

ORIGINAL

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July 15, 2004

Mrs. Blanca S. Bayó  
Director, Division of Records and Reporting  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

RECEIVED-PPSC  
JUL 15 PM 4:34  
COMMISSION  
CLERK

Re: Docket No. 031072-TL

Dear Ms. Bayó:

In connection with the change control process (CCP) associated with BellSouth's operational support systems (OSS), the Commission previously ordered, among other things, that an independent third-party verify that BellSouth allocates, on an equal basis, the resources necessary to respond to certain OSS related Change Requests made by BellSouth and by CLECs. BellSouth retained PricewaterhouseCoopers LLP to conduct the required third-party verification. The attestation has been completed. Accordingly, please find enclosed for filing an original and fifteen copies of PwC's Final Report and Affidavit.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

- JMP \_\_\_\_\_
- COM \_\_\_\_\_
- CTR \_\_\_\_\_
- ECR \_\_\_\_\_
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- OPC \_\_\_\_\_
- MMS \_\_\_\_\_
- RCA \_\_\_\_\_
- SCR \_\_\_\_\_
- SEC 1
- OTH \_\_\_\_\_

cc: All Parties of Record  
Marshall M. Criser III  
R. Douglas Lackey  
Nancy B. White

Sincerely,  
*Robert A. Culpepper*  
Robert A. Culpepper *RA*

RECEIVED & FILED  
*(Signature)*  
FPSC-BUREAU OF RECORDS

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**CERTIFICATE OF SERVICE  
DOCKET NO. 031072-TL**

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via Electronic Mail and First Class U.S. Mail this 15th day of July, 2004 to the following:

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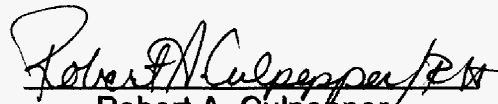
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Represents Network Tel. Corp.

  
Robert A. Culpepper

**BellSouth Telecommunications, Inc.**

**Report on BellSouth's Unit Sizing and  
Actual Unit Reporting Processes**

**July 12, 2004**

**BellSouth Telecommunications, Inc.**  
**Change Control Process**

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Report of Independent Accountants

PricewaterhouseCoopers LLP  
10 Tenth Street, Suite 1400  
Atlanta GA 30309-3851  
Telephone (678) 419 1000  
Facsimile (678) 419 1239

To Management of BellSouth Telecommunications, Inc.:

We have examined management's assertion, included in the accompanying *Management Assertions on BellSouth Telecommunications' Change Control Appendix I Reporting*, that BellSouth Telecommunications, Inc. (BellSouth) accurately reported, by category, the number of units dedicated to Change Requests (CRs) via the Monitoring and Reporting Post Release Capacity Utilization Report (the "Report(s)") for the year ended December 31, 2003, dated June 29, 2004, and for the quarter ended March 31, 2004, dated May 15, 2004, as received by BellSouth from its vendors; and that at least 50% of the total Post Release Development Units for Type IV and V CRs have been reported as CLEC CRs (Type V) for the year ended December 31, 2003, in the Report dated June 29, 2004; and that BellSouth maintained internal controls for the 60 day period ended June 1, 2004, over the process of accepting feature and defect CR hours from vendors through the creation of the Report, dated May 15, 2004 designed to provide reasonable assurance regarding the accurate preparation of the Report. Management is responsible for the Company's assertion. Our responsibility is to express an opinion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included examining, on a test basis, evidence supporting management's assertion and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal control to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our examination identified certain instances where BellSouth deviated from the Report criteria defined in the accompanying *Management Assertions on BellSouth Telecommunications' Change Control Appendix I Reporting* and all are outlined in Attachment B.

In our opinion, except for the deviations from the criteria described in Attachment B, BellSouth accurately reported, in all material respects, by category, the number of units dedicated to CRs via the Reports for the year ended December 31, 2003, dated June 29, 2004 and the quarter ended March 31, 2004, dated May 15, 2004, as received by BellSouth from its vendors; and that at least 50% of the total Post Release Development Units for Type IV and V CRs have been reported as CLEC CRs (Type V) for the year ended December 31, 2003, in the Report dated June 29, 2004; and that BellSouth maintained internal controls for the 60 day period ended June 1, 2004, over the process of accepting feature and defect CR hours from vendors through the creation of the Report dated May 15, 2004, based on the criteria defined in the accompanying *Management Assertions on BellSouth Telecommunications' Change Control Appendix I Reporting*.

This report is intended solely for the information and use of BellSouth Corporation and BellSouth Telecommunications, Inc. and appropriate regulatory agencies and is not intended to be and should not be used by anyone other than these specified parties.

*PricewaterhouseCoopers LLP*

PricewaterhouseCoopers LLP  
June 30, 2004



BellSouth Telecommunications, Inc.  
675 West Peachtree Street, N.E.  
Atlanta, GA 30375

*Report of Management Assertions on BellSouth Telecommunications' Change  
Control Appendix I Reporting*

Management of BellSouth Telecommunications (BellSouth) asserts that:

- The Monitoring and Reporting Post Release Capacity Utilization Reports included as Attachment A, dated June 29, 2004 and May 15, 2004, accurately report, by category (i.e., maintenance, defects, etc.), the number of units dedicated to Change Requests (CR) for the year ended December 31, 2003 and the quarter ended March 31, 2004, respectively, as received by BellSouth from its vendors, with the exception of the items noted in Attachment B, based on the criteria below, and that;
- At least 50% of the total Post Release Development Units for Type IV and V Change Requests, per the Monitoring and Reporting Post Release Capacity Utilization Report dated June 29, 2004, have been reported as CLEC Change Requests (Type V) for the year ended December 31, 2003, and that;
- For the 60 day period ended June 1, 2004, BellSouth maintained internal controls, with the exception of the items noted in Attachment B, over the process of accepting feature and defect Change Request hours from vendors through to the creation of The Monitoring and Reporting Post Release Capacity Utilization Report, dated May 15, 2004, that are designed to provide reasonable assurance regarding the accurate preparation of The Monitoring and Reporting Post Release Capacity Utilization Report. A description of BellSouth's Actuals Reporting Process has been included in Sections V and VI of this report.

The following describes the terms "accurately", "units" and "Internal Controls" criteria:

BellSouth Management asserts that the Monitoring and Reporting Post Release Capacity Utilization Report accurately reports the category and number of units dedicated to the Change Requests for the year ended December 31, 2003 and the quarter ended March 31, 2004. As it relates to this assertion, "accurately" will be assessed according to the following processes:

- Accepting features and defects Change Request hours from BellSouth's vendors,
- Converting Change Request hours to Change Request units,
- Assigning Change Request units by Change Request category (i.e., maintenance, defects, etc), and
- Summarizing units by Change Request category for inclusion in the Monitoring and Reporting Post Release Capacity Utilization Report.

As it relates to this assertion, "units" is defined as:

A unit is equal to 100 Change Request Development and Testing labor hours dedicated to Change Requests per the BellSouth Change Control Process Guide, dated June 4, 2004.

BellSouth Management asserts that it maintained internal controls for the 60 day period ended June 1, 2004, over the process of accepting feature and defect Change Request hours from vendors through to the creation of The Monitoring and Reporting Post Release Capacity Utilization Report, dated May 15, 2004. As it relates to this assertion, "Internal Controls" are defined as:

- BellSouth has a documented process in place that details the procedures to be completed for the quarterly creation of The Monitoring and Reporting Post Release Capacity Utilization Report.



- Quarterly, BellSouth reconciles features and defects that are implemented with the feature and defect hours submitted by vendors.
- BellSouth reviews the accuracy of vendor hours submitted for features and defects by comparing final unit sizing estimates to actual hours reported.
- BellSouth reconciles the total hours received from vendors to the total hours reported on Appendix I. Management performs a formal sign-off on total hours reported on Appendix I.
- BellSouth has a documented process in place for assigning the category type (i.e., Type II, Type III, etc.).
- BellSouth feature and defect Harvest documentation contains an audit trail of the category assessments, including an analysis of the CLEC impact. Procedures are in place to ensure that the audit trail is properly maintained.
- BellSouth has established Key Performance Indicators (i.e., Budget to Actuals) to identify trends and monitor the accuracy of The Monitoring and Reporting Post Release Capacity Utilization Report.
- BellSouth has segregated the task level responsibilities of accepting vendor hours, assigning category types and publication of The Monitoring and Reporting Post Release Capacity Utilization Report.



William Stacy  
Network Vice President  
Interconnection Services

**Monitoring and Reporting Post-Release Capacity Utilization**  
**(Revised: June 29, 2004)<sup>1</sup>**

Categories	1Q		2Q		3Q		4Q		YTD / EOY	
	Units	%	Units	%	Units	%	Units	%	Units	%
<b>Maintenance</b>	106.3	32.9	259.4 <sup>a</sup>	28.4	141.8 <sup>e</sup>	76.0	118.1 <sup>h</sup>	8.0	625.6	21.5
<b>PSN Mandate</b>	3.0	0.9	14.7	1.6	0	0	0 <sup>i</sup>	0	17.7	0.6
<b>Regulatory (Type 2)</b>	40.3	12.5	0	0	2.8	1.4	0	0	43.1	1.5
<b>Defects (Type 6)</b>	31.3	9.7	23.2 <sup>b</sup>	2.6	40.9 <sup>f</sup>	21.9	21.3 <sup>j</sup>	1.4	116.70	4.0
<b>Industry (Type 3)</b>	0	0	0	0	0	0	1045.4 <sup>k</sup>	70.3	1045.4	35.9
<b>BellSouth (Type 4)</b>	0	0	185.8 <sup>c</sup>	20.3	1.3 <sup>g</sup>	0.7	36.0	2.4	223.1	7.7
<b>CLEC</b>	142.2	44.0	430.2 <sup>d</sup>	47.1	0	0	265.5	17.9	837.9	28.8
<b>Total</b>	<b>323.1</b>	<b>100</b>	<b>913.3</b>	<b>100</b>	<b>186.8</b>	<b>100</b>	<b>1486.3</b>	<b>100</b>	<b>2909.50</b>	<b>100</b>

**Revisions to 2nd Quarter Actuals.**

2nd Quarter Actuals were modified based on reevaluation and classification corrections to include the following modifications:

Two Maintenance items post implementation were reevaluated and classification changed to Type 6.

