

1 Mr. Rogers's schedule 1 has been marked as Exhibit
2 No. 1.

3 JOSEPH ROGERS, AMERITECH WITNESS, DULY SWORN
4 (Exhibit 2 marked.)

5 EXAMINER JAMES: We'll go back on the
6 record.

7 Direct Examination

8 By Mr. Dawson.

9 Q. Mr. Rogers, are you the same individual who has
10 caused to be filed in this proceeding 41 pages of
11 prefiled direct testimony with two exhibits
12 attached?

13 A. Yes, I am.

14 Q. And 11 pages of rebuttal testimony?

15 A. That's correct.

16 Q. If I asked you those same questions under oath,
17 would you give the same answers appearing in your
18 prefiled testimony?

19 A. Yes, I would.

20 MR. DAWSON: Ms. James, I move into
21 evidence the direct and rebuttal testimony of this
22 witness along with Exhibits 1 and 2 identified in
23 his testimony as schedules 1 and 2.

24 EXAMINER JAMES: Are there any
25 objections to the exhibits?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

(No response.)

EXAMINER JAMES: The exhibits are received.

(Exhibits 1 and 2 received.)

EXAMINER JAMES: Is there any objection to the incorporation of the testimony?

(No response.)

EXAMINER JAMES: The testimony will be incorporated into the transcript.

(The prepared testimony of Joseph Rogers was incorporated into the record as follows:)

* * *

**DIRECT TESTIMONY OF
JOSEPH A. ROGERS**

Q. Please state your name and business address.

A. Joseph A. Rogers. Ameritech Industry Information Services, 350 N. Orleans.
Chicago, Illinois 60606.

Q. What is your current position?

A. I am Director - Information Technology for Ameritech Industry Information
Services ("AIIS").

Q. What are your duties and responsibilities?

A. I am responsible for the development, installation and operation of information
systems and operation support systems for AIIS. This includes the
implementation of federal and state telecommunications statutes and regulations
as they relate to systems.

Q. Please describe your educational background.

A. I graduated from the University of Illinois at Springfield with a B.A. in Computer Science in 1984.

Q. What is your professional background?

A. I joined Illinois Bell Telephone Company ("Illinois Bell") in 1974 as a directory assistance operator. After serving in the United States Marine Corps from 1974 to 1978, I returned to Illinois Bell and worked as a central office technician until 1982. In 1982, I became a manager in the Springfield Switching Control Center and was responsible for central office switch translations and central office trouble resolution. In 1984, I was transferred to the Information Technology department of Illinois Bell. My responsibilities were to manage the development, implementation, and maintenance of a customer control system for Centrex services. In 1986, I was transferred to Ameritech Services Inc. to develop the same customer control system for use throughout the Ameritech region. In 1991, I became a Consulting Systems Engineer with Ameritech Services, Inc.; my responsibility was to consult with senior management on the use of Information Technology. I assumed my current position in 1993.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide additional evidence regarding Ameritech Wisconsin's ability to provide competing carriers with unbundled, nondiscriminatory access to its Operations Support Systems ("OSS") functions. These are the business functions supported by Ameritech Wisconsin's databases and information which ensure that pre-ordering, ordering, provisioning, maintenance and repair, and billing for unbundled network elements and resold services are performed accurately and efficiently. In accordance with the applicable FCC requirements, and as I describe in further detail below, Ameritech Wisconsin currently provides requesting carriers nondiscriminatory access to these OSS functions. Finally, I will address the sixth issue in the Commission's Notice, the procedures for notifying users of impending changes in the interface, and the extent to which users will have input the modification process.

Q. What are the key elements in determining whether Ameritech Wisconsin meets its OSS obligations?

A. There are two key elements. First, the OSS function interfaces must be operational in the marketplace and/or must have undergone sufficient testing to ensure that they will provide competitors with the requisite OSS-related capabilities. I will refer to this as "operational readiness". Second, there must be sufficient capacity built into the system interfaces or the system interfaces must be

expandable on a timely enough basis that Ameritech Wisconsin can respond to marketplace demand. I will refer to this as "capacity readiness".

Q. How would you characterize the operational and capacity readiness of Ameritech Wisconsin's operating support system interfaces?

