



**MPSC Case No. U-12320**

**Pre-Order Processing Timeliness Plan**

**March 13, 2003**

# Pre-Order Processing Timeliness Plan

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## Pre-Order Processing Timeliness Plan

### 1. Purpose

The purpose of this plan is to describe actions Michigan Bell Telephone Company (“SBC”) has taken and plans to take to improve pre-order processing timeliness. This plan was first filed on October 30, 2002 (“October 30 Compliance Filing”). Pursuant to the Michigan Public Service Commission’s (“MPSC’s”) Order issued on January 13, 2003 (“January 13 Order”) in Case No. U-12320 (“SBC’s §271 Checklist Compliance Docket”), the plan was revised and filed on February 13, 2003 as a draft. The February 13 draft addressed the specific issues identified in the January 13 Order regarding pre-order transaction protocol conversion (i.e., EDI translation) timeliness. Specifically, the January 13 Order required that SBC’s filing include: validation that recent changes to its pre-order EDI translator software resulted in a decrease in translator processing time; details of any further plans in this area; and the status regarding Performance Measurement 2 relating to protocol conversion time. SBC further modified this plan based on input received during the collaborative session held at the MPSC Offices in Lansing, Michigan on March 4-5, 2003. Additionally, SBC reviewed the changes with the MPSC Staff and collaborative participants on a conference call held on March 12, 2003.

### 2. Issue Definition

BearingPoint, Inc. (f/k/a KPMG Consulting) performed a Pre-Order, Order and Provisioning Volume Test as part of the Third-Party Operations Support Systems (“OSS”) testing. Following each of the multiple iterations of that testing, BearingPoint issued various Observations and Exceptions regarding the results. These Observations and Exceptions were consolidated into Exception 112.

During the course of volume testing, SBC made system enhancements addressing the functional issues and timing issues identified by BearingPoint. These enhancements were retested by BearingPoint in subsequent volume test iterations. BearingPoint’s most recent analysis has confirmed that there are presently no unsatisfied determinations for the functionality evaluation criteria, and few issues with timeliness.

The timeliness of the EDI pre-order interface was the issue most consistently cited by BearingPoint during the course of its volume testing. Of the failed test points resulting from volume testing identified by BearingPoint in its report on the OSS Evaluation, virtually all are associated with pre-order transaction timeliness, and more with the timeliness of the EDI pre-order interface than with the CORBA or GUI interface<sup>1</sup>.

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<sup>1</sup> BearingPoint’s Pre-Order, Order, and Provisioning volume test consisted of forty-four test points. Thirty-three of these test points were considered as satisfied in

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Based on then-current performance results, and taking into consideration the significant shift and trend by CLECs to use the CORBA and Verigate interfaces rather than the EDI interface for pre-order inquiries, SBC believes its EDI pre-order performance satisfactory. However, in response to the interest of parties to this OSS evaluation, SBC has continued to examine alternatives to improve EDI pre-order timeliness.

### 3. Actions

#### A. Pre-order EDI translator improvement results.

In its October 30 Compliance Plan filing, SBC proposed a plan for pre-order timeliness. That plan described a configuration change that had been made to SBC's pre-order EDI translator and the expected performance from same, intended future translator software evaluations, and potential system upgrades.

During 3Q02, SBC and Sterling Commerce worked to determine whether it was possible to improve the performance of its Gentran EDI translation software. After initially concluding that no such performance improvement was possible, a custom modification to the software configuration was attempted. This custom modification effectively reduced the amount of system processing performed on each transaction. Testing confirmed the performance improvement and that there was no detrimental impact on process functionality. This software configuration change was then made to the production EDI translator on September 11, 2002<sup>2</sup>.

Data collected by SBC for monitoring EDI translator performance shows a significant improvement as a result of this September 11 software configuration change. These data are included as Attachment 1.<sup>3</sup> The average protocol translation time improved from 1.4 seconds inbound and 1.7 seconds outbound prior to the translator configuration change to

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the October 30 OSS Evaluation report. The test points not satisfied included timeliness of five individual EDI pre-order transaction types, timeliness of two individual GUI pre-order transaction types, timeliness of two individual CORBA pre-order transaction types, appropriateness of responses to GUI pre-order transactions, and timeliness of order reject transactions. See January 13, 2003 "Report of Michigan Public Service Commission" in Case No. U-12320 at pp. 61-63.