Two Type 6 items post implementation were reevaluated and classification changed to Type 4.

One Type 6 item post implementation was reevaluated and classification changed to Type 5.

Eleven Type 6 and two Type 4 non Local items were removed from the report.

<sup>a</sup>Maintenance capacity decreased by .5 units.

<sup>b</sup>Type 6 capacity decreased by 253.5 units.

<sup>c</sup>Type 4 capacity increased by 74.2 units.

<sup>d</sup>Type 5 capacity increased by 158.1 units.

**Revisions to 3rd Quarter Actuals.**

3rd Quarter Actuals were modified based on reevaluation and classification corrections to include the following modifications:

Three Maintenance items post implementation were reevaluated and capacity units were modified.

Three Maintenance items post implementation were reevaluated and classification changed to Type 6.

One Maintenance item post implementation was reevaluated and classification changed to Type 4.

Twelve Type 6 items post implementation were reevaluated and capacity units were modified.

Two Type 6 items were reevaluated as Flow Through, therefore removed from the report.

<sup>e</sup>Maintenance capacity decreased by 11.2 units.

<sup>f</sup>Type 6 capacity increased by 9.1 units.

<sup>g</sup>Type 4 capacity increased by .6 units.

**Revisions to 4th Quarter Actuals.**

4th Quarter Actuals were modified based on reevaluation and classification corrections to include the following modifications:

Twenty one Maintenance items post implementation were reevaluated and classification changed to Type 6.

Three Maintenance items post implementation were reevaluated and classification changed to Type 3.

One Maintenance item post implementation was reevaluated and classification changed to Type 2.

Three Maintenance items and seven Type 2 items were reevaluated as WLNP, therefore removed from the report.

Eight Type 2 items post implementation were reevaluated and classification changed to Type 3.

Eight Maintenance items were reevaluated as non Local, therefore removed from the report.

Eight Type 6 and six Maintenance items were added to the report.

<sup>h</sup>Maintenance capacity decreased by 16.5 units.

<sup>i</sup>PSN Mandate capacity decreased by 243.0 units.

<sup>j</sup>Type 6 capacity increased by 7.3 units.

<sup>k</sup>Type 3 capacity increased by 33.2 units.

<sup>1</sup> This report is a revision to the report dated February 13, 2004 which depicts capacity units for calendar year 2003.



## Monitoring and Reporting Post-Release Capacity Utilization (May 15, 2004)<sup>2</sup>

2004 Annual Release Capacity Utilization – YTD Quarterly Report										
Categories	1Q		2Q		3Q		4Q		YTD / EOY	
	Units	%	Units	%	Units	%	Units	%	Units	%
Maintenance	60.4	12.2							60.4	12.2
PSN Mandate	0.0	0.0							0.0	0.0
Regulatory (Type 2)	47.5	9.6							47.5	9.6
Defects (Type 6)	105.4	21.3							105.4	21.3
Industry (Type 3)	0.0	0.0							0.0	0.0
BellSouth (Type 4)	34.7	7.0							34.7	7.0
CLEC	246.6	49.9							246.6	49.9
<b>Total</b>	<b>494.6</b>	<b>100</b>							<b>494.6</b>	<b>100</b>

<sup>2</sup> Depicts capacity units for 1<sup>st</sup> Quarter 2004. Attached to this report is a list of all Type 2, 3, 4, 5, 6 change requests that were implemented.

The following issues have been numbered sequentially and have not been prioritized based on the significance of the issue:

1. BellSouth implemented two features in the second quarter 2003 that added new functionality and corrected a defect. BellSouth was unable to allocate the number of units expended for the implementation of these features between creating new functionality and addressing the defect. BellSouth categorized all implementation units for these features as Type IV. However, an unknown percentage of units should have been categorized as a Type VI.
2. During our assessment of the first quarter 2004, PwC selected all maintenance CRs for analysis. PwC identified five maintenance items that were CLEC impacting and should have been categorized as Type IV or VI. The five items represented a total of 1.87 units.
3. BellSouth compares time reported by Telcordia for Appendix I features to the amounts invoiced and to final estimates received to ensure that actual hours reported by vendors are accurate. However, BellSouth did not compare defect hours reported by Telcordia for Appendix I to final estimates received for the first quarter 2004. Additionally, BellSouth did not compare feature and defect hours reported by Accenture for Appendix I to final estimates received for the first quarter 2004.
4. BellSouth utilizes the Harvest application to document an audit trail of the category assessments for features and defects, including an analysis of the CLEC impact. PwC noted that for 58% of features and defects implemented in the first quarter 2004, BellSouth did not provide a full explanation of the CLEC impact and its impact on the category assignment.
5. PwC noted the following weaknesses related to Harvest application security:
  - Gaining access to the BellSouth Harvest application does not require authorization by business unit team leaders prior to individuals obtaining access.
  - Harvest Security Administrators are not notified of users who have been terminated or changed job positions and should have Harvest access revoked.
  - There are no periodic reviews of access granted to ensure that existing access is appropriate.
  - Users can have multiple user ids.
  - Users are assigned a default password that matches their User ID. The Harvest application does not require that users change their passwords immediately upon initial logon.

Report of Independent Accountants

PricewaterhouseCoopers LLP  
10 Tenth Street, Suite 1400  
Atlanta GA 30309-3851  
Telephone (678) 419 1000  
Facsimile (678) 419 1239

To Management of BellSouth Telecommunications, Inc.:

We have examined management's assertion, included in the accompanying *Management Assertions on BellSouth Telecommunications' Application of its Unit Sizing Process*, that BellSouth's process for calculating unit sizing estimates for all Change Request (CR) types has been performed from July 1, 2003 to May 31, 2004 with a consistent, documented methodology common to all vendors and systems included within the scope of the Change Control Process (CCP) guide, available on the BellSouth Interconnection website ([interconnection.bellsouth.com](http://interconnection.bellsouth.com)); and that as of June 24, 2004, BellSouth implemented a documented process that measures variances between unit sizing estimates and actual units required for implementation. Based on this process, BellSouth has created reporting for the quarter ended March 31, 2004 that identified the variances between initial unit sizing estimates and actual hours reported by vendors. Management is responsible for the Company's assertion. Our responsibility is to express an opinion based on our examination.

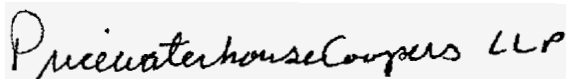
Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included examining, on a test basis, evidence supporting management's assertion and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal control to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our examination identified certain instances where BellSouth deviated from the Unit Sizing Process criteria defined in the accompanying *Management Assertions on BellSouth Telecommunications' Application of its Unit Sizing Process* and all are outlined in Attachment C.

In our opinion, except for the deviations from the criteria described in Attachment C, BellSouth's process for calculating unit sizing estimates for all CR types has been performed, in all material respects, from July 1, 2003 to May 31, 2004 with a consistent, documented methodology common to all vendors and systems; and that as of June 24, 2004 BellSouth had implemented a documented process that measures variances between unit sizing estimates and actual units required for implementation and that BellSouth has created reporting for the quarter ended March 31, 2004 that identified the variances between initial unit sizing estimates and actual hours reported by vendors, based on the criteria set forth in the accompanying *Management Assertions on BellSouth Telecommunications' Application of its Unit Sizing Process*.

This report is intended solely for the information and use of BellSouth Corporation and BellSouth Telecommunications, Inc. and appropriate regulatory agencies and is not intended to be and should not be used by anyone other than these specified parties.



PricewaterhouseCoopers LLP  
June 30, 2004



BellSouth Telecommunications, Inc.  
675 West Peachtree Street, N.E.  
Atlanta, GA 30375

*Report of Management Assertions on BellSouth Telecommunications'  
Application of its Unit Sizing Process*

The Management of BellSouth Telecommunications (BellSouth) asserts the following related to unit sizing for Change Requests:

- BellSouth's Process for calculating unit sizing estimates for all Change Request (CR) types has been performed from July 1, 2003 to May 31, 2004 with a consistent, documented methodology, with the exception of the items noted in Attachment C, common to all vendors and systems included within the scope of the Change Control Process guide, available on the BellSouth Interconnection website ([interconnection.bellsouth.com](http://interconnection.bellsouth.com)); and that
- As of June 24, 2004, BellSouth implemented, with the exception of the items noted in Attachment C, a documented process, based on the criteria below, that measures variances quarterly between unit sizing estimates and actual units required for implementation. Based on this process, BellSouth has created reporting for the quarter ended March 31, 2004 that identifies the variances between initial unit sizing estimates and actual hours reported by vendors. A description of BellSouth's Unit Sizing Process has been included in Sections V and VI of this report.

The following describes the terms "unit sizing", "consistent" and "implemented" criteria:

BellSouth Management asserts that unit sizing has been performed from July 1, 2003 to May 31, 2004 with a consistent, documented methodology common to all vendors and systems included within the scope of the CCP Process Guide. As it relates to this assertion, "unit sizing" will be assessed according to the following:

Unit Sizing is the process of estimating the number of units (i.e., a unit is equal to 100 Change Request Development and Testing labor hours) that will be required to implement a Change Request.

