

State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

RECEIVED FPSC
JUN 27 AM 11:33
COMMISSION CLERK

DATE: June 27, 2002

TO: DIRECTOR, DIVISION OF THE COMMISSION CLERK &
ADMINISTRATIVE SERVICES (BAYÓ)

FROM: DIVISION OF COMPETITIVE MARKETS & ENFORCEMENT (HARVEY, *JD*
VINSON, BROUSSARD, DUFFEY) *JD*
OFFICE OF GENERAL COUNSEL (FUDGE) *JR*

RE: DOCKET NO. 000121A-TP - INVESTIGATION INTO THE
ESTABLISHMENT OF OPERATIONS SUPPORT SYSTEMS PERMANENT
PERFORMANCE MEASURES FOR INCUMBENT LOCAL EXCHANGE
TELECOMMUNICATIONS COMPANIES. (BELLSOUTH TRACK)

AGENDA: July 9, 2002 - REGULAR AGENDA - PROPOSED AGENCY ACTION -
INTERESTED PERSONS MAY PARTICIPATE

CRITICAL DATES: NONE

SPECIAL INSTRUCTIONS: NONE

FILE NAME AND LOCATION: S:\PSC\CMP\WP\000121A -CMP.RCM

ATTACHMENT NAME AND LOCATION: S:\PSC\CMP\WP\121ATTAC.RCM

CASE BACKGROUND

The Commission opened Docket No. 000121-TP to develop permanent performance metrics for the ongoing evaluation of operations support systems (OSS) provided for alternative local exchange carriers' (ALECs) use by incumbent local exchange carriers (ILECs). Associated with the performance metrics is a monitoring and enforcement program that is to ensure that ALECs receive nondiscriminatory access to the ILEC's OSS. Performance monitoring is necessary to ensure that ILECs are meeting their obligation to provide unbundled access, interconnection and resale to ALECs in a nondiscriminatory manner. Additionally, it establishes a standard against which ALECs and this Commission can measure performance

DOCUMENT NUMBER-DATE

06632 JUN 27 8

FPSC-COMMISSION CLERK

over time to detect and correct any degradation of service provided to ALECs.

Docket No. 000121-TP consists of three phases. Phase I began with workshops conducted by staff with members of the ALEC and ILEC communities. These workshops were held on March 30, 2000, August 8, 2000, and December 13, 2000. The purpose of Phase I was to determine and resolve any policy and legal issues in this matter. Phase II involved establishing permanent metrics for BellSouth Telecommunications, Inc. (BellSouth), including a specific monitoring and enforcement program. With the completion of Phase II, the Commission is beginning Phase III of this docket, which entails the establishment of performance metrics and a performance monitoring and evaluation program for the other Florida ILECs.

By Order No. PSC-01-1819-FOF-TP, issued September 10, 2001, (Final Order), the Commission established permanent performance measures and benchmarks as well as a voluntary self-executing enforcement mechanism (Performance Assessment Plan) for BellSouth. By Order No. PSC-02-0187-FOF-TP, issued February 12, 2002, as amended by Order No. PSC-01-0187A-FOF-TP, issued March 13, 2002, BellSouth's Performance Assessment Plan was approved.

By Order No. PSC-02-0503-PCO-TP, issued April 11, 2002, Docket No. 000121-TP was divided into three sub-dockets: (1) 000121A-TP, in which filings directed towards the BellSouth track would be placed; (2) 000121B-TP, in which filings directed towards the Sprint track would be placed; and (3) 000121C-TP, in which filings directed towards the Verizon track would be placed.

This recommendation is being made to resolve outstanding issues with the BellSouth OSS test and is therefore linked to Dockets 960786B-TL and 981834-TP. However, because the issues raised here are related to Service Quality Measures, the method of effecting change in this case is through Docket 000121A-TP.

