaces and processes were not operational.[14] Based on evidence available as of that date, the PSCW found that Ameritech's ordering processes were not providing predictable, reliable results, and thus were not operating at parity with its retail operations.[15]

Among the main deficiencies discussed, the PSCW pointed to late completion notifications via the EDI interface and double billing problems as a customer-affecting difficulties that required resolution. Other problems relating to the interaction of Ameritech's EDI interface and its back-office systems were cited, including the rate of manual, versus automated processing of orders received via the EDI interface. (The staff of the PSCW correlated manual processing with higher rates of order-completion delays.[16]) Since the record closing dates of this decision, Ameritech has initiated fixes for many of these problems and produced evidence that these solutions are improving performance for some such problems. As

---

[14]The first Illinois HEPO, based on evidence submitted through January 16, 1997, found that Ameritech had not provided empirical evidence that its OSS were operational and functional, and Ameritech was directed to work with carriers that experienced orders that were rejected or that required manual intervention. ICC First HEPO at 28. The second HEPO found that the OSS were available and operational. ICC Second HEPO at 49-51. In his discussion of the issues raised by the parties to the proceeding, the Hearing Examiner made certain factual findings that would appear to undermine this conclusion. <u>See</u> following notes 16, 17, and 26.

[15] Part of the PSCW's decision may have been based only on evidence submitted through February 26, 1997. <u>See</u> PSCW Second Order at 18.

[16]The Illinois Hearing Examiner, in the second HEPO, found that manual intervention <u>does</u> "prevent Ameritech from providing these services at a quality level that is at parity with the quality that it provides these services for itself," at least for an interim period before industry standards are available. ICC Second HEPO at 49.

of Ameritech's application date, however, Ameritech had only days before put in place solutions for the double billing problem discussed below.[17]

Most recently, the MPSC found that, although Ameritech was providing access to OSS functions, the Commission could not determine whether Ameritech was providing such access in a nondiscriminatory manner or in a manner providing CLECs with a meaningful opportunity to compete. In particular, the MPSC found that Ameritech had failed to provide appropriate performance measures and associated retail and wholesale results enabling the commission to accurately determine the parity of Ameritech's retail and wholesale performance. Further, the MPSC pointed out the lack of objective standards, apart from parity determinations, with which to gauge the performance of wholesale functions.

Like the MPSC, the Department has found it extremely difficult to untangle the web of conflicting evidence surrounding Ameritech's resale processes. As we discuss below, with no common language between the participating parties to describe Ameritech's performance, and faltering performance during the last reported and highest volume month, the Department believes that Ameritech has not demonstrated the operability of its processes at this time, under these circumstances.

The most complicating factor, discussed by the MPSC and by the Department, below, is the lack of clarity in the performance results reported by Ameritech and the absence of a common language of measures and standards with which to gauge the operation of these new

[17]The second Illinois HEPO discusses double-billing as the "most serious problem relating to Ameritech's OSS" and notes that, although Ameritech appears committed to solving the problem, it has presented no statistics to support its contention that the problem is resolved. ICC Second HEPO at 50.

processes. Clarification in these areas will permit the states, the Department, and the Commission to determine whether Ameritech is satisfying its obligation to provide resale services under Sections 251 and 271. We discuss below specific examples of why such a demonstration is not made in the current application, and improvements necessary to such a demonstration.

a. Meeting Due Dates for Resale Service Installation

Providing resale services in substantially the same time as analogous retail services is probably the most fundamental parity requirement in Section 251. By definition, Ameritech provides at retail the identical services it offers CLECs for resale. The avoided-cost pricing of resale services in Section 252 assumes that the wholesale input to either the BOCs' or requesting carriers' service will be almost identical in quality to the consumer, limiting competition to retailing functions. A CLEC's ability to provide customers with resale services in the same interval or meet the same due dates as a BOC's retail operation is an essential component of such service quality. Yet, because of the complexity of interfacing with the BOC's OSSs that provision such services, parity may be difficult to provide and even more difficult to demonstrate.

For example, because Ameritech has declined to provide actual installation intervals for resale services or elements, choosing instead to emphasize the meeting of due date commitments, particular clarity is required in describing what is included in Ameritech's figures for meeting due dates. Ameritech reports that for the months of March and April, Ameritech "met" 98.3% and 97.7% of resale installation due dates region wide. These figures are comparable to those Ameritech reports for its retail operations. Were Ameritech and CLECs in agreement, or even close to agreement, as to what these figures represented and their accuracy, a demonstration of nondiscriminatory operation would be straight forward.

In contrast to this perhaps overly optimistic scenario, legitimate controversy exists over whether Ameritech is in fact meeting due dates, and whose due dates. The due dates Ameritech purports to meet are not necessarily, for example, those requested by AT&T. There are certain criteria under which Ameritech changes the AT&T-requested due date for an order. Ameritech describes these criteria in its application, and some appear to be legitimate reasons for modification, such as orders received by Ameritech after their requested due date.[18] Other reasons that Ameritech modifies due dates, however, render the reported data useless for determining the nondiscriminatory operation of Ameritech's processes. For example, when, due to a lack of appropriate processing capacity, a backlog of orders requiring manual review occurs, the delay caused by the backlog may force Ameritech personnel to enter orders into Ameritech's systems after the originally-requested due date. That is, the orders may have arrived via the EDI interface long before the requested due date, but their actual entry into the system may be delayed beyond the due date. Under those circumstances, Ameritech modifies the due date because its systems will not accept entry of an order with a past-due date. This modification, which Ameritech does not account for in its reported data, obviously masks the very capacity problems the commenting parties, the states, the Department, and the Commission are attempting to assess. This is not to say that Ameritech has purposefully hidden this practice, but it certainly

---

[18] See Mickens Aff. ¶¶ 86-89.

cannot provide a basis for the Commission to find that operation of Ameritech's resale processes is nondiscriminatory.[19]

If Ameritech-changed due dates are discounted, Ameritech met due dates requested by AT&T roughly 76% of the time in April.[20] The actual measure of appropriate due dates met during this period is higher than this figure because, as is discussed above, there may be legitimate reasons for Ameritech to change requested due dates in certain instances.[21] Further, for orders placed during the week of highest volatility in April, that of April 27, Ameritech completed roughly 73% of AT&T's orders within the original, AT&T-requested due date. Again, for the reasons stated above, the actual figure is likely to be higher than 73%, but how much higher is unclear given the data Ameritech filed in its application. Obviously these figures pale in comparison to Ameritech's reported retail performance (e.g., Ameritech reports that it met 98.8% of retail due dates in April), but the comparison is one of "apples to oranges" because these wholesale and retail figures are measured dissimilarly due to the complications discussed above.