As it relates to this assertion, "consistent" will be assessed according to the following processes:

- BellSouth completes a Rough Order of Magnitude for each Change Request feature to estimate the work effort based on documented criteria.
- BellSouth completes user requirements for each Change Request feature.
- BellSouth completes initial and updated unit sizing estimates based on modeling tools and guidelines.
- BellSouth completes unit sizing and reporting via Appendix IA quarterly as the following phases of the development lifecycle progress:
  - Prior to planning.
  - End of Design.

BellSouth asserts that as of June 24, 2004, BellSouth implemented a documented process that measures variances quarterly between unit sizing estimates and actual units required for implementation. As it relates to this assertion, "implemented" will be assessed based on the following:

- Methods and procedures exist that detail the process to create unit sizing variance reports, report distribution and variance levels that require explanations or action to be taken.

- Reports that compare initial unit sizing estimates to actual hours expended for each change request are reviewed by BellSouth Management.

Handwritten signature of William Stacy in black ink on a light gray rectangular background.

William Stacy  
Network Vice President  
Interconnection Services

The following issues have been numbered sequentially and have not been prioritized based on the significance of the issue:

1. BellSouth's vendors utilize multiple processes (i.e., not a single consistent process), to generate unit sizing. The majority of Accenture Application Teams utilize modeling techniques and guidelines, however some Accenture Application Teams and Telcordia Teams develop unit sizing estimates based on team members' knowledge and experience with similar features and defects.
2. BellSouth distributes Appendix H, Appendix IA and the Detailed Capacity Report to the Competitive Local Exchange Carriers (CLECs). These documents should reflect BellSouth's initial unit sizing estimates for features and defects. PwC performed initial unit sizing testing procedures for a sample of 104 features and defects. PwC noted that for fourteen CRs, the Appendix H, Appendix IA or the Detailed Capacity Reports did not accurately reflect the BellSouth initial unit sizing estimate. Of the fourteen CRs, the variance reported ranged from .18 units to 166.15 units, with a median value of 1.93 units. In addition, PwC noted the following regarding the third quarter 2003, fourth quarter 2003 and first quarter 2004 Detailed Capacity Reports:
  - BellSouth could not provide sufficient detail to verify that two maintenance items were accurately included in the Detailed Capacity Report. The two maintenance items represented a total of .14 units.  
The initial unit sizing estimates for specific features and defects in Releases 16.0 and 17.0 differed between the third quarter 2003, and Detailed Capacity Reports for subsequent quarters. The initial unit sizing estimates for specific features and defects should be consistent from quarter to quarter.
  - For twenty-eight Change Requests, BellSouth had inaccurately reported the Final Estimates on the Detailed Capacity Report. Of the twenty-eight CRs, the variances ranged from .07 units to 56.04 units, with a median value of 1.09 units.
3. PwC noted three instances where the initial unit sizing estimates from various application teams were aggregated inaccurately or incompletely, which resulted in a misstatement of the initial unit sizing. Additionally, there were two instances where BellSouth was unable to provide documentation regarding the initial unit sizing estimates from various application teams to support these initial unit sizing estimates.
4. BellSouth's documented methodology requires a Rough Order of Magnitude to be completed for each CLEC change request. However, PwC noted that BellSouth did not complete a Rough Order of Magnitude for one change request.
5. BellSouth's documented methodology requires BellSouth to accept or reject a change request within ten days of acknowledgement if no clarification is needed. PwC noted one instance where BellSouth accepted a change request and did not request clarification until twenty-eight days later. Subsequently, BellSouth notified the CLECs that they would be unable to support a portion of the change request.
6. In the BellSouth Change Control Process (CCP) Guide, Appendix IA section, PwC noted that the estimated release capacity for the Type IIs (flow-through), IVs, and Vs fields will be summed from the individual feature sizing information provided in Appendix H, thereby indicating that an Appendix H form will be completed for Type II (flow-through) Change Requests. However, in the Change Control Process (CCP) Guide, Appendix H section, PwC noted that Appendix H forms are only created for Features with a CCP Type of IV (BST Initiated) or V (CLEC Initiated). PwC noted that it is BellSouth's practice to only complete an Appendix H form for Type IV and V Change Requests.
7. BellSouth utilizes a standard form for initial unit sizing estimates. For nine defects, BellSouth was unable to provide the initial unit sizing estimate sizing forms.
8. BellSouth has not completed root cause analysis nor provided to management an explanation for variances where total units have increased or decreased greater than 25% for the quarter ended March 31, 2004. PwC noted that root cause analysis was not completed for features and defects that exceeded the variance threshold.

Supplementary Information



**SECTION V – EXECUTIVE OVERVIEW**

**A. Overview of Reports**

In order to verify that BellSouth has provided at least 50% of the total units for Type IV and Type V change requests implemented in 2003 and that BellSouth has established internal controls to provide reasonable assurance that the Monitoring and Reporting Post Release Capacity Utilization Report is accurately created, the management of BellSouth requested that PricewaterhouseCoopers LLP (PricewaterhouseCoopers) perform an independent examination. The initial independent examination addressed the following:

- BellSouth accurately reported, by category, the number of units dedicated to Change Requests (CRs) for the year ended December 31, 2003 and the quarter ended March 31, 2004 as received by BellSouth from its vendors, via the Monitoring and Reporting Post Release Capacity Utilization Report (the "Report(s)") dated June 29, 2004 and May 15, 2004 respectively, and that;
- At least 50% of the total Post Release Development Units for Type IV and V CRs have been reported as CLEC CRs (Type V) for the year ended December 31, 2003, in the Report dated June 29, 2004, and that;
- BellSouth maintained internal controls for the 60 day period ended June 1, 2004, over the process of accepting feature and defect CR hours from vendors through the creation of the Report, dated May 15, 2004 designed to provide reasonable assurance regarding the accurate preparation of the Report.

In addition, in order to verify that BellSouth has followed a consistent, documented methodology to create unit sizing estimates, BellSouth requested that PricewaterhouseCoopers perform a second independent examination. Specifically, the second independent examination addressed the following:

- BellSouth's process for calculating unit sizing estimates for all Change Request (CR) types has been performed from July 1, 2003 to May 31, 2004 with a consistent, documented methodology common to all vendors and systems included within the scope of the Change Control Process (CCP) guide, available on the BellSouth Interconnection website ([interconnection.bellsouth.com](http://interconnection.bellsouth.com)), and that;
- BellSouth has created reporting for the quarter ended March 31, 2004 that identifies the variances between initial unit sizing estimates and actual hours reported by vendors, and that;
- As of June 24, 2004, BellSouth implemented a documented process that measures variances between unit sizing estimates and actual units required for implementation.

**B. Objective of Supplementary Test Information**

The objective of this information is to provide a description of BellSouth's processes to accept, accumulate, and report Change Request hours to be included on the Monitoring and Reporting Post Release Capacity Utilization Report and the process to develop and report initial unit sizing estimates for features and defects.

**SECTION VI – UNIT SIZING AND ACTUALS REPORTING PROCESSES**

BellSouth has implemented a process to accept, accumulate, and report Change Request hours included on the Monitoring and Reporting Post Release Capacity Utilization Report. BellSouth has documented methods and procedures that describe the process to be followed when creating the Monitoring and Reporting Post Release Capacity Utilization Report. These methods and procedures include the following:

- Features and defects are assigned a categorization type (i.e., Type IV for BellSouth initiated CRs) based on their expected impact to CLECs and the party that originated the request.
- BellSouth identifies all features and defects that have been implemented in a quarter and queries vendors to provide actual hours expended in association with the implementation of each feature and defect. BellSouth ensures that all features and defects are included in vendor queries by reconciling project charter features and defects with release implementations.
- BellSouth vendors provide the total actual hours incurred during the implementation of each Feature and Defect to BellSouth.
- BellSouth compares the total actual hours received from vendors to estimates received from the vendors to identify large variances.
- BellSouth assigns to separate individuals the responsibilities of accepting actual hours from vendors and preparing the Monitoring and Reporting Post Release Capacity Utilization Report. BellSouth reconciles total actual hours received from vendors to total actual hours reported via the Monitoring and Reporting Post Release Capacity Utilization Report.
- BellSouth converts the hours reported by vendors into units by dividing the total number of hours by 100.
- BellSouth Management reviews and approves a draft version of the Monitoring and Reporting Post Release Capacity Utilization Report prior to distribution to CLECs.
- BellSouth Change Control distributes "Appendix I: Monitoring and Reporting Post Release Capacity Utilization" to the CLECs via email within forty-five days of the end of each Quarter.