JURISDICTION

The Commission is vested with jurisdiction over this matter pursuant to Sections 364.01(3) and (4)(g), Florida Statutes. Pursuant to Section 364.01 (3), Florida Statutes, the Florida legislature has found that regulatory oversight is necessary for the development of fair and effective competition in the telecommunications industry. To that end, Section 364.01 (4) (g),

Florida Statutes, provides, in part, that the Commission shall exercise its exclusive jurisdiction in order to ensure that all providers of telecommunications service are treated fairly by preventing anticompetitive behavior. Furthermore, it is noted that the FCC has encouraged the states to implement performance metrics and oversight for purposes of evaluating the status of competition under the Telecommunications Act of 1996.

DISCUSSION OF ISSUES

ISSUE 1: Should this Commission order BellSouth to file a specific action plan by July 30, 2002, on how it intends to achieve the Service Quality Measure flow-through benchmark by October 30, 2002, and adjust the Self Effectuating Enforcement Mechanism (SEEM) for the flow-through metric?

RECOMMENDATION: Yes. This Commission should order BellSouth to file a specific action plan by July 30, 2002, designed to improve the flow-through Service Quality Measure in order to achieve the mandated benchmark by October 30, 2002, and adjust the Self Effectuating Enforcement Mechanism (SEEM) for the flow-through metric. **(BROUSSARD)**

STAFF ANALYSIS: Flow-through is the ability of an ALEC's electronically submitted order to flow from the OSS interface to BellSouth's ordering systems and on to completion without human intervention. Flow-through of Local Service Requests (LSRs) is critical to the ALECs' ability to deliver service to customers in a timely manner. Fall-out of LSRs for manual handling can result in delays in the return of confirmations or errors and may have a negative impact on the timeliness of the completion of ALEC orders. Ultimately, these delays can result in a lower level of customer satisfaction and ultimately lead to loss of the ALEC's customer altogether.

In Docket No. 960786B-TL, the OSS Test Manager, KPMG Consulting, conducted transaction testing to determine if BellSouth's systems process order transactions in accordance with

Service Quality Measures approved in Order No. PSC-00-2451-PAA-TP and PSC-01-1428-PAA-TL. According to the Florida Interim Service Quality Measurement Plan, Version 3.0, dated June 1, 2001, the benchmarks for the components of Percent Flow-Through Service Requests are:

SQM Flow-Through Benchmarks	
Residence	95%
Business	90%
Unbundled Network Elements (UNE)	85%
Local Number Potability (LNP)	85%

As a result of OSS testing and evaluation criteria, KPMG Consulting issued a "Not Satisfied" for UNE flow-through, meaning that this issue may have a significant business impact on ALECs.

During the initial production testing, from March 13, 2001 through November 25, 2001, KPMG Consulting experienced a 73.50 percent UNE flow-through rate. KPMG Consulting issued Exception 136 on January 15, 2002, detailing that BellSouth's performance of 82.14 percent on UNE flow-through during testing through January 4, 2002, was below the SQM benchmark of 85 percent. BellSouth's response to Exception 136 indicated that a defect modification was completed in a release in February 2002 to address orders that fell out for manual handling due to a due date calculation problem.

Based on retesting results through March 24, 2002, KPMG Consulting issued Second Amended Exception 136. The amendment noted that BellSouth's performance on UNE flow-through of 74.6 percent was again below the SQM benchmark of 85 percent. BellSouth's response indicated that a system enhancement was opened and implemented on June 1, 2002, to increase the opportunity for flow-through of xDSL migration orders. Exception 136 remains open.

Detailed KPMG Consulting results for UNE products are as follows:

DATE: June 27, 2002

KPMG Consulting UNE Flow-Through Testing Results			
	Initial Test	Retest 1	Retest 2
Number of Expected Flow-Through	566	196	378
Number of Flow-Through	416	161	282
Percent Flow-Through	73.50%	82.14%	74.60%
SQM Benchmark	85%	85%	85%

(Source: BellSouth Telecommunications, Inc. OSS Evaluation Report, pg POP-274)

As a result of failing the OSS test for UNE flow-through, staff reviewed the aggregate commercial data for the flow-through metric. Residential and Business flow-through for December 2001 through March 2002 have consistently fallen below the benchmark as indicated in the table below. This table presents the most recent four months of available ALEC commercial data results reported by BellSouth:

Aggregate Commercial Data Results					
December 2001-March 2002					
	Benchmark	Dec	Jan	Feb	March
Residential	95%	89.50%	88.56%	87.17%	86.49
Business	90%	74.07%	74.56%	75.20%	73.55%
UNE	85%	82.67%	85.50%	84.86	83.88%
LNP	85%	87.62%	92.81%	94.12%	92.25%

Source: Varner Affidavit dated May 24, 2002, filed in Docket 960786B-TP and BellSouth Monthly Performance Summary Report, January 2002. (Shading denotes failure to meet benchmark.)