---

[19] Since the filing of its application, Ameritech (jointly with AT&T) has submitted data to the Department accounting for this practice and clarifying other data. The Department, however, has not had a full opportunity to evaluate this information, and thus will comment here only on the data submitted with Ameritech's application.

[20] This figure is based on data Ameritech supplied to AT&T and relied on by AT&T in its presentations before the MPSC. Ignoring invalid AT&T requested due dates, Ameritech completed 3,958 out of 5,204 orders on time as originally requested by AT&T.

[21] See Mickens Aff. ¶¶ 86-89.

b. Manual Capacity Constraints

In April, the most critical month of commercial use prior to Ameritech's application date, and thus the most valuable month to Ameritech in proving the operation of its systems, Ameritech asserts that AT&T had dramatic order-volume swings which caused a backlog and thus a degradation in overall performance. Because a certain percentage of orders that Ameritech receives electronically are processed manually (roughly 40% for Michigan in April),[22] the dramatic increase in volume increased the number, but not the percentage of orders requiring manual processing.[23] While Ameritech's systems were able to process successfully the orders that "flowed through" electronically, Ameritech's heavy reliance on manual processing, and lack of adequate manual capacity to match the increase at the time, caused the backlog in manual processing. This backlog affected all CLECs placing orders with Ameritech, including USN.[24] Obviously, the danger of such delays and errors resulting from manual processing decreases as the percentage of orders processed electronically increases.

If Ameritech relies on manual procedures to process a significant portion of orders received via its EDI interface, the capacity of its electronic processes becomes less important

---

[22] There is evidence in the record indicating that Ameritech's figures for manual processing underestimate the actual manual processing taking place. See Affidavit of Susan L. Z. Bryant ¶ 136 ("Bryant Aff."), attached to AT&T Comments, Exhibit E.

[23] In a separate instance in May, AT&T submitted ramped up volumes of orders that Ameritech could not process electronically, causing a significant increase in both the number and percentage of orders processed manually by Ameritech. This May incident, however, should not be reflected in Ameritech's figures for April.

[24] USN stated in the Michigan hearings that it had experienced "considerable backlogs" during this time frame. Michigan Public Service Commission, In the matter, on the Commission's own motion, to consider Ameritech Michigan's compliance with the competitive checklist in Section 271 of the Telecommunications Act of 1996, Case No. U-11104, Transcript of Proceedings, at 157 (May 28, 1997) ("MPSC Transcript, May 28, 1997").

than that of its manual procedures, as the events in April indicate. The manual capacity becomes the weakest link in the processing chain. Ameritech states that its capacity planning is based on "relatively stable volume increases," Mickens Aff. ¶ 88, but the competitive local marketplace, especially during the early stages of entry, may not accommodate Ameritech's expectations. Certainly, Ameritech cannot and should not build systems to anticipate every conceivable volume swing within its monthly forecasts, but given the low volume of orders involved in this incident (4,541 Michigan orders for AT&T in the last two weeks of April, representing a mere 13% of the forecasted 33,877 total orders for all CLECs region-wide that month),[25] we believe there is cause for concern and a need for additional improvement.[26]

c. Minimum Processing Intervals

Ameritech's measurement of firm order confirmation (FOC) and order reject intervals reveals additional, significant information about Ameritech's process performance. The FOC and order rejection intervals reported by Ameritech can be used as an indicator of minimum installation intervals regardless of the actual due dates requested by CLECs or established by

[25] Because in many cases Ameritech's performance measurements do not include pending orders until they are processed, the full impact of the increase in late April will be reflected in the data for May, which was obviously incomplete at the time Ameritech filed.

[26] As noted previously, the second Illinois HEPO recognizes that extensive manual processing means that Ameritech is not providing CLECs with service quality at parity with that it provides itself. ICC Second HEPO at 49. In concluding, nonetheless, that Ameritech's OSS comply with the checklist, the HEPO finds that "[p]arity must be interpreted to mean that any quality problems are within reasonable limits," and adds that "what is reasonable today may not be reasonable in the near future. The Commission is committed to seeing exact parity in service quality in the very near future." Id. at 51 (discussing percentages of rejected CLEC orders). The Department believes that providing resale services in substantially the same time as analogous retail services is a fundamental parity requirement. Where, as here, manual intervention causes that requirement to not be met (or demonstrated), then the statute's requirement of parity has not been satisfied. See also infra Appendix B.2.c., re Minimum Processing Intervals.

Ameritech. It is the Department's understanding that, regardless of whether an order is received via facsimile or through the EDI interface, Ameritech returns a FOC or order rejection only upon the entry of such orders into an Ameritech OSS. For example, if an order is received via the EDI interface, and requires manual review or editing prior to electronic processing, the FOC or rejection will only be sent after the manual processing is completed and the order is forwarded to a particular OSS. Orders that flow through electronically, and do not require manual review, trigger an almost immediate FOC or rejection.[27] Because an order cannot be completed prior to its entry into Ameritech's systems, and the wait for a FOC or rejection indicates the time required for such entry, the time it takes Ameritech to return FOCs or rejections is an indication of the absolute minimum time Ameritech would have required to complete the order. In addition, beyond their use as barometers of performance, FOC and rejection notifications play a critical role in a CLEC's ability to keep its customer apprised of installation dates (or the changing thereof) and modify a customer's order prior to installation.

As is depicted in Schedule 22 of Mickens affidavit, the percentage of FOCs not returned to CLECs within 96 hours has increased markedly from roughly 14% in January to 45% in April. See Mickens Aff. ¶ 101. This is a troubling indication that the minimum time for Ameritech to process orders is increasing as volume has increased. Although, as Ameritech points out, the figures for April are affected by the "spikes" in volume discussed above, the trend upward began in the previous months, and because the "spikes" occurred toward the end of April, data for May

[27] See, e.g., Connolly Aff. ¶ 134.

may be impacted even more.[28] The reason this trend is not reflected in the due date discussion, above, is because AT&T's requested due dates have been sufficiently lengthy to mask the trend. In contrast to the data in Schedule 22, covering all FOCs, Schedule 25 includes FOC data for EDI only, representing primarily transactions with AT&T. The figure of 11.9% of FOCs returned in excess of 48 hours in April appears not to include the bulk of the FOCs resulting from orders placed in late April.[29] See Mickens Aff. ¶ 98. Thus, without data for May, the impact of AT&T's ramp-up cannot be discerned. Further, because only FOCs that were sent are included within this measure, those never sent due to error are not considered.

With regard to order rejections, AT&T presented evidence before the MPSC, based on Ameritech data, that average order rejections were taking upwards of almost 6 days in April, and were almost always taking longer on average than order completions.[30] Again manual processing delays are likely the cause given the immediacy of a rejection performed electronically. These delays leave CLECs in limbo vis-a-vis their (potential) customers for significant periods of time, whereas Ameritech retail representatives receive comparable notifications of order errors almost immediately.