BellSouth Telecommunications, Inc.  
Unit Sizing and Actual Unit Reporting Processes

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BellSouth has implemented a process to develop and report initial and updated unit sizing estimates for features and defects. BellSouth has documented methods and procedures that describe the process to be followed when creating and reporting initial unit sizing estimates. These methods and procedures include the following:

- The Application Planning (AP) team provides a Rough Order of Magnitude (ROM) estimate for all CLEC initiated Change Requests (CR). This estimate is provided in terms of the level of impact (Small, Medium or Large) to the various applications and the feature or defect as a whole.
- The AP team reviews the available documentation in order to provide a draft impact analysis (i.e., Draft-High Level Conceptual Design), to be used to create the planning and feasibility estimates.
- The AP team requests initial estimates from the impacted applications and teams based on the available documentation. Each application team creates and populates their initial estimates based on estimate modeling tools and guidelines specific to each application.
- The AP team then compiles the estimates from each application team to create the initial feature/defect unit sizing estimate. The AP team also creates an Appendix H for Type IV and V CRs.
- The initial estimates are communicated via Appendix H to CLECs in the form of the Change Review Package, which is sent 5-7 business days prior to the Change Review Meetings. During the Quarterly Change Review Meetings, the change requests are prioritized by the participants of the meeting. Status updates are provided monthly but prioritization occurs quarterly.
- Once scoped for a release, the initial unit sizing by category is published and communicated to the CLEC community via the quarterly “*Appendix IA: Reporting Pre-Release Estimated Capacity Forecasting Used for Capacity Planning Only*” and the supporting documentation “*Release XX.X Detailed Capacity Report*”. Within the “*Release XX.X Detailed Capacity Report*” the initial estimate is outlined by the CR and category type.
- Once the initial sizing estimate is created and more information is communicated about the feature or defect, updated estimates are created using the same estimate modeling tools and guidelines.
- Updated estimates for the End of Design milestone are published and communicated to the CLEC community via the quarterly “*Appendix IA: Reporting Pre-Release Estimated Capacity Forecasting Used for Capacity Planning Only*” and the supporting documentation “*Release XX.X Detailed Capacity Report*”.
- After the feature or defect has been implemented, BellSouth produces a variance report that compares the estimates to actuals.



4. A total of 12 PwC professionals spent over 2,800 hours performing the work described in this affidavit. The PwC professionals included 3 Partners, a Director and 2 Senior Managers. Our Partners, Director and Senior Managers led all aspects of the fieldwork. The PwC Partners, Director, Senior Managers, and Staff who worked on this engagement, have extensive telecommunications industry and telecommunications business process and/or systems experience.
5. The attestation examination discussed herein was conducted in accordance with the attestation standards of the American Institute of Certified Public Accountants (AICPA). An attestation examination is one in which a practitioner is engaged to issue a written communication that expresses a conclusion about the reliability of a written assertion that is the responsibility of another party. An attestation examination is the highest level of assurance that can be provided on a written assertion under these standards. PwC's conclusions regarding its attestation examination of BellSouth's management assertions are set forth in the "Report of Independent Accountants" which is appended hereto as Attachment A. Also, a copy of the BellSouth's Management Assertion is appended hereto as Attachment A.
6. BellSouth Management has made the following two assertions:

**Appendix I Report**

7. The Monitoring and Reporting Post Release Capacity Utilization Reports included as Attachment A, dated June 29, 2004 and May 15, 2004, accurately report, by category (i.e., maintenance, defects, etc.), the number of units dedicated to Change Requests (CR) for the year ended December 31, 2003 and the quarter ended March 31, 2004,

respectively, as received by BellSouth from its vendors based on the criteria below, and that;

8. At least 50% of the total Post Release Development Units for Type IV and V Change Requests, per the Monitoring and Reporting Post Release Capacity Utilization Report dated June 29, 2004, have been reported as CLEC Change Requests (Type V) for the year ended December 31, 2003, and that;
9. For the 60 day period ended June 1, 2004, BellSouth maintained internal controls over the process of accepting feature and defect Change Request hours from vendors through to the creation of The Monitoring and Reporting Post Release Capacity Utilization Report, dated May 15, 2004, that are designed to provide reasonable assurance regarding the accurate preparation of The Monitoring and Reporting Post Release Capacity Utilization Report, based on the criteria below.

**Unit Sizing Estimates**

10. BellSouth's Process for calculating unit sizing estimates for all Change Request (CR) types has been performed from July 1, 2003 to May 31, 2004 with a consistent, documented methodology common to all vendors and systems included within the scope of the Change Control Process guide, available on the BellSouth Interconnection website ([interconnection.bellsouth.com](http://interconnection.bellsouth.com)); and that
11. As of June 24, 2004, BellSouth implemented a documented process, based on the criteria below, that measures variances quarterly between unit sizing estimates and actual units required for implementation. Based on this process, BellSouth has created reporting for the quarter ended March 31, 2004 that identifies the variances between initial unit sizing estimates and actual hours reported by vendors.

## **Assertion Criteria**

12. As it relates to the Appendix I Report assertion, “accurately” will be assessed according to the following processes:

- Accepting features and defects Change Request hours from BellSouth’s vendors,
- Converting Change Request hours to Change Request units,
- Assigning Change Request units by Change Request category (i.e., maintenance, defects, etc), and
- Summarizing units by Change Request category for inclusion in the Monitoring and Reporting Post Release Capacity Utilization Report.

13. As it relates to the Appendix I Report assertion, “units” is defined as:

- A unit is equal to 100 Change Request Development and Testing labor hours dedicated to Change Requests per the BellSouth Change Control Process Guide, dated June 4, 2004.

14. As it relates to the Appendix I assertion, “internal controls” are defined as:

- BellSouth has a documented process in place that details the procedures to be completed for the quarterly creation of The Monitoring and Reporting Post Release Capacity Utilization Report.
- Quarterly, BellSouth reconciles features and defects that are implemented with the feature and defect hours submitted by vendors.
- BellSouth reviews the accuracy of vendor hours submitted for each feature and defect by comparing final unit sizing estimates to actual hours reported.



- BellSouth reconciles the total hours received from vendors to the total hours reported on Appendix I. Management performs a formal sign-off on total hours reported on Appendix I.
- BellSouth has a documented process in place for assigning the category type (i.e., Type II, Type III, etc.).
- BellSouth feature and defect documentation contains an audit trail of the category assessments, including an analysis of the CLEC impact. Procedures are in place to ensure that the audit trail is properly maintained.
- BellSouth has established Key Performance Indicators (i.e., Budget to Actuals) to identify trends and monitor the accuracy of The Monitoring and Reporting Post Release Capacity Utilization Report.
- BellSouth has segregated the task level responsibilities of accepting vendor hours, assigning category types and publication of The Monitoring and Reporting Post Release Capacity Utilization Report.

15. As it relates to the Unit Sizing Estimates assertion, “unit sizing” has been assessed according to the following:

- **Unit Sizing is the process** of estimating the number of units (i.e., a unit is equal to 100 Change Request Development and Testing labor hours) that will be required to implement a Change Request.

16. As it relates to the Unit Sizing Estimates assertion, “consistent” has been assessed according to the following processes:

- BellSouth completes a Rough Order of Magnitude for each Change Request feature to estimate the work effort based on documented criteria.

- BellSouth completes user requirements for each Change Request feature.
- BellSouth completes initial and updated unit sizing estimates based on modeling tools and guidelines.
- BellSouth completes unit sizing and reporting via Appendix IA quarterly as the following phases of the development lifecycle progress:
  - Prior to planning.
  - End of Design.

17. As it relates to the Unit Sizing Estimates assertion, “implemented” has been assessed based on the following:

- **Methods and procedures** exist that detail the process to create unit sizing variance reports, report distribution and variance levels that require explanations or action to be taken.
- Reports that compare initial unit sizing estimates to actual hours expended for each change request are reviewed by BellSouth Management.

#### **Engagement Timing**

18. The subject matter of Management’s assertions required PwC to complete workstreams for various time periods. Refer to the *PwC Testing* section below for details of testing completed. Based on Management’s assertions, PwC performed testing according to the following time periods:

- PwC completed testing over the accuracy of **The Monitoring and Reporting Post Release Capacity Utilization Report** during 2003 and the first quarter of 2004.
- PwC completed testing, for the time period April 1, 2004 through June 1, 2004, of BellSouth’s Internal Controls over the generation of the first quarter 2004

*Monitoring and Reporting Post Release Capacity Utilization Report, dated May 15, 2004.*

- PwC completed testing over the BellSouth Unit Sizing Process for the period of July 1, 2003 to May 31, 2004.
- PwC completed testing over BellSouth's documented process that measures variances quarterly between unit sizing estimates and actual units required for implementation as of June 24, 2004.

### **Engagement Planning**

19. PwC completed several walkthroughs of the BellSouth process to create and report the Monitoring and Reporting Post Release Capacity Utilization Report. This process included detailed interviews to gain an understanding of the processes of accepting feature and defect Change Request hours from BellSouth vendors, converting Change Request hours to Change Request units, segmenting Change Request units by Change Request category, and summarizing units by Change Request category for inclusion in the Monitoring and Reporting Post Release Capacity Utilization Report.
20. PwC conducted walkthroughs of BellSouth's Unit Sizing Process for all Change Control Process types with Management and Staff to gain an understanding of the process for calculating unit sizing estimates for all Change Request (CR) types. This included gaining an understanding of the process to accept Change Requests, the Rough Order of Magnitude process, the completion of user requirements for each Change Request feature, the initial unit sizing estimate process, the process to update unit sizing estimates and reporting estimates via Appendix IA and the Detailed Capacity Report.

21. Next, PwC developed detailed test plans that included testing of the Monitoring and Reporting Post Release Capacity Utilization Report key activities and verification of the accuracy and consistency of the units sizing process. For example, PwC developed tests to verify that the reported hours that BellSouth received from its vendors reconciled to the hours reported on the Monitoring and Reporting Post Release Capacity Utilization Report. Refer to the *PwC Testing* section of this affidavit for a complete description of the key activities tested by PwC.

22. PwC reviewed the following documentation to gain an understanding of the BellSouth Appendix I Report process:

- Project Charters,
- The Features and Defects spreadsheet sent to the vendors by BellSouth,
- The reconciled Features and Defects spreadsheet sent by the BellSouth vendors to the BellSouth Technology Group,
- Harvest documentation,
- Email correspondence between BellSouth and BellSouth's vendors,
- BTG Data Report Submitted to Business Unit Release Management,
- Actuals CLEC Report used by Release Management,
- Appendix-I: Monitoring and Reporting Post-Release Capacity Utilization Report, and
- BellSouth's Methods and Procedures for creating Appendix I.