<sup>2</sup> See AT&T's comments filed 11/15/02, Connolly affidavit at pg. 34, ¶ 77, questioning whether SBC had actually placed the modified translator configuration into production.

<sup>3</sup> MPSC January 13 Opinion and Order, pg. 5, requiring that SBC provide information to validate that the September 11, 2002 configuration change produced a decrease in translator processing time.

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.36 seconds inbound and .73 seconds outbound after the change; this can be seen in examining the data just before and just after implementation of the configuration change.

### **B. Pending Pre-order EDI translator improvement**

Further, SBC will upgrade the existing SBC commercial EDI translator to the most recent version of software, Gentran:Server 6.0, in 2Q2003. The configuration change, as outlined above, will be carried over to this upgraded version<sup>4</sup>.

Sterling Commerce released a completely new version of their EDI translator software in late 2002. This new version is referred to as Sterling Integrator. SBC is evaluating this new translator software, and considering implementation of the software.

During October 2002, the SBC EDI group examined the technical documentation, viewed product demonstrations, and held discussions with the Sterling Integrator development team. While there are a number of new application management features in the Integrator product, no obvious performance enhancements over the translator software configuration presently in use by SBC were identified at that time.

Subsequently, SBC's translator operating environment was replicated for Sterling so that they could perform comparison measurements in their labs<sup>5</sup>. On February 6, 2003, the Sterling technical team identified a potential way to further improve translator response time using Sterling Integrator. This solution, however, has limitations in its ability to handle multiple versions and trading partners. We are continuing investigation to determine if it is possible to realize the performance improvements while retaining necessary functionality.

The following table provides the schedule for the actions discussed in this section:

Task	Begin	End	Status
1. Implement translator configuration change.	9/11/02	9/11/02	Completed
2. Upgrade EDI translator to latest available version (Gentran:Server 6.0)	02/03/03	6/30/03	In progress
A. Install Gentran:Server 6.0 on test server			Completed

<sup>4</sup> See AT&T's comments filed 11/15/02, Connolly affidavit at pg. 34, ¶ 77, questioning whether the 2003 software upgrade is compatible with other software in the translator configuration.

<sup>5</sup> See AT&T's comments filed 11/15/02, Connolly affidavit at pg. 34, ¶ 77, questioning whether SBC had ordered the software upgrade.

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Task	Begin	End	Status
B. Upgrade operating system version on production translator	02/03/03	Ongoing	In progress
C. Install Gentran:Server 6.0 on production translator	02/03/03	Ongoing	In progress
3. Evaluate performance of Sterling Integrator	12/15/02	Ongoing	In progress

### **C. Status of Performance Measure 2**

As a means to monitor the future performance of the pre-order EDI translator, SBC had jointly proposed with CLECs, and the MPSC has approved, an immediate clarification and amendment to Performance Measure 2, Pre-Order Transaction Timeliness. In this clarification, the measurement of protocol conversion time is clearly defined. This modification to PM 2 is included with the January 17, 2003 filing to the Commission of performance measure modifications resulting from the collaborative six-month review, which the MPSC approved on February 20, 2003. A copy of the modified PM2 is included as Attachment 2. The business rules now clearly define when and where the time stamps are to be taken for protocol translations and for the requested pre-order function. In addition a separate benchmark has been added for protocol translation for EDI, CORBA and WebVerigate. The modified PM2 will be implemented in March 2003 results, reported in April 2003.