Accordingly, as of the filing date of this application, the Department believes Ameritech has failed to demonstrate its ability to provision resale services in a nondiscriminatory manner.

---

[28] Mickens Aff. ¶ 101. Ameritech, however, does not clearly indicate which FOCs are included under Schedule 22 (or 23, 24, or 25, which appear to be identical) versus Schedule 25. Schedule 22 appears to represent all FOCs, whether the result of manual or EDI-based ordering.

[29] The number of FOC transactions listed in Schedule 25 for April is less than half of the number of orders submitted by AT&T alone.

[30] CLEC Exhibit 6 submitted at Hearing on Ameritech Michigan's Operation Support Systems, MPSC Case No. U-11104 (May 28, 1997); Bryant Aff. at Attachments 21 & 22.

As is discussed above, clearer performance data are a precondition to such a demonstration, and based on the data provided, additional performance results demonstrating nondiscriminatory operation is also required.

3. Unbundled Loop Ordering

Ameritech has processed over 39,000 unbundled loops in Michigan and Illinois since 1995, over 10,000 region-wide in 1997, and roughly 8,000 via its ASR electronic interface.[31] With the exception of due dates, discussed below, Ameritech's performance with respect to unbundled loops appears to be satisfactory. For example, according to Ameritech's reported results, the trouble report rate for unbundled loop customers remained on average below that of Ameritech retail customers throughout every reported month in 1997.[32] Similarly, restoration and service outage rates for loop and retail customers generally did not appear significantly disparate on average throughout the reported months of 1997, and where disparities existed, Ameritech appears to have provided, generally speaking, reasoned explanations for the disparity or improved results since such disparate performance.

As in the case of resale services, however, Ameritech's critical performance regarding due date obligations appears controversial and unclear. Again, because of Ameritech's resistance to reporting actual installation intervals,[33] Ameritech's due date performance is crucial to its demonstration that unbundled loops are meaningfully available to competitors. The

[31] Mickens Aff. ¶ 23, Schedules 18 and 25. Ameritech has committed to implement, within 120 days of finalization, the now-finalized ATIS EDI SOSC Issue 7.0, which includes EDI ordering guidelines for loops, switching, loops plus number portability, and loops plus switching.

[32] Mickens Aff. ¶¶ 62-63.

[33] See Subsection C to this Appendix.

controversy surrounding Ameritech's performance can be summarized by comparing Ameritech's claimed results with those reported by Brooks Fiber, Ameritech's highest volume loop customer: while Ameritech reports meeting due dates 94-98% of the time, Brooks reports due dates met only 55-63% of the time.[34]

Rather than repeat the details of the controversy between Ameritech and Brooks Fiber, fully explored in detail in the MPSC's hearings and final recommendation, we again note that without some common understanding of Ameritech's performance and the measures with which to gauge such performance, it is extremely difficult for Ameritech to demonstrate, and thus for the Commission to conclude, that Ameritech is providing unbundled loops in accordance with its obligations under Sections 251 and 271. This is not to say that the Department has concluded that Brooks' data is correct, or that a parity determination would necessarily be far off once a proper understanding of Ameritech's performance was reached. But on the basis of the record presented, in particular by Brooks Fiber and WorldCom's MFS subsidiary, and in accordance with the similar findings of two state commissions that have addressed the matter, the Department believes Ameritech has failed to make a convincing showing in this regard.

Finally, the Department shares the concerns raised by many parties regarding Ameritech's fragmented approach to automating the loop ordering and provisioning process via a combination of ASR (loop order), EDI (number portability), and facsimile (disconnect) mechanisms. Ameritech's adoption of this methodology, however, preceded even the initial industry forays at standardizing the loop ordering process. Now that such standards are in place for EDI, Ameritech has committed to implementing those standards within 120 days assuming

[34] Mickens Aff. at Schedule 19; Brooks Opposition at Attachment G.

the cooperation from other carriers that is always necessary in establishing an interface.[35] The Department views evidence of Ameritech's progress in fulfilling this commitment as fundamental to its demonstration under Section 271, and we will closely monitor both Ameritech's progress and the cooperation it is provided by competitors over the coming months.

4. Unbundled Switching and Combinations of Elements

In Section III.A. we discuss in detail our view of Ameritech's unbundled switching and shared transport offerings, including combinations thereof. We note here that, from an operational point of view, Ameritech is currently engaged in one of two planned trials of providing a combination of local switching with other network elements. Kocher Aff. ¶¶ 71-78. The results of these trials may provide important evidence of Ameritech's ability to provide unbundled local switching in combination with other network elements, in addition to the appropriate usage and billing information required by such combinations. Currently, however, Ameritech does not offer sufficiently detailed evidence, beyond the general discussion of internal testing in Kocher's affidavit, of internal or other testing to demonstrate its ability to provide local switching alone or in combination with other elements. See Kocher Aff. ¶¶ 47-70.

5. Maintenance and Repair

In addition to manual methods, Ameritech provides two electronic interfaces for performing maintenance and repair transactions. First, Ameritech provides the industry standard T1M1 interface for reporting access service trouble. Ameritech has used this interface with large interexchange carriers for two years and asserts that the same interface may be used for reporting

[35] Rogers Aff. ¶ 10.

POTS service troubles. In support of its assertion, Ameritech states that MCI has used the interface to report 189 troubles on Ameritech POTS lines since May, 1996. MCI partially refutes this claim, however, alleging that MCI "did not check the status of the trouble reports, obtain completions, or in any other way use the interface as it is intended to be used to report troubles for a CLEC's own local customers." Affidavit of Samuel King ¶ 148 ("King Aff."), attached to MCI Comments, Exhibit D.

In accordance with our view that smaller competitors require an alternative to expensive interfaces such as the T1M1,[36] Ameritech also provides a graphical user interface for reporting maintenance trouble. CCT has apparently tested and begun commercial use of the GUI, and Ameritech's pay phone subsidiary has, according to Ameritech, processed thousands of trouble reports with the GUI in the identical manner as a CLEC would. Rogers Aff. ¶ 93. Finally, Ameritech presented robust capacity figures for its T1M1 interface. Meixner Aff. at Schedules 21-22.

In contrast to the evidence presented for other processes, including the T1M1 interface, Ameritech fails to present details of the functionality or internal testing of the GUI for use in local services.[37] For example, although Ameritech asserts that CCT has performed carrier-to-carrier testing of the GUI, Ameritech provides neither results of such testing nor details of CCT's alleged commercial use. While evidence of high volume and successful use of the GUI by

[36] USN, for example, testified that the T1M1 interface is currently too expensive to justify for its operations. MPSC Transcript, May 28, 1997 at 154-55.