As noted above, BellSouth has consistently failed to achieve the benchmark for Residential, Business, and UNE flow-through. Flow-through, in general, is an important issue for ALECs. UNE flow-through is especially important to ALECs in Florida because UNEs are a step in the direction of facilities-based competition. As such, staff believes a more proactive approach should be taken

to motivate BellSouth to perform at or above the benchmark for all elements of flow-through.

To this end, staff recommends that the Commission require BellSouth to file a specific action plan by July 30, 2002, that would reduce BellSouth-caused fall-out and result in compliance with benchmarks by October 30, 2002. In addition, staff recommends that BellSouth adjust its Self-Effectuating Enforcement Mechanism (SEEM) to establish a greater monetary incentive to meet the minimum flow-through benchmark for this metric.

Staff is proposing modifications to the approved BellSouth SEEM and recommends a separate remedy payment schedule be established for flow-through.

Proposed Tier 1

The "Ordering (O-4): Percent Flow-Through Service Requests (Detail)" metric provides flow-through results by individual ALEC. Currently, if BellSouth flow-through for a particular ALEC falls below the benchmark, payments under Tier 1 progress as follows:

Current SEEM Tier 1 Payments						
Measure	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Ordering	\$450	\$650	\$800	\$1,000	\$1,150	\$1,350

(Source: Florida Self-Effectuating Enforcement Mechanism Administrative Plan, pg A-1)

Since recent flow-through results have, in general, not achieved benchmarks, staff believes it is necessary to add a separate category and schedule of payments to address flow-through. Flow-through results which do not meet the benchmark for any one month would trigger payments per affected item as indicated below:

DATE: June 27, 2002

Proposed SEEM Tier 1 Payments						
Measure	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Flow Through	\$900	\$1,300	\$1,600	\$2,000	\$2,300	\$2,700

Staff proposes the increase in payments for flow-through because the SEEM plan has been approved by the Commission since February 12, 2002, yet there has not been a positive impact on flow-through results. Staff believes significant action is needed at this time.

Proposed Tier 2

The "Ordering (0-3): Percent Flow-Through Service Requests (Summary)" metric is applicable to the Tier 2 SEEM. The Tier 2 remedy payment for Ordering, which included flow-through, is currently \$700 and is triggered when aggregate ALEC performance trails the benchmark for three consecutive months.

Staff proposes Tier 2 payments for flow-through, currently at \$700, be set at \$1,400 per month. Unlike the current scheme for Tier 2, which imposes payments after results fall below the benchmark for three consecutive months, staff recommends payments for flow-through be imposed each month BellSouth fails to meet the benchmark.

Staff further recommends that this modification to the Self-Effectuating Enforcement Mechanism Administrative Plan be revisited during the six-month review to determine if performance warrants continuance of the special Tier 1 and Tier 2 payment scheme for flow-through.

CONCLUSION: The Commission should order BellSouth to file a specific action plan by July 30, 2002, designed to improve flow-through in order to achieve the benchmark by October 30, 2002, and adjust the Self Effectuating Enforcement Mechanism (SEEM) for the flow-through metric by July 30, 2002 for the August 2002 results.

ISSUE 2: To assist in resolving the issues within Exceptions 123 and 157 issued by KPMG Consulting in the Florida OSS test, should the Commission order BellSouth to implement metrics to better prevent and then correct software defects within certain intervals?