A. The interfaces and other functionalities necessary to provide electronic access to Ameritech Wisconsin's OSS functions are fully operational today. This is true for both unbundled network elements and resold services. For example, electronic interfaces for unbundled loop ordering are in use today by carriers like MFS and CCI in Illinois and Brooks Fiber in Michigan and have been in use since April of 1995. The electronic interface for resale order entry has been ready for commercial use for months. The electronic interface for pre-ordering functions has been operational since mid-December 1996 and one carrier is currently using that interface. I will describe in more detail the Company's operational readiness relative to all of the interfaces used by requesting carriers to access Ameritech's OSS functions, including the extensive testing which all of them have undergone.

Because OSS system access for unbundled network elements and resold services is somewhat different, I will discuss them separately.

With respect to Ameritech Wisconsin's capacity readiness relative to these OSS functionalities, the OSS system interfaces have been sized so as to ensure more than sufficient capacity to meet the expected marketplace demand. I will provide specific information on the actual demand forecasts that were used; the capacity that is in place and planned to be installed this next year; and Ameritech Wisconsin's capacity tracking and planning process. In addition, I will describe how current planned capacity greatly exceeds current demand forecast, and how quickly additional capacity can be added in the event it is required.

Operational Readiness

Q. Please describe the major OSS operational functions.

A. The major OSS operational functions are as follows:

- Pre-ordering
- Order entry
- Provisioning
- Repair and maintenance
- Billing information

These functions are common to both unbundled network elements and resold services. I will separately discuss the operational readiness of the interfaces

corresponding to each of these OSS functions. In addition, for ease of understanding, I will discuss the latter four OSS functions separately for unbundled network elements and for resale.

Q. Are Ameritech Wisconsin's electronic interfaces for access to pre-ordering functions currently available?

A. Yes. The electronic interfaces required to provide access to Ameritech Wisconsin's pre-ordering functions for unbundled network elements and resale services are currently being made available by Ameritech Wisconsin to requesting telecommunications carriers. Within the pre-ordering function, there are five sub-functions:

- access to customer service records ("CSRs");
- access to telephone number selection (i.e., the ability to select and reserve telephone numbers while the end user is on-line);
- determination of feature availability (i.e., the features/services that are currently available in that end user's central office or for that prefix);
- due date selection (i.e., the ability to select an order due data and schedule any outside work required while the end user is on-line); and
- address validation (i.e., the ability to determine that a given address is valid and properly expressed).

These pre-ordering sub-functions are common to both unbundled network elements and resale services.

Q. What electronic interfaces does Ameritech Wisconsin use to provide access to these pre-ordering sub-functions?

A. The electronic interfaces used to provide access to these sub functions are Electronic Data Interchange ("EDI") and File Transfer. The first of these, EDI, may be described as computer-to-computer communications of basic business data, in standard formats, among firms that regularly conduct business with one another. EDI is used to give requesting carriers on-line access to CSRs, telephone number selection and due date selection. Ameritech Wisconsin's EDI formats are consistent with the Customer Service Order Guideline, Issue 5 of the Alliance for Telecommunications Industry Solutions ("ATIS") and the Telecommunications Industry Forum. The second type of interface, File Transfer, electronically transfers entire files to the requesting carrier. The requesting carrier receives data at regular intervals, stores it, and accesses it as needed. File Transfer is used to provide access to feature availability and address validation.

Q. Who developed the components for Ameritech's pre-ordering interface?

A. The components underlying the interface needed to provide access to these systems were developed by Bellcore and G.E. Information Systems. A third

system required to manage the GEIS and Bellcore systems was developed by Telesphere.

Q. Would you describe the testing that was done on Ameritech's pre-ordering interface?

A. Yes. First of all, it is important to note that this interface was developed externally and, therefore, was subject to extensive testing by the vendors before the individual components were shipped. The individual components were delivered by the vendors in late November 1996. Ameritech then performed acceptance testing on the individual components before assembling them for integration testing. Integration testing was then performed on the complete interface. Each of the business functions (i.e. customer service record access, due date selection and telephone number selection) was tested to ensure that the complete interface performed as designed. The Company created test cases that would test the full extent of the interface. Like the integration test performed on the order interface, there were a few errors, but all were resolved quickly.

Q. Is Ameritech's electronic pre-ordering interface being used by any carrier today?

A. Yes. USN Communications Inc. ("USN") is currently using Ameritech's electronic interface for pre-ordering.

Q. Please describe in detail the operational readiness of Ameritech Wisconsin's order entry processes for unbundled network elements.

A. Electronic interfaces for unbundled network element order entry are fully operational and in use in the marketplace today. These interfaces were thoroughly tested before they were placed in commercial operation. Ameritech receives approximately 1,500 orders for unbundled loops per month on a regional basis and approximately 27,000 unbundled loops have been processed through these systems since April of 1995, the vast majority of which were processed in the last six months.