23. PwC reviewed the following documentation to gain an understanding of the BellSouth Unit Sizing Estimate process:

- ENCORE Program Process Manual,

- Change Control Process Guide,
- Change Control Meeting Minutes, and
- Unit sizing models, guidelines and templates.

24. PwC assessed the threshold for exception reporting based on our understanding of the process to create and report the Monitoring and Reporting Post Release Capacity Utilization Report and the Unit Sizing Estimate processes. Refer to our report dated June 30, 2004, which has been included in Attachment A, for a description of all issues that exceeded the exception threshold. The exception reporting threshold had been established according to the following:

- PwC identified a reportable exception regarding the accuracy of the Monitoring and Reporting Post Release Capacity Utilization Reports, dated May 15, 2004 and June 29, 2004, where the actual units for any features or defects were inaccurately reported by BellSouth to CLECs.
- PwC also identified a reportable exception where BellSouth could not provide sufficient evidence that the internal controls established by BellSouth over the creation of The Monitoring and Reporting Post Release Capacity Utilization Report have been implemented and are acting as intended.
- PwC identified key action points within the BellSouth Unit Sizing Estimate Process. PwC identified an exception if during the BellSouth Unit Sizing Estimate Process, change requests, defects and features transactions did not successfully pass each key action point at least 95% of the time. The basis for selecting 95% was a historic acceptance by external parties that hold organizations to a high standard, but not an unachievable standard.

- PwC applied professional judgment to determine exceptions that do not meet the criteria above, however certain items identified may be required to be reported. For example, if change request, defect or feature transactions successfully passed a key action point at least 95% of the time, it would not be deemed a reportable exception based on the criteria above. However, due to the criticality of select action points within the BellSouth Unit Sizing Estimate Process, PwC has held these transactions to a “Higher Standard”. Refer to the *Exceptions* section of this affidavit for a description of all exceptions identified.

### **PwC Testing**

#### *Appendix I Report*

25. In examining management’s assertion that the Monitoring and Reporting Post Release Capacity Utilization Reports, dated June 29, 2004 and May 15, 2004, accurately reports, by category (i.e., maintenance, defects, etc.), the number of units dedicated to Change Requests (CR) for the year ended December 31, 2003 and the quarter ended March 31, 2004, respectively, as received by BellSouth from its vendors; PwC conducted numerous test steps. PwC performed the following, testing all features and defects implemented within the year ended December 31, 2003 and quarter ended March 31, 2004:

- PwC obtained and reviewed the Project Charter for each Release implemented in the year ended December 31, 2003 and the quarter ended March 31, 2004.
- PwC reconciled the Project Charters to the features and defects spreadsheets sent by BellSouth to their vendors to collect the hours worked for each feature and defect.

- PwC obtained and reconciled the features and defects spreadsheets sent to vendors and the hours reported by vendors.
- PwC obtained and reconciled the feature and defect hours captured by BellSouth to vendor responses.
- PwC obtained and reconciled the Monitoring and Reporting Post-Release Capacity Utilization Report for the year ended December 31, 2003 and the quarter ended March 31, 2004 to the hours reported by vendors.
- PwC re-performed BellSouth's process for converting the hours reported by vendors to units reported in the Monitoring and Reporting Post-Release Capacity Utilization Report.
- PwC obtained and reviewed the Monitoring and Reporting Post-Release Capacity Utilization Report distributed by BellSouth Change Control to the CLECs for the year ended December 31, 2003 and the quarter ended March 31, 2004. PwC validated that the Monitoring and Reporting Post-Release Capacity Utilization Report distributed to CLECs reconciled to vendor hours reported.
- PwC independently re-performed BellSouth's process for accumulating the Monitoring and Reporting Post-Release Capacity Utilization based on hours received from vendors and compared results to BellSouth's Monitoring and Reporting Post-Release Capacity Utilization Report for the year ended December 31, 2003 and the quarter ended March 31, 2004.
- PwC assessed the categorization assigned for each feature and defect. PwC obtained and reviewed Change Request, Harvest, User Requirements and System Requirements documentation to assess the CLEC impact. PwC also inquired of



CLECs as to which features and defects had a direct impact on their systems or processes that were not categorized as CLEC affecting.

26. In examining management's assertion that at least 50% of the total Post Release Development Units for Type IV and V Change Requests, per the Monitoring and Reporting Post Release Capacity Utilization Report dated June 29, 2004, have been reported as CLEC Change Requests (Type V) for the year ended December 31, 2003; PwC validated that the units reported as CLEC Change Requests (Type V) exceeded the number of units reported as BellSouth Change Requests (Type IV) for the year ended December 31, 2003.
27. In examining management's assertion that for the 60 day period ended June 1, 2004, BellSouth maintained internal controls over the process of accepting feature and defect Change Request hours from vendors through to the creation of The Monitoring and Reporting Post Release Capacity Utilization Report, dated May 15, 2004, that are designed to provide reasonable assurance regarding the accurate preparation of The Monitoring and Reporting Post Release Capacity Utilization Report; PwC performed the following tests:
- PwC obtained and reviewed the **BellSouth Appendix I Capacity Management Report Methods and Procedures**, which details the procedures to be completed for the accumulation of the Monitoring and Reporting Post Release Capacity Utilization Report. PwC verified the key control points in the BellSouth Monitoring and Reporting Post Release Capacity Utilization Report accumulation process were addressed by the document. PwC validated that the BellSouth

Appendix I Capacity Management Report Methods and Procedures included a process for assigning category types (i.e., Type II, Type III, etc.).

- PwC reviewed the procedures taken by BellSouth to reconcile the features and defects that had been implemented in the first quarter 2004 with the spreadsheet sent to vendors to accumulate hours incurred. PwC obtained checklists utilized by BellSouth to document reconciliations of features and defects implemented to project charters and release information.
- PwC reviewed BellSouth's process to verify the accuracy of vendor hours submitted for features and defects. PwC obtained checklists that document verification procedures of vendor estimates to actual hours reported by vendors.
- PwC reviewed BellSouth checklists that document their completion of a reconciliation of hours reported by vendors to hours reported via Monitoring and Reporting Post Release Capacity Utilization Report dated May 15, 2004.
- PwC obtained and reviewed Change Request documentation that contains an analysis of the CLEC impact and an audit trail of the category assignment. PwC reviewed the security parameters of key applications that maintain change request audit trails.
- PwC obtained and reviewed BellSouth Key Performance Metrics utilized by BellSouth to monitor the accuracy of the Monitoring and Reporting Post Release Capacity Utilization Report dated May 15, 2004.
- PwC verified that the task level responsibilities of accepting vendor hours, assigning category types and distributing the Monitoring and Reporting Post

Release Capacity Utilization Report dated May 15, 2004 have been assigned to individuals with separate responsibilities.

### **Exceptions**

28. PwC identified instances where the actual units for features or defects were inaccurately reported by BellSouth to CLECs via the Monitoring and Reporting Post Release Capacity Utilization Reports, dated May 15, 2004 and June 29, 2004. These instances included the following:

- **BellSouth implemented two features in the second quarter 2003 that added new functionality and corrected a defect.** BellSouth was unable to allocate the number of units expended for the implementation of these features between creating new functionality and addressing the defects. BellSouth categorized all implementation units for these features as Type IV in the Monitoring and Reporting Post Release Capacity Utilization Report, date June 29, 2004. However, an unknown percentage of units should have been categorized as a Type VI. By reporting all hours in category IV, BellSouth was conservative in its reporting.
- During our assessment of the first quarter 2004, PwC selected all maintenance CRs for analysis. PwC identified five maintenance items that were CLEC impacting and should have been categorized as Type IV or VI. The five items represented a total of 1.87 units.

29. PwC identified instances where BellSouth could not provide sufficient evidence that the internal controls established by BellSouth over the creation of The Appendix I

Report have been implemented and are operating as intended. These instances included the following:

- BellSouth compares time reported by Telcordia for Appendix I features to the amounts invoiced and to final estimates received to ensure that actual hours reported by vendors are accurate. However, BellSouth did not compare defect hours reported by Telcordia for Appendix I to final estimates received. Additionally, BellSouth did not compare feature and defect hours reported by Accenture for Appendix I to final estimates received.
- BellSouth utilizes the Harvest application to document an audit trail of the category assessments for features and defects, including an analysis of the CLEC impact. PwC noted that for 58% of features and defects implemented in the first quarter 2004, BellSouth did not provide a full explanation of the CLEC impact and its affect on the category assignment.
- PwC noted the following weaknesses related to Harvest application security:
  - Gaining access to the BellSouth Harvest application does not require authorization by business unit team leaders prior to individuals obtaining access.
  - Harvest Security Administrators are not notified of users who have been terminated or changed job positions and should have Harvest access revoked.
  - There are no periodic reviews of access granted to ensure that existing access is appropriate.
  - Users can have multiple user ids.

- Users are assigned a default password that matches their User ID. The Harvest application does not require that users change their passwords immediately upon initial logon.

30. PwC performed quarterly reviews of the BellSouth Monitoring and Reporting Post Release Capacity Utilization Report throughout 2003 and the first quarter 2004. During these reviews, PwC identified instances where features and defects were inaccurately reported. Once these instances were identified, PwC notified BellSouth. BellSouth reviewed PwC's finding and restated feature and defect units throughout 2003. At the conclusion of our review, BellSouth issued a final Monitoring and Reporting Post Release Capacity Utilization Report for 2003 on June 29, 2004. These instances were not included in our report dated June 30, 2004 because these issues were addressed by BellSouth prior to the publication of Monitoring and Reporting Post Release Capacity Utilization Report for 2003 on June 29, 2004. PwC reported the following instances to BellSouth which were subsequently included in the Monitoring and Reporting Post Release Capacity Utilization Report for 2003 on June 29, 2004:

- For the first quarter 2003, PwC identified 9 features and defects representing 2 units that required restatement.
- For the second quarter 2003, PwC identified 32 features and defects representing 302.5 units that required restatement.
- For the third quarter 2003, PwC identified 33 features and defects representing 61.6 units that required restatement.