RECOMMENDATION: Yes. Staff recommends that BellSouth should establish three new metrics as part of the Service Quality Measures in Docket 000121A-TP. A metric for defect correction intervals and a metric for capturing the number of defects found in a release as shown in Attachments 1 should be adopted. Additionally, BellSouth should develop a software validation metric similar to that in use for Verizon New York. These metrics should be effective August 1, 2002. **(DUFFEY)**

STAFF ANALYSIS: Defective software releases are a significant issue that has emerged from the Florida Third Party Test of BellSouth's OSS. Software defects impair effective ALEC use of BellSouth's ordering, pre-ordering, billing, maintenance and repair systems. ALECs also incur increased costs for having to use manual systems when electronic interfaces fail.

KPMG Consulting Exception 123

Exception 123 states that BellSouth is not classifying change requests as defects in accordance with the BellSouth definition of a defect. KPMG Consulting identified a number of instances where defects were classified inappropriately as new features. According to KPMG Consulting, BellSouth is required to provide alternatives and/or fixes for all defect change requests within a specified time frame. However, issues classified as features or not opened at all are not subject to any resolution time frame. KPMG Consulting states that the lack of timely workarounds and resolutions to defects may result in the ALEC's inability to efficiently execute transactions with BellSouth resulting in ALEC customer dissatisfaction.

KPMG Consulting Exception 157

Exception 157 states that BellSouth fails to follow its software testing and quality processes. According to KPMG Consulting, BellSouth's incomplete internal software testing may affect an ALEC's ability to efficiently execute transactions with BellSouth, resulting in ALEC customer dissatisfaction. KPMG Consulting states that BellSouth did not completely test code

changes for Release 10.2 and 10.3 prior to these releases going into production. The exception cited internal BellSouth documentation that showed BellSouth had "no plan to mitigate the adverse effect of reduced pre-release testing."

Exception 157 states that there were numerous "significant defects in the software when the releases were placed into the production environment." Exception 157 reveals that in Release 10.2 of September 2001, there were ten defects when the release was placed into production. In Release 10.3 of January 2002, there were 31 defects, and, in Release 10.5 in May 2002, there were an additional eleven defects in the software upon release into production.

According to KPMG Consulting, BellSouth identified and published 31 defects contained in the 10.3 release since its January 5, 2002, implementation. As of January 22, 2002, there was a backlog of 61 defect change requests with only 37 scheduled for correction in the April 2002 release.

BellSouth Response to Exceptions 123 and 157

In its post-workshop supplemental data submission on May 31, 2002, for Docket 960786B-TL, BellSouth argues that, notwithstanding the current and ongoing status of the two exceptions, the FCC adequately addressed these complaints together in its Georgia/Louisiana 271 application approval. BellSouth believes that due to information it provided to the FCC in its application, and supported by the Georgia Public Service Commission in its comments, the FCC did not concur with "commenters' assertions that BellSouth fails to implement corrections to defects in a timely manner and that there are unnecessary defects because BellSouth's software implementations are not sufficiently tested before release." BellSouth agrees that reducing coding defects is beneficial for ALECs and that software releases with numerous defects can inhibit a smooth transition between releases.

BellSouth claims that the FCC found "that BellSouth demonstrates that most of these defects have a very small impact and have been corrected quickly and within the time frames set by the Change Control Process." BellSouth points out that the FCC noted the BellSouth explanation that, of the 38 defects outstanding as of March 5, 2002, a number were scheduled or targeted for implementation this year.

DATE: June 27, 2002

BellSouth contends that the evidence shows that it adequately tests for defects. As affirmation of its resolve to properly test and implement releases, BellSouth points to the recent testing of Release 10.5. This release contained numerous complex features and defect fixes. BellSouth claims that appropriate notifications leading up to the implementation were provided to ALECs. BellSouth notes that Release 10.5 was also available to ALECs in the CLEC Application Verification Environment (CAVE). BellSouth discovered certain defects for which there was no workaround or fixes by the scheduled date for implementation. BellSouth argues that it acted appropriately by delaying Release 10.5 for two weeks.