[37] Meixner reviews internal test results of the T1M1 interface's capacity, using benchmark transactions created by Ameritech and Further Inspection, a software consulting firm. Meixner Aff. ¶¶ 41-42.

Ameritech Pay Phones may prove to be quite persuasive, Ameritech provides few details other than monthly use statistics. See Rogers Aff. ¶ 93. Without evidence of at least internal testing, and where available carrier-to-carrier testing and commercial use, Ameritech cannot demonstrate operation of these interfaces.

6. Billing

Ameritech provides daily usage data and wholesale bills to CLECs. The former enables CLECs to bill customers, the latter is Ameritech's bill for wholesale services to the CLEC. Ameritech appears to provide industry-standard EMR format usage files in a timely manner.[38] This usage data affects a CLEC's ability to answer customer inquires and obtain revenue for services provided, and thus such timely provisioning is competitively significant.

Ameritech has experienced difficulties, however, in providing wholesale bills in a timely manner. According to Schedule 25 of Mickens' affidavit, Ameritech was late in providing such bills 42.9% of the time in January, 100% of the time in February and March, and 91.7% of the time in April. See Mickens Aff. ¶ 111. Ameritech acknowledges its lack of performance in this category, and discusses in detail both the reasons for its lack of performance and the changes being made to remedy the situation. Mickens Aff. ¶¶ 112-113. The Department will look for improvement in this area in the coming months.

Finally, Ameritech has experienced problems coordinating order completion notifications transmitted to CLECs, with the suspension of Ameritech billing system activity, which should end upon completion of the customer's migration to a CLEC. The problem, discussed at length

[38] Mickens Aff. at Schedule 25. MCI asserts, however, that it continues to experience significant problems with Ameritech's EMR feeds. King Aff. ¶¶ 159-162.

in the Wisconsin and Illinois dockets, has caused double billing incidents, where both Ameritech and the CLEC bill the customer for service during a period. This is a serious, customer-affecting problem that Ameritech has acknowledged. Ameritech has asserted that, although billing system activity apparently continues after a completion notice is transmitted to the CLEC, solutions were put in place on May 12 that prevent the billing systems from mistakenly sending out bills after such notice.[39] Obviously as of Ameritech's filing date, nine days after these solutions were put in place and twenty-one days after the last reported performance data, it is too soon to tell whether the fixes implemented by Ameritech have eliminated the double billing problem.

7. Documentation

Although several CLECs have commented on the dramatic improvements in Ameritech's interface and ordering documentation, some note that further clarification is required, in particular with respect to "USOCs" and "FIDs," the codes that Ameritech uses to identify services and features.[40] These codes appear on the customer service records Ameritech provides CLECs. If a CLEC cannot accurately identify the corresponding services and features a customer currently receives, the CLEC may not be fully aware of service-affecting ramifications of assuming service obligations for the customer or be able to order services accurately. Ameritech has assured the Department that improvements in this area of documentation have been forthcoming, and we will reserve comment until CLECs have had an opportunity to take advantage of these improvements.

---

[39] Rogers Aff. at Schedule 14.

[40] See, e.g., Affidavit of Wayne Charity ¶¶ 8-10, attached to LCI Comments, Exhibit C.

C. Missing Performance Measures

1. Actual installation intervals for resale

Ameritech currently measures and reports two installation measurements for its resold services. The first is installations outside of a six day interval, while the second is due dates not met. Mickens indicates that installations outside of interval is a measure that Ameritech has tracked in the past for its own retail customers, that Ameritech can therefore report a comparable measure for both resale and retail installations, and that the measure is an indication of network performance. Mickens Aff. ¶¶ 36-37. Mickens adds that an actual installation interval is meaningless because the measure is affected by the end-users' choice of due dates. Id.

The trouble with this position, as the MPSC has recognized, is that "[m]easuring rates of completion within a target period of time rather than determining actual average time to complete a task does not permit direct comparisons to Ameritech's retail performance." MPSC Consultation at 31. In other words, if 100% of Ameritech's retail customers receive service on day one, while 100% of the CLEC's customers do not receive their service until day five, then a report of installations outside of six days will show parity of performance, not revealing the discriminatory difference in performance between Ameritech and the CLEC.[41]

Obviously, it is unlikely that every Ameritech and CLEC customer will want service as soon as possible. Many subscribers will want service on a specified date that may be extended past the first available installation date. It is reasonable for these installations to be excluded from the count, so that the measure is an appropriate comparison of performance rather than a

[41] See Friduss Aff. ¶ 63 ("This 'raw' interval is as important, and perhaps more important, than the percentage of completions beyond a set objective.")

comparison of the respective desires of Ameritech's customers versus the CLEC's customers.[42] The MPSC agreed with this approach, stating that "performance must measure what is in Ameritech's control in order to help prevent attempts to waive the relevance of particular performance measurements. If an order completion date can be determined either by Ameritech or by the desires of the customer, the latter should not be included in Ameritech's performance measure." MPSC Consultation at 31.[43]

The Department is not committed to a particular method of obtaining the required information when an adequate substitute is available. Mickens states that, while Ameritech will not provide a measure of actual installation intervals,[44] it is willing to audit, upon request, its due dates offered to its retail units and the CLECs. Mickens Aff. ¶ 37. A commitment to audit in the future, however, does not present the information that is required to evaluate today whether Ameritech is providing nondiscriminatory service as required by the Act. Nor has Ameritech provided any information on how such an audit would be conducted, making it impossible to evaluate whether the audit proposal is, in fact, an adequate substitute for the actual measure. In

---

[42] The definition of the measure must make it clear which installations are being counted and which are being excluded so that all understand what is being measured.

[43] It would appear that Ameritech recognizes this; its current definition of installations outside of interval notes that "[t]his measure does not include customer requested due dates." Mickens Aff. at Schedule 5, Section 3, at 1.

[44] Ameritech's position on average installation intervals might be unfavorably compared to its position on measures for repair and maintenance where, after requests by both CLECs and regulators, Ameritech agreed to measure and report both average-time-to-repair in addition to its original proposed measure of out-of-service-over-24 hours. Mickens Aff. ¶ 32.

addition, Ameritech's suggested frequency of such an audit—every six months for the first year and annually thereafter[45]—appears too limited.