- For the fourth quarter 2003, PwC identified 65 features and defects representing 276.6 units that required restatement.

PwC noted for the first quarter 2004, which was reported on the Monitoring and Reporting Post Release Capacity Utilization Report, dated May 15, 2004, 5 features and defects representing 1.87 units were inaccurately reported. This represented a reduction in the number of restatements required in comparison to prior quarters.

### **Unit Sizing Estimates**

31. In examining management's assertion that BellSouth's Process for calculating unit sizing estimates for all Change Request (CR) types has been performed from July 1, 2003 to May 31, 2004 with a consistent, documented methodology common to all vendors and systems included within the scope of the Change Control Process guide, available on the BellSouth Interconnection website ([interconnection.bellsouth.com](http://interconnection.bellsouth.com)); PwC executed numerous tests. PwC completed tests based on a sample of all Change Requests, features and defects that were in development from July 1, 2003 through May 31, 2004.

### *Sample Size Determination for Unit Sizing Estimates*

32. PwC employed the following sampling techniques to determine the number of

Harvest Documents to be tested across all features and defects opened by BellSouth:

- Total population: >300
- Confidence Factor: 95%
- Tolerable Rate: 5%
- Expected Error Rate: 1%

33. PwC loaded this criteria into Audit Command Language (ACL) and used the Sampling Size function to determine what sample size should be employed. Based on this criterion, our test population was identified to be 95 transactions. PwC selected a sample of 104 transactions which exceeded the 95 transactions required by statistical sampling techniques.
34. Within the sample of 104 features and defects processed through the unit sizing procedures, PwC established the following requirements to ensure that the sample was comprehensive and inclusive of criteria representative of the entire population of features and defects:
- The sample included features and defects of all category types.
  - The sample included features and defects requested by both BellSouth and CLECs (i.e., Type IV vs. Type V).
  - The sample encompassed features and defects that affected all Encore systems.
  - The sample included features and defects at various phases in the development lifecycle from July 1, 2003 to May 31, 2004. This included features and defects that were originated, subject to unit sizing and implemented during this time period.
35. During the course of our engagement, PwC held discussions with five CLECs. As a result of these discussions, PwC selected Change Requests to be included in our sample that the CLECs expressed a concern over the unit sizing results communicated to them by BellSouth.
36. For our sample of features and defects, PwC performed the following testing:

- PwC obtained and reviewed BellSouth's database repositories that track change requests, defects and features.
- Where applicable, PwC obtained and reviewed change request documentation and traced the submitted dates, accept/reject decisions and communications dates to BellSouth change request databases.
- PwC observed BellSouth Change Review Board (CRB) meetings and gained an understanding of the process to identify impacted systems and the formal accept/reject process.
- PwC obtained and reviewed CRB tracking spreadsheets to validate that all appropriate features and defects were properly processed through the CRB.
- PwC attended Defect Team meetings and gained an understanding of the presentation process for the change requests, communication process of the affected systems, and formal accept/reject process.
- PwC obtained initial user requirements and business rules documentation for all applicable features and defects. PwC validated that user requirements and business rule documentation was completed using established user requirements guidelines.
- PwC observed BellSouth meetings to define feature and defect user requirements and detailed business rules. PwC also observed the BellSouth process to accept user requirements. PwC obtained confirmation via meeting minutes and user requirements logs that features and defects were accepted and finalized ("baselined").



- PwC obtained and validated that Rough Order of Magnitude estimates were completed for applicable features and defects. Rough Order of Magnitude estimates provide a high, medium or low estimate regarding level of effort based on draft user requirements and change request information.
- PwC obtained feature and defect Harvest documentation. Harvest documentation was reviewed to ensure that CLEC impacts and categorization assignments has been clearly documented.
- PwC observed the unit sizing estimate and impact analysis creation process for features and defects. This included observations of individual application development teams, user requirements teams and testing teams.
- PwC obtained and reviewed the unit sizing models, guidelines and templates utilized by the application development, user requirements and testing teams to develop initial estimates.
- PwC obtained and verified that initial estimates were logged onto the standard BellSouth Unit Sizing Estimate form. PwC re-performed the calculation to accumulate the disaggregate unit sizing estimates by the application development, user requirements, testing teams and release level activities into the initial unit sizing for a feature or defect.
- PwC traced feature and defect initial submissions, the accept/reject process, and development of user requirements to the creation of initial unit sizing estimates.
- PwC reviewed the accuracy of the quarterly Appendix IA Reports distributed to CLECs by comparing the initial unit sizing determined by BellSouth's vendors

and the initial sizing estimate reported on Appendix IA distributed on September 24, 2003, December 10, 2003 and March 24, 2004.

- PwC obtained updated feature and defect estimates and verified they were logged onto the standard BellSouth Unit Sizing Estimate form. Updated estimates contain a mixture of actuals hours reported to date and an expected number of hours to complete. PwC re-performed the calculation to accumulate the disaggregate unit sizing estimates by the application development, user requirements, testing teams and release level activities into the updated unit sizing for features or defects.
- PwC reviewed the accuracy of the quarterly Appendix IA Reports distributed to CLECs by comparing the updated unit sizing determined by BellSouth's vendors and the Final sizing estimate reported on Appendix IA distributed on September 24, 2003, December 10, 2003 and March 24, 2004.

37. In examining management's assertion that as of June 24, 2004, BellSouth implemented a documented process, that measures variances quarterly between unit sizing estimates and actual units required for implementation and based on this process, BellSouth has created reporting for the quarter ended March 31, 2004 that identifies the variances between initial unit sizing estimates and actual hours reported by vendors; PwC completed the following tests:

- PwC inquired of BellSouth to gain an understanding of BellSouth's process to compare estimates to actuals for the following:
  - Initial unit sizing estimates to actuals.
  - Initial unit sizing to updated estimates.

- PwC obtained BellSouth's initial unit sizing estimates to actuals schedule for the quarter ended March 31, 2004.
- PwC obtained BellSouth's Methods and Procedures document that defines the process to be taken to prepare schedules that calculate variances in initial unit sizing estimates and actual reported units.
- PwC traced the initial unit sizing estimates and actual units in BellSouth's first quarter 2004 schedule to initial unit sizing estimates prepared by BellSouth vendors and actual hours reported by vendors in the first quarter 2004.
- PwC inquired of BellSouth to provide root cause analysis for any variances greater than 25% identified in BellSouth's initial unit sizing estimates to actuals schedule for the quarter ended March 31, 2004.

### **Exceptions**

38. PwC identified instances where BellSouth deviated from their Unit Sizing Estimate Process. PwC measured these instances against the criteria developed during the Engagement Planning process to assess whether they are reportable. PwC identified the following instances where BellSouth did not adhere to the Unit Sizing Estimate Process for a specific control point for at least 5% (conversely, adherence to the process was less than 95%) of our sample:

- According to Management's assertion criteria, unit sizing estimates are based on modeling techniques or guidelines to ensure estimate consistency. BellSouth's vendors utilize multiple processes (i.e., not a single consistent process), to generate unit sizing. The majority of Accenture Application Teams utilize modeling techniques and guidelines, however some Accenture Application Teams

and Telcordia Teams develop unit sizing estimates based on team members' knowledge and experience with similar features and defects. PwC has reported this issue based on BellSouth utilizing two distinct approaches to initial unit sizing, whereas the assertion refers to a "consistent" process for developing unit sizing estimates.

- BellSouth distributes Appendix H, Appendix IA and the Detailed Capacity Report to the Competitive Local Exchange Carriers (CLECs). These documents should reflect BellSouth's initial unit sizing estimates for features and defects. PwC performed initial unit sizing testing procedures for a sample of 104 features and defects. PwC noted that for fourteen CRs, the Appendix H, Appendix IA or the Detailed Capacity Reports did not accurately reflect the BellSouth initial unit sizing estimate. Of the fourteen CRs, the variance reported ranged from .18 units to 166.15 units, with a median value of 1.93 units. In addition, PwC noted the following regarding the third Quarter 2003, fourth quarter 2003 and first quarter 2004 Detailed Capacity Reports:
  - BellSouth could not provide sufficient detail to verify that two maintenance items were accurately included in the Detailed Capacity Report. The two maintenance items represented a total of .14 units.
  - The initial unit sizing estimates for specific features and defects in Releases 16.0 and 17.0 differed between the third Quarter 2003, and Detailed Capacity Reports for subsequent quarters. The initial unit sizing estimates for specific features and defects should be consistent from quarter to quarter.

- For twenty-eight Change Requests, BellSouth had inaccurately reported the Final Estimates on the Detailed Capacity Report. Of the twenty-eight CRs, the variances ranged from .07 units to 56.04 units, with a median value of 1.09 units.
- PwC noted three instances where the initial unit sizing estimates from various application teams were aggregated inaccurately or incompletely, which resulted in a misstatement of the initial unit sizing. Additionally, there were two instances where BellSouth was unable to provide documentation regarding the initial unit sizing estimates from various application teams to support these initial unit sizing estimates.
- BellSouth's documented methodology requires a Rough Order of Magnitude to be completed for each CLEC change request. However, PwC noted that BellSouth did not complete a Rough Order of Magnitude for one change request.
- BellSouth utilizes a standard form for initial unit sizing estimates. For nine defects, BellSouth was unable to provide the initial unit sizing estimate sizing forms.
- BellSouth has not completed root cause analysis nor provided to management an explanation for variances where total units have increased or decreased greater than 25% for the quarter ended March 31, 2004. PwC noted that root cause was not completed for features and defects that exceeded the variance threshold.