Protocol Translation Time – EDI (input and output)	95% in <= 4 seconds
Protocol Translation Time – CORBA (input and output)	95% in <= 1 seconds

Protocol Translation Time – WebVerigate (input and output)	95% in <= 1 second diagnostic
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### **4. Status Reporting**

SBC will file a report regarding its progress on pending pre-order EDI translator improvement discussed in Section 3(b) above to the Commission for its review and serve the report upon the parties of record in MPSC Case No. U-12320 in July 2003 and quarterly thereafter, if needed. SBC will report protocol translation times in accordance with the terms of PM 2 effective with the schedule approved by the MPSC on February 20, 2003, which requires that protocol translation times for PM 2 be effective with March 2003 results, reported in April 2003.

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### EDI Protocol Translation Time (Pre-Order)

SENDER	LOG_DATE	IN_AVG	OUT_AVG	TRANS_COUNT	IN_SEC_TOT	OUT_SEC_TOT
EDI	20020901	0.976	1.748	1	0.976	1.748
EDI	20020903	1.451	1.617	1207	1751.52	1951.839
EDI	20020904	1.514	1.665	1164	1761.853	1937.84
EDI	20020905	1.474	1.658	775	1142.69	1285.139
EDI	20020906	1.469	1.603	751	1103.225	1203.565
EDI	20020907	1.346	1.445	20	26.927	28.907
EDI	20020909	1.472	1.646	1051	1546.858	1729.577
EDI	20020910	1.497	1.62	900	1346.923	1458.101
EDI	20020911	1.474	1.672	759	1119.057	1269.149
<b>Totals</b>				<b>6628</b>	<b>9800.029</b>	<b>10865.865</b>
				Avg IN =	1.478580115	
				Avg OUT=		1.639388202
EDI	20020912	0.344	0.569	814	279.847	463.402
EDI	20020913	0.342	0.549	982	335.503	539.067
EDI	20020914	0.347	0.671	47	16.3	31.537
EDI	20020915	0.353	0.759	36	12.691	27.34
EDI	20020916	0.361	0.693	2081	751.99	1442.01
EDI	20020917	0.383	0.706	1910	731.324	1347.946
EDI	20020918	0.347	0.749	2030	704.384	1520.846
EDI	20020919	0.349	0.717	1849	645.167	1325.398
EDI	20020920	0.345	0.738	1780	613.31	1312.95
EDI	20020921	0.349	0.61	68	23.726	41.507
EDI	20020922	0.372	0.613	35	13.02	21.441
EDI	20020923	0.343	0.692	2350	806.808	1626.588
EDI	20020924	0.359	0.782	3000	1078.345	2345.589
EDI	20020925	0.347	0.749	2053	712.898	1538.3
EDI	20020926	0.383	0.796	1956	748.237	1556.162
EDI	20020927	0.385	0.773	1829	703.929	1413.058
EDI	20020928	0.391	0.72	92	35.983	66.195
EDI	20020929	0.544	0.844	24	13.047	20.252
EDI	20020930	0.385	0.779	2965	1140.448	2309.75
<b>Totals</b>				<b>25901</b>	<b>9366.957</b>	<b>18949.338</b>
				Avg IN =	0.361644608	
				Avg OUT=		0.731606424

This table shows the time required for processing transactions through SBC Midwest's pre-order EDI translator. All LSOG 5 EDI pre-order transactions for the region are included.

Information is compiled from raw data captured from the EDI translator and has not been modified to be consistent with the expected reporting of this information

Dates are in the format of YYYYMMDD, times are in seconds.

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The following table provides data resulting from an analysis of EDI protocol timeliness for three recent months (December 2002 – February 2003) per the business rules for PM 2 as approved by the MPSC on February 20, 2003. Note that EDI timeliness has exceeded the benchmark established in the recently-updated PM 2 for all three months.