2. Installation interval for loops

Ameritech has proposed no measure of installation interval for unbundled network elements, specifically loops. This makes it impossible to discern from Ameritech's reports whether or not it is achieving the level of performance committed to in its contracts. The provisioning of unbundled loops does not have a direct analogy to any Ameritech retail function, so Ameritech points to the specific, "objective performance standards" contained in its contracts as the appropriate measure of non-discriminatory provisioning, asserting that these standards are "based on Ameritech's experience and consider the unique nature of each request for access to unbundled network elements." Mickens Aff. ¶ 24. Yet Ameritech does not provide in its application the information sufficient to measure whether these contractual intervals have been achieved.[46]

Ameritech's proposed measure of due dates not met, while an important measure on its own, does not capture the information necessary to determine installation intervals. Similar to the resale scenario above, it is conceivable, for example, that Ameritech might report only 10% due dates not met but this would not reveal that the "missed" due dates were all orders where the

---

[45] Mickens Aff. ¶ 37.

[46] Mickens's affidavit provides a more detailed analysis of the performance results for Brooks Fiber, a Michigan CLEC using Ameritech loops, Mickens Aff. ¶¶ 51-61, but this information is not reflected in the performance reports Ameritech has committed to provide on an ongoing basis. Moreover, as discussed above, Brooks has disputed Ameritech's measure of the results.

CLEC had requested the standard interval while the "met" due dates were all orders for which the customer had requested an extended installation.

3. Comparative Performance Information for UNEs

Unlike its report for resold services, Ameritech's performance report for unbundled network elements (UNEs) contains no information permitting a comparison between Ameritech and its competitors. While there may be fewer measures that can be compared in a UNE environment,[47] a number do exist. Ameritech has discussed some of them in the Mickens Affidavit, for instance where he compares the due dates not met for Brooks Fiber and for Ameritech retail. Mickens Aff. ¶ 51.[48] Ameritech's retail results for trouble report rate, receipt to restore, and out of service over 24 hours are included as comparable in its resale reports and there is no obvious reason why they could not be similarly reported on the unbundled loop reports.

---

[47] But see MPSC Consultation at 31, "Although exact parity of operations may not exist on the retail and wholesale operations, instances which are substantially analogous should be utilized for purposes of comparison. For example, as was suggested by DOJ, 'the provisioning of an end-to-end combination of loop, switching, and transport elements is, in some cases, analogous to a BOC's retail POTS line. In such cases, the Department would normally expect a BOC to process an order in the same automated fashion that it processes retail POTS lines.'"

[48] Although Mickens claims that missed due dates for unbundled loops are not comparable to missed due dates for Ameritech retail POTS "because the provision of unbundled loops is fundamentally different from the provision of bundled local service", Mickens Aff. ¶ 51, this explanation goes to why the actual installation interval for unbundled loops cannot be compared to actual installation for retail POTS. The fundamental difference described is appropriately reflected in the differing installation intervals and not in the missed due dates measure.

4. Other Missing Measures

There are other performance measures which are discussed in the Friduss affidavit but are not apparent in Ameritech's proposed reporting plan. These include certain measures of ordering (service order accuracy and percent flow through, [49] Friduss Aff. ¶ 62), provisioning (held orders and provisioning accuracy, id. at ¶ 63), and billing (bill quality or accuracy, id. at ¶ 66). Also missing for UNEs are repeat reports, a critical measure of customer-affecting functionality. Id. at ¶ 64. Ameritech provides this measure for resale but does not do so for its unbundled loops performance reports.

5. Need for Specific and Clear Definitions

In order for performance reports to be meaningful and useful, the relevant measures must be specifically and clearly defined. Without such definition, the reports will be meaningless if not actually misleading to a CLEC or regulator. "[C]ycle-time performance measures are dependent on the specific definition of start and stop times, while reliability measures are dependent on the specific definition of what constitutes a failure." Friduss Aff. ¶ 23. The MPSC recognized the importance of this in its list of criteria: "A specific determination of how measurements should be made must be delineated. If orders received late in the day are treated as next day orders, this should be specified and performance of Ameritech's retail operations should be similarly measured." MPSC Consultation at 32. Before Ameritech's proposed performance measures can be considered sufficient to judge non-discrimination and detect post-entry backsliding, they must be specifically and clearly defined.

---

[49] Ameritech has provided some discussion of order flow-through in Rogers Aff. ¶¶ 37-41.

Ameritech has recognized the need for agreement on the definitions of tracked measures. As Mickens states, "any meaningful performance measurement analysis requires a common understanding of timing procedures." When "it became clear that Ameritech and an Illinois-based CLEC, Consolidated Communications Telecom of Illinois, Inc. ("CCT") were not measuring or reporting repair time in the same manner," Mickens Aff. ¶ 40, Ameritech and CCT met, isolated and discussed the differences between their measurements, and agreed upon a joint definition and process to use going forward.[50] Mickens describes these steps in detail in his affidavit. Id. It appears that the same process may still need to occur with regard to ordering and provisioning measurements, among others. See MPSC Consultation at 26 ("It has not been determined how some proposed standards will be measured. The primary example of this is the huge difference between the data provided by Brooks and the data provided by Ameritech in regard to assessing whether unbundled loops have been installed on time.") Ameritech's stated definition for service due dates reads only "The agreed-upon date when service order is due," Mickens Aff. at Attachment 5, Section 3, and does not detail Ameritech's specific measuring procedures such as counting orders received after 3 p.m. the next business day, and excluding weekends and holidays from the calculation. Nor does the stated definition make clear Ameritech's practice of measuring relative to due dates it has defined rather than those the CLECs had requested. See Section B.2.a., above. Regardless of which measure is more

[50] See generally Mickens Aff. ¶¶ 38-40; Illinois Commerce Commission, Investigation concerning Illinois Bell Telephone Company's compliance with Section 271(c) of the Telecommunications Act of 1996, Docket No. 96-0404, Supplemental Direct Testimony of Warren Mickens, at 8-10 (Apr. 4, 1997).

representative of performance, [51] this lack of clarity reduces the value of the performance measure.

In addition, Ameritech's definition of due dates not met, relating "the number of missed appointments to the total number of appointments in the reporting period" does not reveal that the measure includes only installations completed past due and excludes orders which are pending past due. Ameritech may have an appropriate reason for excluding pending orders from its due date calculation, and has, in fact, included an analysis of pending orders in the text of Mickens's affidavit,[52] but the lack of clarity in the definition of the measure may cause confusion.[53]

6. End Office Integration (EOI) Trunks

Ameritech provides testimony concerning its EOI trunk offers and associated wholesale support processes. According to Mayer's affidavit, to mitigate trunk blocking CLECs can request additional trunking to augment existing EOI trunk groups, they can request two-way trunks, and they can request trunks that directly connect Ameritech end offices to a CLEC switch.[54] In addition, Mayer recommends that CLECs establish points of interconnection (POI)

---

[51]<u>But see</u> Friduss Aff. ¶ 23 (missed appointments "should be measured against the original due date; due date changes could only be considered when explicitly requested by the end user").