Q. What electronic interfaces are used to provide access to Ameritech Wisconsin's OSS functions for ordering?

A. The interfaces used for ordering unbundled network elements are EDI and Access Service Request ("ASR"). ASR is a standard interface that Ameritech has used since 1984 to exchange access orders with interexchange carriers ("IXCs"), and since April 1995 for order entry with respect to unbundled network elements. EDI is used for ordering unbundled local switching. ASR is used for the remaining unbundled network elements (e.g., loops and unbundled interoffice transmission facilities).

Q. Is the interface required for provisioning activities associated with unbundled network elements operational?

A. Yes. There are three sub-functions within provisioning: firm order confirmation, change in order status and order completion. An electronic interface for firm order confirmation (ASR) has been operational and processing "live" transactions since April 1995. There is no need for a mechanized interface for verifying order status or completion. Most unbundled loop orders are coordinated with the other carrier and the other carrier is fully aware of both order status and time of completion.

Q. What about repair and maintenance systems for unbundled network elements?

A. Ameritech Wisconsin has developed an electronic interface for repair and maintenance for unbundled network elements which is fully tested and operational. The industry standard specification for this interface is T1M1, which refers to an OSI CMISE interface established by the Operations, Administration, Maintenance and Provisioning Committee of ATIS. This same interface is being used by AT&T and MCI today for repair and maintenance activities related to their carrier access services. Therefore, there is no question that the interface is operational.

At this point, all of the carriers currently subscribing to unbundled loops are using a manual interface for repair and maintenance functions. This manual interface is in operation and functions well.

- Q. Is there any deficiency in the electronic interface that is prompting these carriers to prefer the manual interface for repair and maintenance?**
- A. No. These carriers prefer the manual interface because their volume of trouble reports has not reached a level which would warrant mechanization at their end.
- Q. Please describe the operational readiness of the billing system associated with unbundled network elements.**
- A. Billing for unbundled loops is provided through Ameritech's Carrier Access Billing System ("CABS"). This system has been used since divestiture to bill IXCs for carrier access charges. It has been used to bill unbundled loops since April 1995.
- Q. Is there any operational uncertainty associated with the OSS system interfaces supporting order entry, provisioning, repair and maintenance, or billing for unbundled network elements?**
- A. No. They have been up and running with "live" customer transactions (either CLEC or IXC) for many months without system problems.

Q. Is any additional testing required at this point?

A. No. All testing for the order entry, provisioning, repair and maintenance, and billing interfaces was completed before they were placed in commercial operation.

Q. Are carriers currently purchasing a full range of unbundled network elements from Ameritech today?

A. No. Today, Ameritech has only experienced marketplace demand for unbundled loops and circuits for end office integration ("EOI"). However, the interfaces for unbundled transport and other transport-based network elements will be the same as for loops and EOI circuits. Unbundled local switching will be handled under the same interface used for resale.

Q. Please describe the operational readiness of the interface required for access to order entry systems associated with resold services.

A. The EDI electronic interface for resale order entry has been available for use by carriers since February 1996. This interface has been thoroughly tested and is operationally ready.

Q. Are any of the Company's existing resale customers using the electronic interface for order entry?

A. Yes. Until recently, requesting carriers purchasing resale services from Ameritech were using a manual ordering process for their regular operations. The carriers' use of this manual process reflected the small volume of orders which they placed each month, which tended to make the electronic interface less attractive from a cost/benefit perspective. However, AT&T, Network Recovery Services and USN recently shifted to use of the electronic interface.

I also should note that during the OSS carrier-to-carrier interface testing for resale services that was performed with AT&T, "live" customer accounts were processed over the electronic interface and converted to AT&T accounts.

Q. Is the interface required for provisioning activities associated with resold service operational?

A. Yes. The electronic interface for the provisioning function associated with resale services (EDI) is operational. Requesting carriers can electronically receive the necessary information relevant to firm order confirmation, order status and order completion today.

Q. Please provide additional information on the operational readiness of Ameritech Wisconsin's resale repair and maintenance interface.

A. The situation is similar to what I described earlier for the unbundled network element repair and maintenance interface. Ameritech has developed and made available an electronic interface for repair and maintenance activities associated with resale services that is fully tested and operational (TIM1). However, at this time, the carriers who purchase Ameritech's resale services use a manual, rather than electronic, interface for repair and maintenance requests associated with those services.