BellSouth contends that such discoveries are not the result of inadequate testing but rather the result of extensive and intensive internal testing. It believes that ALECs will be better served by the delay in terms of receiving a better release, as well as gaining an additional two weeks of testing their own scenarios. BellSouth states that the ALEC complaints, as well as the Florida Third Party Exceptions, are based upon situations occurring prior to the development of new Change Control Process language regarding "ALEC-affecting" defects and revisions to the software testing processes (including additional ALEC testing capabilities in CAVE).

Staff is concerned that some BellSouth releases have contained so many defects that software development resources are being dedicated to correcting those defects after a release, which may be diverting resources from addressing and providing ALEC-requested new features. This contributes to the backlog of unimplemented change requests.

Staff understands that Release 10.5 was delayed due to newly found defects just prior to the scheduled implementation date. As a result, Release 10.6 and 11.0 have each been delayed three weeks to a month. BellSouth contends that the delay of Release 10.5 demonstrates that it adequately tests for defects. Staff agrees that a delay is better than putting a problematic release into production just to meet the announced schedule. However, BellSouth's argument does not address the resulting after effects of the delay. Not only did Release 10.5 contain additional defects after it went into production, but BellSouth has announced that two upcoming releases will be delayed three weeks to a month each. Staff believe that BellSouth is in a spiral in which it is unable to implement releases both on schedule and with only a reasonable number of defects.

DATE: June 27, 2002

For example, on June 10, 2002, the BellSouth Quarterly Tracking Reports showed that 76 percent of the Change Requests BellSouth has implemented since the Change Control Process began in 1998 have been for defects. According to the current BellSouth Release Log for the month of May 10 to June 10, 2002, 87 percent of the Change Requests implemented were for defects.

Staff is concerned that the problems in Release 10.5 were found so close to the originally scheduled release date. If BellSouth testing procedures and resources are adequate, why are severe defects being found so late in release development? Moreover, staff is concerned that while the delay may have prevented some serious defects from going into production, there were still high and medium-impact defects in Release 10.5 after it was placed into production. Based on the above, staff cannot concur with BellSouth's contention that it adequately tests for defects.

Tighter software defect correction intervals will diminish concerns about miscoding the severity levels of defects by BellSouth. ALECs and staff have observed numerous instances of miscoding of defect severity levels. Defect correction intervals are tied to BellSouth assigned severity codes. Defects coded as "low impact" have an open-ended resolution time period, which is stated in the Change Control document as "best effort."

In addition, staff believes that tighter defect software intervals with associated metrics will incent BellSouth to improve the quality of software releases rather than suffer penalties for excessive defects. The staff proposed metric for defect correction interval measurement is contained in Attachment 1. The metric is *Percent of Software Error Corrected in X (10, 30, 45) Business Days*. Staff believes this metric will expedite defect correction. Tier 2 remedy payments are applicable to this metric. Additionally, staff is proposing a metric titled *Number of Defects in Production Releases*. This metric will capture the number of defects associated with a release within the initial three-week period of its implementation. The bulk of defects associated with any release are typically found within three weeks. This metric is shown in Attachment 2.

Adequate testing should help BellSouth meet the twin goals of quality and timeliness. In addition, adequate testing should help BellSouth retain all the scheduled features and defect corrections

DOCKET NO. 000121A-TP

DATE: June 27, 2002

in a particular release with minimal further defects. In order to potentially resolve this issue, staff is recommending that BellSouth develop a new metric for Software Validation. The metric should be designed similar to the Software Validation metric currently in place for Verizon New York. Implementation of staff's recommendation for a new metric for software validation will require BellSouth to improve and expand the test deck it currently uses to validate scenarios used by ALECs.

CONCLUSION: Staff recommends that BellSouth should establish three new metrics as part of the Service Quality Measures in Docket 000121A-TP. A metric for defect correction intervals and a metric for capturing the number of defects found in a release as shown in Attachment 1 should be adopted. Additionally, BellSouth should develop a Software Validation metric similar to that in use for Verizon New York. These metrics should be effective August 1, 2002.

DOCKET NO. 000121A-TP

DATE: June 27, 2002

ISSUE 3: Should this docket be closed?