[52]<u>See</u> Mickens Aff. ¶¶ 102-103 (4,000 pending resale orders, 1,500 pending past due; 1,030 unbundled loop orders, 172 pending past due).

[53]<u>See</u> PSCW Second Order at 19: "Ameritech's measure of due dates met was inaccurate as it did not consider overdue orders still pending as having missed due dates. An analysis of due dates not met should include overdue pending orders as a due date not met."

[54] Mayer Aff. ¶ 36.

with each tandem in the LATA to provide alternate interconnection paths for when one trunk group is (temporarily) at capacity.

The Department commends Ameritech's efforts to provide effective wholesale support processes for EOI trunks. There is evidence to suggest, however, that Ameritech has not provided CLECs with sufficient ability to control EOI trunk blockage. In particular, TCG describes an effort lasting more than six months to resolve blocking problems in Chicago and Detroit.[55] It claims to have attempted to resolve the blocking problem through each of the alternatives described in the Mayer affidavit.[56]

The Department is also concerned that CLECs may not have access to the data needed to solve EOI blocking problems when the blocking occurs on the Ameritech side of the POI. Specifically, CLECs cannot identify which Ameritech end offices are candidates for EOI trunks without access to Ameritech network call flow data. Ameritech has this data, but to our knowledge it has not provided it to any CLEC, nor has it committed to do so. Without such information to identify the sources of blocking, it may be unreasonable to expect CLECs to propose costly network reconfigurations.[57]

---

[55] TCG Comments at 4-8 and Pelletier Aff. ¶¶ 10-24.

[56] TCG has a POI at each of the three tandems in the Chicago LATA. However, it questions whether its NXXs are routed to alternative POI when the initial POI is blocked. TCG has also requested both two-way trunking and trunks between Ameritech end offices and the TCG switch. It maintains that Ameritech has refused to provide either of these facilities. TCG Comments at 5-8.

[57] Ameritech claims that CLEC competitors would be able to monitor Ameritech's performance using their own OSS data and Ameritech's public regulatory reports, Ameritech Brief at 91, but that argument appears inapplicable where CLECs do not have this information.

APPENDIX B

Michigan Overview and Descriptions of Local Competitors in Michigan

Michigan is the nation's eighth most populous state, with over 9.5 million inhabitants, and is the second most populous state in the Ameritech region. 70.5% of its population is in metropolitan areas, according to U.S. census data. Of Michigan's five LATAs, two contain significant metropolitan areas centered around Detroit and Grand Rapids.[1] Detroit, with a population of about 1 million, is among the ten largest cities in the U.S, and its greater metropolitan area has a population of some 5.2 million, while the city of Grand Rapids has a population of 190,000, with some 1 million persons in its metropolitan area. These urban concentrations could reasonably be expected to attract local telephone competition in the absence of entry barriers, and indeed have begun to do so on a small scale. Michigan is also the ninth largest state in terms of long distance traffic nationwide, with 17,899,649,000 interLATA access minutes in 1995, 3.25% of the total.[2]

As of 1995, there were over 6.1 million access lines in Michigan, including 5.5 million switched access lines.[3] Of these, Ameritech Michigan had 5.5 million access lines (90% of the total), including 4.8 million switched access lines (88% of the total),[4] the great majority of the remainder being served by independent LECs in separate service areas, rather than competitors in

---

[1] Two of the remaining LATAs are centered around Lansing and Saginaw, and the last is in the more rural Upper Peninsula.

[2] FCC 1996 Common Carrier Statistics at Table 2.6

[3] FCC 1996 Common Carrier Statistics at Table 2.5

[4] FCC 1996 Common Carrier Statistics at Table 2.10

its service area. In 1996, Ameritech Michigan served between 4.9 and 5.1 million switched access lines.[5] Of Ameritech's access lines in Michigan, 4.5 million are located in metropolitan areas,[6] with nearly half of Ameritech's lines, some 2.3 million, in the Detroit LATA.[7] In 1996, Ameritech had about 1.7 million business and 3.2-3.3 million residential switched access lines throughout Michigan.[8] Data in Ameritech's brief and supporting affidavits, together with information in the comments and other public documents of competitors, identifies a total of between 67-80,000 access lines in service or ordered by local exchange competitors in Michigan,[9] and while service resale has grown more recently, total lines actually served by

---

[5] FCC ARMIS Annual Summary Report 43-01, Michigan Bell Telephone Company, 1996, at Table II, row 2150 (4.931 million billable common lines), and FCC ARMIS Annual Service Quality Report 43-05, Michigan Bell Telephone Company, 1996, at Table II, row 0140 (5.081 million access lines). The 1996 10-K Annual Report for Ameritech Corporation, at 3, states that Ameritech had in Michigan 4.979 million access lines in service at the end of 1995, and 5.124 million access lines in service at the end of 1996, a difference of 145,000. Ameritech's own growth in access lines served in Michigan between 1995 and 1996 exceeded the aggregate number of lines served by all of its local competitors. See also AT&T Comments at 32-36, 41.

[6] FCC ARMIS Annual Service Quality Report 43-05, Michigan Bell Telephone Company, 1996, at Table II, row 0140.

[7] Presentation to Department of Justice by AT&T Corp., Ameritech Region (Derived from April 1996 ARMIS Report) (August 19, 1996).

[8] FCC ARMIS Annual Summary Report 43-01, Michigan Bell Telephone Company, 1996, at Table II, rows 2090, 2120 and FCC ARMIS Annual Service Quality Report 43-05, Michigan Bell Telephone Company, 1996, at Table II, row 0140.

[9] The highest estimate of 79,200 lines that can be derived from Ameritech's Harris and Teece Affidavit, Table III.6 (proprietary version), including separate facilities, unbundled loops, and resold lines, overstated the extent of actual competition at the time. Harris and Teece Aff. at Table III.6, 73. Harris and Teece's calculations of competitors' on-net facilities were not based on actual numbers but on estimates from a formula that produced results inconsistent with information from other parties, especially MFS, and with respect to facilities obtained from Ameritech, Harris and Teece included not only unbundled or resold loops in service but also those on order from Ameritech but not yet delivered, which means that the customer is still with

competitive providers in Michigan appear to still be no more than 70,000-80,000, correcting for overestimates in Ameritech's data.