Q. Please provide additional information on the operational readiness of your resale billing system.

A. The resale billing system has been operational since February 1996. Ameritech has been sending bills and providing daily usage feeds to resale customers such as USN and MFS since April 1996. The interface for transmitting daily usage is known as Exchange Message Record ("EMR"). EMR is based on specifications developed by Ordering and Billing Forum Committee of ATIS, and is widely used to transmit usage data. Ameritech has been using EMR for years. The interface for resale services billing data is the Ameritech Electronic Billing System ("AEBS").

Q. Do you have other comments regarding Ameritech's electronic interface for its resale services billing functions?

A. Yes. I should note that from a billing perspective, as well as from a more general customer perspective, there is no difference between resold lines processed on a manual basis and resold lines processed on an electronic basis once the initial order has been entered. Orders for approximately 35,000 resold lines have been successfully completed since March 1996, 10,000 of these were converted in February 1997; they are being properly billed for through AEBS; and the carriers are receiving the necessary bill detail to bill their own customers. All of these facts demonstrate that the OSS interface for resale services billing functions is operationally ready.

Q. Please describe the testing which the Company has conducted to ensure the operational readiness of its resale interfaces.

A. The electronic resale interfaces have been the subject of extensive internal testing and customer implementation testing with AT&T, USN, CBG, and Network Recovery Services. All of these tests were successful.

Q. Please describe the internal tests which Ameritech Wisconsin conducted.

A. Prior to putting the resale order entry interface into operation in February of 1996, extensive testing was performed to assure that the order entry interface and all systems associated with the order entry process functioned as defined.

First, testing was performed on the mechanized (i.e. electronic) order subsystem. This subsystem represents the only unique piece of software needed to facilitate order entry. The rest of the interface consisted of existing interfaces with Ameritech Wisconsin's operating systems and the EDI mainframe computer which Ameritech has been using for years for purchasing and electronic funds transfer. The mechanized order subsystem was tested to assure the system could accept manually created EDI orders and create Ameritech service orders or present the order to a service representative for manual intervention. Tests were also performed to assure that incomplete or inaccurate orders would not be completed. The subsystem was successfully tested in January of 1996.

Then, an integration test was performed to assure that electronic (EDI) resale service orders could be received; input into the underlying Ameritech OSS systems; provisioned; and, then, properly billed. The testing approach was to create test cases that would mimic the range of resale orders that could be expected when the system was put into production. Thus, the test environment mirrored the "production" or marketplace environment. The Company sampled actual customer accounts to create test orders for the testing environment. These test orders were then processed against real accounts and progress was monitored as the orders progressed through the systems. Of course, these test orders were

identified as such within the system to ensure that no actual customer account was impacted by the test process.

Q. How would you characterize the outcome of the integration test?

A. The overall results of the integration test were very successful. Although there were errors, none of them identified a design flaw and all were quickly resolved.

Q. Has there been any subsequent internal testing with actual customer orders?

A. Yes. Since there have been no customers ready to make high volume use of the electronic order entry interface for resale services, the Company has continued to test the electronic ordering system in parallel with the processing of manual orders. Service representatives sample actual resale orders received manually and simulate them on a mechanized basis for purposes of monitoring their flow through the mechanized system. That effort continues today. Furthermore, all manual orders are processed through the mechanized system for purposes of order tracking and administration.

Q. Were any tests conducted with an actual carrier customer?

- A. Yes. As I indicated previously, implementation testing was performed with AT&T, USN, CBG and Network Recovery Services this year.

From Ameritech Wisconsin's perspective, the implementation testing done with these carriers provided further confirmation that the OSS interfaces and downstream systems for resale services function properly. The Company initially encountered some minor errors that were attributable to the interface. However, they were all resolved within days and there were no "service affecting" errors. A service affecting error is one where a customer's service would have been adversely affected as a direct result of the error (e.g., a material delay in the change-over of the account).

- Q. Would you describe the results of the AT&T implementation testing in more detail?**

- A. Yes. However, I first want to explain what kinds of results one would expect to see in a test of this kind. Whenever systems from two different companies exchange data over an interface for the first time, it is assumed that some minor "syntactical" errors will occur. A syntactical error occurs when the format of the message does not meet specifications. An example of this would be putting data in the wrong field of an order. To minimize these kinds of errors, Ameritech

offers to meet with requesting carrier customers to review their implementation of the interface before any data is actually sent over it.

Q. Once these syntactical problems were resolved, were all of the AT&T orders successfully processed?

A. No, and I would not expect them to be. In any ordering environment, some orders are processed and others are not completed. This has been Ameritech Wisconsin experience with respect to orders entered by its own personnel and I would certainly anticipate the same result with other carriers' orders.