<b>Month</b>	<b>Count</b>	<b>EDI-IN</b>	<b>EDI-OUT</b>
December 2002	127925	99.48%	95.75%
January 2003	129536	99.37%	98.33%
February 2003	189805	99.45%	96.49%

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<b>2. Percent Responses Received within “X” seconds – OSS Interfaces</b>
<b>Definition:</b>
The percent of responses completed in “x” seconds for pre-order interfaces (WebVerigate, EDI and CORBA) by function.
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>• None</li></ul>
<b>Business Rules:</b>
<p>Timestamps for the interfaces (WebVerigate, EDI and CORBA) are taken at the SBC Pre-Order Adapter and do not include transmission time through the xRAF or protocol translation times. The clock starts on the date/time when the query is received by the SBC Pre-Order Adapter and stops at the date/time the SBC Pre-Order Adapter passes the response back to the interfacing application (WebVerigate, EDI pre-order or CORBA). The response time is measured only within the published hours of interface availability as posted on the CLEC On-line website.</p> <p><a href="https://clec.sbc.com/clec/hb/filelist/docs/011030-012759/OSS%20Hours%20of%20Operation.xls">https://clec.sbc.com/clec/hb/filelist/docs/011030-012759/OSS Hours of Operation.xls</a></p> <p>For the protocol translation response times, interface input times start at the time the interface receives the pre-order query request from the CLEC and the end time is when the connection is made to the SBC Pre-Order Adapter for processing. Interface output times start when the interface receives the response message back from SBC Pre-Order Adapter and the end time is when the message is sent to the CLEC.</p> <p>If the CLEC accesses SBC systems using a Service Bureau Provider, the measurement of SBC's performance does not include Service Bureau Provider processing, availability or response time.</p>

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<b>Levels of Disaggregation:</b>					
<ul style="list-style-type: none"> <li>• Address Verification</li> <li>• Telephone Number Assignment (includes inquiry, reservation, confirmation and cancellation transactions)</li> <li>• Customer Service Inquiry (CSI) &lt;= 30 WTNs (Also broken down for Lines as required for DIDs).</li> <li>• Customer Service Inquiry (CSI) &gt; 30 WTNs/lines</li> <li>• Service Availability</li> <li>• Service Appointment Scheduling (Due Date)</li> <li>• Dispatch Required</li> <li>• PIC</li> <li>• Actual Loop Makeup Information requested</li> <li>• Design Loop Makeup Information requested (includes Pre-Qual transactions)</li> <li>• Protocol translation time – EDI (includes input and output times)</li> <li>• Protocol translation time – CORBA (includes input and output times)</li> <li>• Protocol translation time – WebVerigate (includes input and output times)</li> </ul>					
<b>Calculation:</b>	<b>Report Structure:</b>				
$(\# \text{ of responses within each time interval} \div \text{total responses}) * 100$	Reported for a CLEC, all CLECs, and SBC affiliate where applicable (or SBC acting on behalf of its' affiliate), by interface.				
<b>Measurement Type:</b>					
	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>OH</b>	<b>WI</b>
<b>Tier 1</b>	Low	Low	Med	Low	Low
<b>Tier 2</b>	Med	Med	Med	Med	Med
<b>Benchmark:</b>					
No damages will apply to the Protocol Translation Times for WebVerigate. No damages apply to the disaggregation for CSIs with greater than 30 WTNs/lines. Critical z-value does not apply.					
<b>Measurement</b>					<b>WebVerigate, EDI and CORBA</b>
Address Verification					95% in <= 10 seconds
Telephone Number Assignment (includes inquiry, reservation, confirmation and cancellation transactions)					95% in <= 10 seconds
Customer Service Inquiry < or = 30 WTNs/lines					95% in <= 15 seconds
Customer Service Inquiry > 30 WTNs/lines					95% in <= 60 seconds diagnostic

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Service Availability		95% in <= 13 seconds
Service Appointment Scheduling (Due Date)		95% in <= 5 seconds
Dispatch Required		95% in <= 19 seconds
PIC		95% in <= 25 seconds
Actual Loop Makeup Information requested (5 or less loops searched)		95% in <= 30 seconds
Actual Loop Makeup Information requested (greater than 5 loops searched)		95% in <= 60 seconds
Design Loop Makeup Information requested (includes Pre-Qual transactions)		95% in <= 15 seconds
Protocol Translation Time – EDI (input and output)		95% in <= 4 seconds
Protocol Translation Time – CORBA (input and output)		95% in <= 1 seconds
Protocol Translation Time – WebVerigate (input and output)		95% in <= 1 second diagnostic