Thus, the aggregate market share of CLECs, measured by total number of access lines statewide using all forms of competition (separate facilities, unbundled loops and resale), appears to be between 1.2% and 1.5%.[10] The CLEC market share measured by revenues is likely slightly higher because the CLECs are focused primarily or entirely on business customers,

---

Ameritech. Brooks lists its total lines in service in Grand Rapids as of June 1997, as 21,786, Brooks Opposition at 6-7, substantially lower than the Harris and Teece estimate, and MFS/WorldCom has also strongly criticized Ameritech's data as inaccurate. WorldCom Comments at 4. The data in Ameritech's brief on competitors' lines yields a slightly smaller aggregate CLEC total of about 71,000 competitor lines, but also relies on the estimates from the Harris and Teece Affidavit that overstate the amount of competition. Ameritech Brief at 10-11, 36, 44, 54 (proprietary version). MCI states that CLECs own or lease at most 67,000 access lines in Ameritech Michigan's region, MCI Comments at 2 and Affidavit of Kenneth C. Baseman and Frederick R. Warren-Boulton ¶ 68, n.52, attached to MCI Comments, Exhibit A., while an affiant for AT&T, using Ameritech's data, has calculated the total as 76,269 lines while noting the likelihood of overestimation. Affidavit of Michael Starkey ¶ 15 ("Starkey Aff."), attached to AT&T Comments, Exhibit T. Some of the data on individual competitors has been claimed as proprietary in Ameritech's filing, and so the Department does not provide separate figures for each provider in its public Evaluation, but these aggregate totals do not reveal any particular competitor's proprietary information.

[10] A market share of about 1.5% can be derived from data in Ameritech's Harris and Teece Affidavit, Table III.6 (proprietary), although this data overstated the extent of actual competition at the time. The data in Ameritech's brief on competitors' lines yields a slightly smaller market share of 1.3%, based on Ameritech's total access lines in 1995. MCI has estimated the CLECs' market share in Michigan as 1.2%, compared with Ameritech's total access lines, MCI Comments at 2, while AT&T, using Ameritech's data, has estimated the CLECs' market share as at most 1.5%. AT&T Comments at 41; Starkey Aff. ¶¶ 7, 15-17. Adjusting the totals of CLECs' lines to account both for the overestimates in Ameritech's data and further information available on the growth of resale since that data was compiled would yield a maximum aggregate CLEC market share in Michigan of about 1.5% of total access lines, based on an upper bound of 80,000 CLEC lines compared with Ameritech's 5.5 million total lines in 1995.

while nearly two-thirds of Ameritech's lines are residential.[11] In Grand Rapids, where the greatest degree of local competition exists, CLEC market share measured by number of lines served by central offices with collocation is 5.9%,[12] and CLEC market share, measured by revenues generated by lines in collocated central offices is approximately 11.4%.[13]

---

[11] For example, Brooks has reported its revenue in Grand Rapids to be $75.37 per line, "Brooks Fiber's Properties Reports Record, First Quarter Revenues" <www.Brooks.net, Q1_table.pdf> (posted Apr. 28, 1997), while the revenue per line for Ameritech can be estimated from published data at $44.77 if only basic local service and network access service is included, or $64.56 if all revenue sources, including intraLATA toll, are included. Based on these figures, the CLECs' aggregate share of local revenues in Ameritech's Michigan service areas is probably not more than 2-3%.

Ameritech's Michigan operations generated approximately $2,948,826,000 in combined basic local service, network access service, and toll network service revenues in 1996, or $3,154,539,000 in total. Basic local service revenues were $1,408 million, network access services revenues were $779 million, and toll network services (intraLATA toll) were $761 million. FCC ARMIS Annual Summary Report 43-01, Michigan Bell Telephone Company, 1996, at Table I, rows 1010, 1020, 1030. Ameritech's Michigan operating company revenues represented 27.88% of its total revenues from its local operations regionwide in 1996, second only to those from Illinois. Total Ameritech revenues from its local operating companies regionwide in 1996 were $11,312,077,000, including $3,553,987,000 from Illinois, $1,219,155,000 from Indiana, $2,213,842,000 from Ohio, and $1,170,554,000 from Wisconsin, as well as the Michigan revenues stated above. Ameritech 1996 FCC ARMIS Annual Summary Report 43-01 for Illinois, Indiana, Michigan, Ohio, and Wisconsin.

[12] 343,000 lines are served by the 11 central offices in which Brooks is collocated, according to "Brooks Fiber Reports Results of Operation of Grand Rapids, Michigan Unit for Competitive Switched Services" <www.Brooks.net> (posted Oct. 24, 1996). Brooks had 21, 786 lines in service in Grand Rapids as of June 1997. Brooks Opposition at 6-7.

[13] This estimate assumes Ameritech's revenue is uniformly distributed across lines. Brooks Fiber's annualized revenue figure is reported in its first quarter results. "Brooks Fiber's Properties Reports Record, First Quarter Revenues" <www.Brooks.net/ Q1_table.pdf> (posted Apr. 28, 1997). The market share is 11.4% if only basic local service and network access, based on FCC ARMIS Annual Summary Report 43-01, Michigan Bell Telephone Company, 1996, at Table I, rows 1010, 1020, are included in the Ameritech revenue figure. This number declines to 8.4% if toll network service is included, and declines to 7.9% if all revenues are included (row 1090).

There are seven firms that the Department has identified as operational facilities-based competitors or resellers in Michigan providing local exchange service -- Brooks Fiber, MFS Intelenet/Worldcom, TCG, MCImetro, USN, AT&T and LCI. Several of these competitors, including Brooks Fiber, MFS, TCG and MCImetro, have fiber networks and local switches in Michigan. In total, however, CLECs have only six local switches in Michigan -- three in Detroit (operated by MFS, TCG and MCImetro), and one each in Grand Rapids, Traverse City and Lansing, all operated by Brooks Fiber -- compared with at least 435 local switches operated by Ameritech Michigan.[14] Profiles of the operational local exchange service competitors in Michigan follow.[15]

Brooks Fiber Communications

Brooks Fiber Communications entered the Michigan local exchange/access market in January of 1996 when it purchased City Signal. City Signal began operation in 1989, as a competitive access provider (CAP) in Grand Rapids. In 1993, City Signal installed a Nortel DMS-500 Class 3/4/5 switch, which enabled it to provide local, tandem, and carrier switching. In 1994, City Signal merged with long distance reseller, Teledial to form US Signal, which was

---

[14] Ameritech Brief at 10-11; MCI Comments at 2-3 (448 switches); Sprint Petition at 33 (440 switches). FCC ARMIS Annual Service Quality Report 43-05, Michigan Bell Telephone Company, 1996, at Table IV, rows 200, 201 identifies 435 local switches in use, while the FCC 1996 Common Carrier Statistics at Table 2.10 (1996) lists Michigan Bell as having 442 central office switches.