Q. Why would you expect some test orders to be processed and others rejected?

A. Obviously, it is critical that any order entry system correctly process orders that have been properly completed by the carrier customer and properly transmitted through the interface. However, it is at least as important that the system does not complete orders with errors in them to ensure the integrity of downstream operations.

Q. Would you provide an example?

- A. Yes. The order entry interface is the link between Ameritech Wisconsin systems that provision and bill carriers for the services they order and the carrier's systems and databases used to bill their own end users. If Ameritech Wisconsin allowed errors to flow through the interface, it could affect the service which Ameritech Wisconsin provides the carrier's customer, the accuracy of the bill Ameritech Wisconsin presents to the carrier and/or the carrier's ability to accurately bill its end user customer.

For example, if the carrier sent Ameritech Wisconsin an order to add a feature that the interface could not interpret and that order was processed, the carrier's customer would not get the requested feature. Furthermore, the carrier might proceed to bill the customer for the feature, even though the customer did not have it. The likely result would be a disgruntled end user customer and a problem between Ameritech Wisconsin and the carrier. By identifying the error at the order entry stage and returning it to the originating carrier, the error can be fixed before any negative consequences occur.

- Q. Do Ameritech Wisconsin's own internal systems reject orders in similar circumstances?**

A. Yes. However, the order is not "returned" to anyone. The system simply indicates an error and requires that the error be corrected before the orders is processed.

Q. Please describe the AT&T testing process.

A. Testing with AT&T was separated into four phases. The first phase was connectivity testing. In this phase, the ability to send and receive orders between the two companies' operations support systems was tested. Once this was completed and orders passed between the two companies, transaction content testing was performed to assure that order content was correct. This was accomplished through the exchanging of test orders. Once this was completed, end-to-end testing was performed to assure that AT&T resale test orders could flow completely through the system. The first three test phases, i.e., connectivity, transactional and end-to-end testing, were completed in early October 1996. The fourth phase of testing, production testing, began on October 7, 1996.

Q. What were the results of the production testing that followed the AT&T tests after the initial start-up period?

A. Attached as my Schedule 2 is a summary of the orders Ameritech received from AT&T from October 7, 1996, when production testing started, to November 26,

1996. During this period, AT&T sent Ameritech 157 orders. Of the 157 orders, 64 were completed, 3 were pending and were subsequently completed and 90 could not be completed. AT&T was aware of the disposition of each of these orders because it received messages that informed AT&T that an order had been completed or could not be completed. These messages also informed AT&T of the deficiencies in the orders. Of the 90 orders that could not be completed, 79 could not be completed because of AT&T's errors.

Q. Is Ameritech Wisconsin still in implementation testing with AT&T.

A. No. On March 10th AT&T began offering local service in Michigan using Ameritech resale and Ameritech's electronic ordering interface.

Q. Do the carriers interfacing with Ameritech Wisconsin have the information they need to configure their systems to meet Ameritech Wisconsin's?

A. Yes. Ameritech has provided requesting carriers with the information that they need to configure their systems to operate in tandem with the Company's OSS. Ameritech's OSS interface specifications are provided to requesting carriers and are available to others, provided that they enter into appropriate agreements protecting the confidentiality of these materials. In addition to this information, Ameritech has created training manuals and conducts training programs for requesting carriers which want to subscribe to its resale or unbundled offerings. Ameritech routinely sends experienced personnel to requesting carriers' premises to explain its OSS and provides hands-on "walk-through" of the service order and

other processes. Ameritech also has prepared extensive documentation for each process which explains all of the steps required. This documentation is updated on a regular basis to keep it current. Every effort has been made to keep the OSS interfaces and processes as simple as possible.

Q. Would you describe Ameritech's approach to determining the necessary capacity for its OSS function interfaces?

A. Yes. The Company relied on actual demand forecasts by the carriers (to the extent the carriers provided them) and its own internal projections. These projections were used by my organization in designing and sizing the OSS function interfaces.

Q. Could you provide an overview of Ameritech Wisconsin's capacity readiness?

A. Yes. Attached as ~~my~~^{Ex} Schedule 1 is a matrix which provides an overview of Ameritech's OSS readiness from a capacity perspective. It lists for each OSS function and sub-function:

- the electronic interfaces Ameritech uses to provide requesting carriers access to each OSS function and sub-function;
- the planned monthly capacity for those electronic interfaces for each quarter in 1997;