39. Certain instances were noted that did not meet the Unit Sizing Estimate Process 5% tolerance guideline defined by PwC in the Engagement Planning process. However, based on the nature of the Unit Sizing Estimate Process and the importance to all

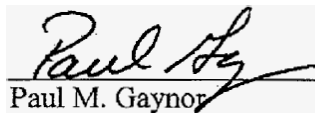
parties involved, these exceptions warranted reporting to provide greater transparency to all readers. The following issues have been deemed reportable by PwC:

- BellSouth's documented methodology requires BellSouth to accept or reject a change request within ten days of acknowledgement if no clarification is needed. PwC noted one instance where BellSouth accepted a change request and did not request clarification until twenty-eight days later. Subsequently, BellSouth notified the CLECs that they would be unable to support a portion of the change request.
- In the BellSouth Change Control Process (CCP) Guide, Appendix IA section, PwC noted that the estimated release capacity for the Type IIs (flow-through), IVs, and Vs fields will be summed from the individual feature sizing information provided in Appendix H, thereby indicating that an Appendix H form will be completed for all Type II (flow-through) Change Requests. However, in the Change Control Process (CCP) Guide, Appendix H section, PwC noted that Appendix H forms are only created for Features with a CCP Type of IV (BST Initiated) or V (CLEC Initiated). PwC noted that it is BellSouth's practice to only complete an Appendix H form for Type IV and V Change Requests.

40. Our conclusion is included within our reports dated June 30, 2004, which has been included as Attachment A.

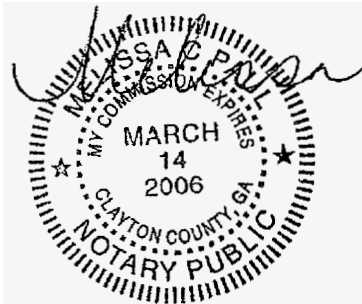
I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on July 12, 2004



Paul M. Gaynor  
Principal, PricewaterhouseCoopers LLP

Subscribed and sworn to before me this 12<sup>th</sup> day of July 2004.



Notary Public, Clayton County, Georgia  
My Commission Expires March 14, 2006

## **Attachment A**



**BellSouth Telecommunications, Inc.**

**Report on BellSouth's Unit Sizing and  
Actual Unit Reporting Processes**

**July 12, 2004**

**BellSouth Telecommunications, Inc.**  
**Change Control Process**

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Report of Independent Accountants

PricewaterhouseCoopers LLP  
10 Tenth Street, Suite 1400  
Atlanta GA 30309-3851  
Telephone (678) 419 1000  
Facsimile (678) 419 1239

To Management of BellSouth Telecommunications, Inc.:

We have examined management's assertion, included in the accompanying *Management Assertions on BellSouth Telecommunications' Change Control Appendix I Reporting*, that BellSouth Telecommunications, Inc. (BellSouth) accurately reported, by category, the number of units dedicated to Change Requests (CRs) via the Monitoring and Reporting Post Release Capacity Utilization Report (the "Report(s)") for the year ended December 31, 2003, dated June 29, 2004, and for the quarter ended March 31, 2004, dated May 15, 2004, as received by BellSouth from its vendors; and that at least 50% of the total Post Release Development Units for Type IV and V CRs have been reported as CLEC CRs (Type V) for the year ended December 31, 2003, in the Report dated June 29, 2004; and that BellSouth maintained internal controls for the 60 day period ended June 1, 2004, over the process of accepting feature and defect CR hours from vendors through the creation of the Report, dated May 15, 2004 designed to provide reasonable assurance regarding the accurate preparation of the Report. Management is responsible for the Company's assertion. Our responsibility is to express an opinion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included examining, on a test basis, evidence supporting management's assertion and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal control to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our examination identified certain instances where BellSouth deviated from the Report criteria defined in the accompanying *Management Assertions on BellSouth Telecommunications' Change Control Appendix I Reporting* and all are outlined in Attachment B.

In our opinion, except for the deviations from the criteria described in Attachment B, BellSouth accurately reported, in all material respects, by category, the number of units dedicated to CRs via the Reports for the year ended December 31, 2003, dated June 29, 2004 and the quarter ended March 31, 2004, dated May 15, 2004, as received by BellSouth from its vendors; and that at least 50% of the total Post Release Development Units for Type IV and V CRs have been reported as CLEC CRs (Type V) for the year ended December 31, 2003, in the Report dated June 29, 2004; and that BellSouth maintained internal controls for the 60 day period ended June 1, 2004, over the process of accepting feature and defect CR hours from vendors through the creation of the Report dated May 15, 2004, based on the criteria defined in the accompanying *Management Assertions on BellSouth Telecommunications' Change Control Appendix I Reporting*.

This report is intended solely for the information and use of BellSouth Corporation and BellSouth Telecommunications, Inc. and appropriate regulatory agencies and is not intended to be and should not be used by anyone other than these specified parties.

*PricewaterhouseCoopers LLP*

PricewaterhouseCoopers LLP  
June 30, 2004



BellSouth Telecommunications, Inc.  
675 West Peachtree Street, N.E.  
Atlanta, GA 30375

*Report of Management Assertions on BellSouth Telecommunications' Change  
Control Appendix I Reporting*

Management of BellSouth Telecommunications (BellSouth) asserts that:

- The Monitoring and Reporting Post Release Capacity Utilization Reports included as Attachment A, dated June 29, 2004 and May 15, 2004, accurately report, by category (i.e., maintenance, defects, etc.), the number of units dedicated to Change Requests (CR) for the year ended December 31, 2003 and the quarter ended March 31, 2004, respectively, as received by BellSouth from its vendors, with the exception of the items noted in Attachment B, based on the criteria below, and that;
- At least 50% of the total Post Release Development Units for Type IV and V Change Requests, per the Monitoring and Reporting Post Release Capacity Utilization Report dated June 29, 2004, have been reported as CLEC Change Requests (Type V) for the year ended December 31, 2003, and that;
- For the 60 day period ended June 1, 2004, BellSouth maintained internal controls, with the exception of the items noted in Attachment B, over the process of accepting feature and defect Change Request hours from vendors through to the creation of The Monitoring and Reporting Post Release Capacity Utilization Report, dated May 15, 2004, that are designed to provide reasonable assurance regarding the accurate preparation of The Monitoring and Reporting Post Release Capacity Utilization Report. A description of BellSouth's Actuals Reporting Process has been included in Sections V and VI of this report.

The following describes the terms "accurately", "units" and "Internal Controls" criteria:

BellSouth Management asserts that the Monitoring and Reporting Post Release Capacity Utilization Report accurately reports the category and number of units dedicated to the Change Requests for the year ended December 31, 2003 and the quarter ended March 31, 2004. As it relates to this assertion, "accurately" will be assessed according to the following processes:

- Accepting features and defects Change Request hours from BellSouth's vendors,
- Converting Change Request hours to Change Request units,
- Assigning Change Request units by Change Request category (i.e., maintenance, defects, etc), and
- Summarizing units by Change Request category for inclusion in the Monitoring and Reporting Post Release Capacity Utilization Report.


As it relates to this assertion, "units" is defined as:

A unit is equal to 100 Change Request Development and Testing labor hours dedicated to Change Requests per the BellSouth Change Control Process Guide, dated June 4, 2004.

BellSouth Management asserts that it maintained internal controls for the 60 day period ended June 1, 2004, over the process of accepting feature and defect Change Request hours from vendors through to the creation of The Monitoring and Reporting Post Release Capacity Utilization Report, dated May 15, 2004. As it relates to this assertion, "Internal Controls" are defined as:

- BellSouth has a documented process in place that details the procedures to be completed for the quarterly creation of The Monitoring and Reporting Post Release Capacity Utilization Report.

- Quarterly, BellSouth reconciles features and defects that are implemented with the feature and defect hours submitted by vendors.
- BellSouth reviews the accuracy of vendor hours submitted for features and defects by comparing final unit sizing estimates to actual hours reported.
- BellSouth reconciles the total hours received from vendors to the total hours reported on Appendix I. Management performs a formal sign-off on total hours reported on Appendix I.
- BellSouth has a documented process in place for assigning the category type (i.e., Type II, Type III, etc.).
- BellSouth feature and defect Harvest documentation contains an audit trail of the category assessments, including an analysis of the CLEC impact. Procedures are in place to ensure that the audit trail is properly maintained.
- BellSouth has established Key Performance Indicators (i.e., Budget to Actuals) to identify trends and monitor the accuracy of The Monitoring and Reporting Post Release Capacity Utilization Report.
- BellSouth has segregated the task level responsibilities of accepting vendor hours, assigning category types and publication of The Monitoring and Reporting Post Release Capacity Utilization Report.