RECOMMENDATION: No, if no person whose substantial interests are affected files a protest within 21 days of the issuance date of the Order, the Order will become final upon the issuance of a Consummating Order. The docket should remain open to conduct the six-month review outlined in Order No. PSC-01-1819-FOF-TP. Staff recommends that if a protest is filed, then resolution of the protest should be addressed during the six-month review process.
(FUDGE, HARVEY)

STAFF ANALYSIS: If no person whose substantial interests are affected files a protest within 21 days of the issuance date of the Order, the Order will become final upon the issuance of a Consummating Order. The docket should remain open to conduct the six-month review outlined in Order No. PSC-01-1819-FOF-TP. Staff recommends that if a protest is filed, then resolution of the protest should be addressed during the six-month review process.

Percent of Software Errors Corrected in X (10, 30, 45) Business Days

Definition

Measures the percent of Software Errors corrected by BellSouth in X (10, 30, 45) business days within the report period.

Exclusions

- ◆ Software Corrections having implementation intervals that are longer than those defined in this measure and agreed upon by the CLECs.
- ◆ Rejected or reclassified software error (BellSouth must report the number of rejected or reclassified software errors disputed by the CLECs.)

Business Rules

This metric is designed to measure BellSouth's performance in correcting identified Software Errors within the specified interval. The clock starts when a Software Error validation is due to the CLEC per the Change Control Process, a copy of which can be found at http://www.interconnection.bellsouth.com/markets/lec/ccp_live/index.html, and stops when the error is corrected and notice is posted to the Change Control Website. Software defects are defined as Type 6 Change Requests in the Change Control Process.

Calculation

Percent of software Errors Corrected in X (10, 30, 45) Business Days = $(a \div b) \times 100$

a = Total number of Software Errors corrected where "X" = 10, 30, or 45 business days.

b = Total number of Software Errors requiring correction where "X" = 10, 30, or 45 business days.

Report Structure

Severity Level 2 = 10 Business Days

Severity Level 3 = 30 Business Days

Severity Level 4 = 45 Business Days

Data Retained

Report Period

Total Completed

Total Completed Within X Business Days

Disputed, Rejected or Reclassified Software Errors

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Region	95% within interval

SEEM Measure

SEEM Measure		
	Tier I	
Yes	Tier II	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
Not Applicable	95% within interval

Number of Defects in Production Releases (Type 6 CR)

Definition

Measures the number of defects in Production Releases. This measure will be presented as the number of Type 6 Severity 1 defects, the number of Type 6 Severity 2 defects without a mechanized work around, and the number of Type 6 Severity 3 defects resulting within a three week period from a Production Release date. The definition of Type 6 Change Requests (CR) and Severity 1, Severity 2, and Severity 3 defects can be found in the Change Control Process Document.

Exclusions

None

Business Rules

This metric measures the number of Type 6 Severity 1 defects, the number of Type 6 Severity 2 defects without a mechanized work around, and the number of Type 6 Severity 3 defects resulting within a three week period from a Production Release date. The definitions of Type 6 Change Requests (CR) and Severity 1, 2, and 3 defects can be found in the Change Control Process, which can be found at http://www.interconnection.bellsouth.com/markets/lec/ccp_live/index.html.

Calculation

The number of Type 6 Severity 1 Defects, the number of Type 6 Severity 2 Defects, and the number of Type 6 Severity 3 Defects without a mechanized work around.

Report Structure

Production Releases
Number of Type 6 Severity 1 defects
Number of Type 6 Severity 2 defects without a mechanized work around
Number of Type 6 Severity 3 defects

Data Retained

Region
Report Period
Production Releases
Number of Type 6 Severity 1 defects
Number of Type 6 Severity 2 defects without a mechanized work around
Number of Type 6 Severity 3 defects

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Region--Number of Type 6 Severity 1 defects	0 Defects
Region--Number of Type 6 Severity 2 defects without a mechanized work around	0 Defects
Region--Number of Type 6 Severity 3 defects	0 Defects

SEEM Measure

SEEM Measure	
No	Tier I
	Tier II

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
Not Applicable	