[15] In addition to those listed below, Ameritech cites WinStar as a current, facilities-based local exchange provider, and Building Communications and Coast-to-Coast as local exchange resellers operating in Michigan. Ameritech Brief at 74. WinStar does not yet have an approved local tariff, and the Department believes the only services it currently provides are CAP or transport services, not local exchange services. The Department has no independent information on Building Communications or Coast-to-Coast, but Ameritech does not attribute to either of them any substantial activity.

certified to provide switched local service in Grand Rapids in October of 1994, and actually began offering service in August of 1995. Teledial and the US Signal name were sold to LCI in 1995, and the local services company was renamed City Signal, which was merged into Brooks Fiber Properties in early 1996. Brooks Fiber and Ameritech entered into a negotiated interconnection agreement on August 5, 1996, which was approved by the Michigan PSC in November and filed as approved and executed in December 1996. In addition to Grand Rapids, Brooks Fiber currently has facilities in Lansing, Ann Arbor, and Traverse City, and a total of three switches statewide in Michigan. Brooks Fiber provides service to both business and residential customers primarily in Grand Rapids, through a combination of its own facilities and loops leased from Ameritech. It is not engaged in local exchange resale in Michigan. Brooks had 21,786 lines in service in Grand Rapids, its principal service area, as of June 6, 1997, including 15,876 business lines and 5,910 residential lines, making it one of the two largest local competitors of Ameritech in Michigan.[16] Brooks provides 31% of its own access lines in Michigan, obtaining the remaining 69% from Ameritech, so that Brooks is the principal user of unbundled loops obtained from Ameritech in Michigan.[17] Brooks relies on Ameritech for at least some facilities, primarily loops, to reach 75% of all of its customers, including 61% of its business customers and 90% of its residential customers.[18] Brooks has also entered into agreements with long distance carriers, including AT&T and MCI, to provide the local exchange portion of an integrated service offering.

---

[16] Brooks Opposition at 6-7.

[17] Id. at 6-7 and n.18, 9.

[18] Id. at 7; MPSC Consultation at 10.

MFS Intelenet/WorldCom

MFS is the nation's largest CAP, and has been operating in Detroit on a resale basis since 1991 and on a facilities basis since 1995. MFS has a fiber network and one switch in Detroit. It was certified to provide local service in Detroit in May of 1995, and state-wide on November 14, 1996. It has been offering switched local service and access services to business customers in Michigan since May 1996. MFS entered into a negotiated interconnection agreement with Ameritech on May 17, 1996, which was approved by the Michigan PSC and filed in approved, executed form in December 1996. MFS's recent merger with WorldCom creates an integrated, facilities-based local/LD company, and its earlier merger with UUNet allows it to include Internet access as part of a bundled offering. MFS Intelenet does not have any residential service customers in Michigan. According to MFS/WorldCom, 79% of MFS's business lines and 86% of is customers in Michigan are served on a resale basis, including resale of Centrex services, although MFS also has a small number of its loops of its own in Michigan, only 2.2% of its total, and has ordered some unbundled loops from Ameritech, accounting for the remaining 19%.[19]

Teleport Communications Group (TCG)

TCG is one of the nation's largest CAPs, and has been operating in that capacity in Detroit since 1993. TCG was granted certification to provide switched local service in April of 1995. TCG has a fiber network and a Class 5 switch in Detroit and is currently providing both local exchange and access services to business customers. Following a request for arbitration and a decision by the Michigan PSC, TCG and Ameritech filed an executed agreement which

[19] WorldCom Comments at 4, 5 n.10.

was approved by the Michigan PSC in February 1997. TCG has also signed an agreement with AT&T to provide local network access in several markets, including Detroit. TCG concentrates on large businesses that can be served over its own facilities, and as a result, although TGC uses some facilities obtained from Ameritech,[20] it currently has no unbundled loops or resold lines, and does not have any residential service customers in Michigan.

MCImetro

MCImetro is a subsidiary of MCI Telecommunications, created to provide local exchange and access services, primarily over its own facilities, to business and residential customers. MCImetro has fiber rings in Detroit and its suburbs of Warren and Auburn Hills, and a class 5 switch in Detroit. MCImetro was certified to provide switched local service in Michigan in March of 1995, and has been serving some business customers in Detroit since June of 1996, making use of its own facilities and preexisting Ameritech tariffs for resale. It is conducting a trial of residential service with a few customers using loops obtained from Ameritech. MCI launched NetworkMCI on September 12, 1996 in several large cities (including Detroit, Milwaukee, and Chicago), which offers local, long distance, data, conferencing, international long distance, paging, Internet access, and cellular on a single bill. Although MCI has requested interconnection and sought arbitration, and the MPSC issued an arbitration decision in December 1996, there remained unresolved issues between Ameritech and MCI. Therefore, to date neither MCI Telecommunications, nor any of its subsidiaries, has an approved interconnection agreement with Ameritech Michigan, although an agreement was finally signed on June 13, 1997.

[20] TCG Comments at 25-26.

USN Communications

USN is a telecommunications reseller that was initially certified to provide service to some Detroit exchanges on August 22, 1996. On April 26, 1996, USN entered into a ten year interconnection agreement with Ameritech that commits it to be reselling a total volume of 10,000 residential lines and 100,000 business lines during each year after a "ramp-up" period ending December 31, 1997 for residential service, or 18 months after the service start date for business, subject to penalties for underutilization. USN's negotiated agreement with Ameritech was approved by the MPSC in January 1997 and filed as executed and approved in February 1997. USN markets to small and medium-sized business customers, and is currently offering service in at least four cities in Michigan: Grand Rapids, Southfield, Ann Arbor, and Flint.[21]

AT&T

AT&T, the nation's largest telecommunications company, has recently entered Michigan on a resale basis, serving residential as well as business customers. AT&T, after requesting interconnection with Ameritech and unsuccessfully attempting to negotiate an agreement, sought arbitration, and the MPSC issued an arbitration decision in November 1996. This did not lead immediately to an approved agreement, as Ameritech and AT&T continued to dispute certain issues. Ameritech and AT&T filed an executed agreement after further MPSC action in February 1997, and the MPSC approved that agreement in April 1997. AT&T's approved interconnection agreement addresses all three of the entry paths envisioned in the 1996 Act. AT&T has also begun operational testing of the facilities "platform" with Ameritech. This

---

[21] Jim Harger, "Another Hopeful Courts Local Phone Customers: USN Communications Targets Small and Medium-Sized Businesses," Grand Rapids Press, Mar. 15, 1997, at C7, 1997 WL 7865202.

appears to be AT&T's preferred near-term means of entry. Over the longer term, AT&T may also become a facilities-based provider in Michigan using its fixed wireless technology. It appears that AT&T's resale activities to date have made it one of the two largest local competitors of Ameritech in Michigan, although this competition is still on a very small scale.

LCI Communications

LCI is a large long distance reseller that has recently entered Michigan as a reseller of local services. It does not have an approved interconnection agreement with Ameritech, and is reselling service under existing tariffs. It is marketing to small and medium-sized business customers.