  
William Stacy  
Network Vice President  
Interconnection Services

## Monitoring and Reporting Post-Release Capacity Utilization (Revised: June 29, 2004)<sup>1</sup>

2003 Annual Release Capacity Utilization – YTD Quarterly Report										
Categories	1Q		2Q		3Q		4Q		YTD / EOY	
	Units	%	Units	%	Units	%	Units	%	Units	%
Maintenance	106.3	32.9	259.4 <sup>a</sup>	28.4	141.8 <sup>c</sup>	76.0	118.1 <sup>h</sup>	8.0	625.6	21.5
PSN Mandate	3.0	0.9	14.7	1.6	0	0	0 <sup>i</sup>	0	17.7	0.6
Regulatory (Type 2)	40.3	12.5	0	0	2.8	1.4	0	0	43.1	1.5
Defects (Type 6)	31.3	9.7	23.2 <sup>b</sup>	2.6	40.9 <sup>f</sup>	21.9	21.3 <sup>j</sup>	1.4	116.70	4.0
Industry (Type 3)	0	0	0	0	0	0	1045.4 <sup>k</sup>	70.3	1045.4	35.9
BellSouth (Type 4)	0	0	185.8 <sup>c</sup>	20.3	1.3 <sup>e</sup>	0.7	36.0	2.4	223.1	7.7
CLEC (Type 5)	142.2	44.0	430.2 <sup>d</sup>	47.1	0	0	265.5	17.9	837.9	28.8
<b>Total</b>	<b>323.1</b>	<b>100</b>	<b>913.3</b>	<b>100</b>	<b>186.8</b>	<b>100</b>	<b>1486.3</b>	<b>100</b>	<b>2909.50</b>	<b>100</b>

#### Revisions to 2nd Quarter Actuals.

2nd Quarter Actuals were modified based on reevaluation and classification corrections to include the following modifications:

- Two Maintenance items post implementation were reevaluated and classification changed to Type 6.
- Two Type 6 items post implementation were reevaluated and classification changed to Type 4.
- One Type 6 item post implementation was reevaluated and classification changed to Type 5.
- Eleven Type 6 and two Type 4 non Local items were removed from the report.

- <sup>a</sup>Maintenance capacity decreased by .5 units.
- <sup>b</sup>Type 6 capacity decreased by 253.5 units.
- <sup>c</sup>Type 4 capacity increased by 74.2 units.
- <sup>d</sup>Type 5 capacity increased by 158.1 units.

#### Revisions to 3rd Quarter Actuals.

3rd Quarter Actuals were modified based on reevaluation and classification corrections to include the following modifications:

- Three Maintenance items post implementation were reevaluated and capacity units were modified.
- Three Maintenance items post implementation were reevaluated and classification changed to Type 6.
- One Maintenance item post implementation was reevaluated and classification changed to Type 4.
- Twelve Type 6 items post implementation were reevaluated and capacity units were modified.
- Two Type 6 items were reevaluated as Flow Through, therefore removed from the report.

- <sup>e</sup>Maintenance capacity decreased by 11.2 units.
- <sup>f</sup>Type 6 capacity increased by 9.1 units.
- <sup>g</sup>Type 4 capacity increased by .6 units.

#### Revisions to 4th Quarter Actuals.

4th Quarter Actuals were modified based on reevaluation and classification corrections to include the following modifications:

- Twenty one Maintenance items post implementation were reevaluated and classification changed to Type 6.
- Three Maintenance items post implementation was reevaluated and classification changed to Type 3.
- One Maintenance item post implementation was reevaluated and classification changed to Type 2.
- Three Maintenance items and seven Type 2 items were reevaluated as WLN, therefore removed from the report.
- Eight Type 2 items post implementation was reevaluated and classification changed to Type 3.
- Eight Maintenance items were reevaluated as non Local, therefore removed from the report.
- Eight Type 6 and six Maintenance items were added to the report.

- <sup>h</sup>Maintenance capacity decreased by 16.5 units.
- <sup>i</sup>PSN Mandate capacity decreased by 243.0 units.
- <sup>j</sup>Type 6 capacity increased by 7.3 units.
- <sup>k</sup>Type 3 capacity increased by 33.2 units.

<sup>1</sup> This report is a revision to the report dated February 13, 2004 which depicts capacity units for calendar year 2003

## Monitoring and Reporting Post-Release Capacity Utilization (May 15, 2004)<sup>2</sup>

Categories	1Q		2Q		3Q		4Q		YTD / EOY	
	Units	%	Units	%	Units	%	Units	%	Units	%
Maintenance	60.4	12.2							60.4	12.2
PSN Mandate	0.0	0.0							0.0	0.0
Regulatory (Type 2)	47.5	9.6							47.5	9.6
Defects (Type 6)	105.4	21.3							105.4	21.3
Industry (Type 3)	0.0	0.0							0.0	0.0
BellSouth (Type 4)	34.7	7.0							34.7	7.0
CLEC (Type 5)	246.6	49.9							246.6	49.9
<b>Total</b>	<b>494.6</b>	<b>100</b>							<b>494.6</b>	<b>100</b>

<sup>2</sup> Depicts capacity units for 1<sup>st</sup> Quarter 2004. Attached to this report is a list of all Type 2, 3, 4, 5, 6 change requests that were implemented.



The following issues have been numbered sequentially and have not been prioritized based on the significance of the issue:

1. BellSouth implemented two features in the second quarter 2003 that added new functionality and corrected a defect. BellSouth was unable to allocate the number of units expended for the implementation of these features between creating new functionality and addressing the defect. BellSouth categorized all implementation units for these features as Type IV. However, an unknown percentage of units should have been categorized as a Type VI.
2. During our assessment of the first quarter 2004, PwC selected all maintenance CRs for analysis. PwC identified five maintenance items that were CLEC impacting and should have been categorized as Type IV or VI. The five items represented a total of 1.87 units.
3. BellSouth compares time reported by Telcordia for Appendix I features to the amounts invoiced and to final estimates received to ensure that actual hours reported by vendors are accurate. However, BellSouth did not compare defect hours reported by Telcordia for Appendix I to final estimates received for the first quarter 2004. Additionally, BellSouth did not compare feature and defect hours reported by Accenture for Appendix I to final estimates received for the first quarter 2004.
4. BellSouth utilizes the Harvest application to document an audit trail of the category assessments for features and defects, including an analysis of the CLEC impact. PwC noted that for 58% of features and defects implemented in the first quarter 2004, BellSouth did not provide a full explanation of the CLEC impact and its impact on the category assignment.
5. PwC noted the following weaknesses related to Harvest application security:
  - Gaining access to the BellSouth Harvest application does not require authorization by business unit team leaders prior to individuals obtaining access. Harvest Security Administrators are not notified of users who have been terminated or changed job positions and should have Harvest access revoked.
  - There are no periodic reviews of access granted to ensure that existing access is appropriate.
  - Users can have multiple user ids.
  - Users are assigned a default password that matches their User ID. The Harvest application does not require that users change their passwords immediately upon initial logon.



Report of Independent Accountants

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Telephone (678) 419 1000  
Facsimile (678) 419 1239

We have examined management's assertion, included in the accompanying *Management Assertions on BellSouth Telecommunications' Application of its Unit Sizing Process*, that BellSouth's process for calculating unit sizing estimates for all Change Request (CR) types has been performed from July 1, 2003 to May 31, 2004 with a consistent, documented methodology common to all vendors and systems included within the scope of the Change Control Process (CCP) guide, available on the BellSouth Interconnection website ([interconnection.bellsouth.com](http://interconnection.bellsouth.com)); and that as of June 24, 2004, BellSouth implemented a documented process that measures variances between unit sizing estimates and actual units required for implementation. Based on this process, BellSouth has created reporting for the quarter ended March 31, 2004 that identified the variances between initial unit sizing estimates and actual hours reported by vendors. Management is responsible for the Company's assertion. Our responsibility is to express an opinion based on our examination.

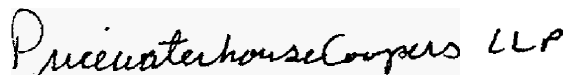
Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included examining, on a test basis, evidence supporting management's assertion and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal control to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our examination identified certain instances where BellSouth deviated from the Unit Sizing Process criteria defined in the accompanying *Management Assertions on BellSouth Telecommunications' Application of its Unit Sizing Process* and all are outlined in Attachment C.

In our opinion, except for the deviations from the criteria described in Attachment C, BellSouth's process for calculating unit sizing estimates for all CR types has been performed, in all material respects, from July 1, 2003 to May 31, 2004 with a consistent, documented methodology common to all vendors and systems; and that as of June 24, 2004 BellSouth had implemented a documented process that measures variances between unit sizing estimates and actual units required for implementation and that BellSouth has created reporting for the quarter ended March 31, 2004 that identified the variances between initial unit sizing estimates and actual hours reported by vendors, based on the criteria set forth in the accompanying *Management Assertions on BellSouth Telecommunications' Application of its Unit Sizing Process*.

This report is intended solely for the information and use of BellSouth Corporation and BellSouth Telecommunications, Inc. and appropriate regulatory agencies and is not intended to be and should not be used by anyone other than these specified parties.



PricewaterhouseCoopers LLP  
June 30, 2004



BellSouth Telecommunications, Inc.  
675 West Peachtree Street, N.E.  
Atlanta, GA 30375

*Report of Management Assertions on BellSouth Telecommunications'  
Application of its Unit Sizing Process*

The Management of BellSouth Telecommunications (BellSouth) asserts the following related to unit sizing for Change Requests:

- BellSouth's Process for calculating unit sizing estimates for all Change Request (CR) types has been performed from July 1, 2003 to May 31, 2004 with a consistent, documented methodology, with the exception of the items noted in Attachment C, common to all vendors and systems included within the scope of the Change Control Process guide, available on the BellSouth Interconnection website ([interconnection.bellsouth.com](http://interconnection.bellsouth.com)); and that
- As of June 24, 2004, BellSouth implemented, with the exception of the items noted in Attachment C, a documented process, based on the criteria below, that measures variances quarterly between unit sizing estimates and actual units required for implementation. Based on this process, BellSouth has created reporting for the quarter ended March 31, 2004 that identifies the variances between initial unit sizing estimates and actual hours reported by vendors. A description of BellSouth's Unit Sizing Process has been included in Sections V and VI of this report.

The following describes the terms "unit sizing", "consistent" and "implemented" criteria:

BellSouth Management asserts that unit sizing has been performed from July 1, 2003 to May 31, 2004 with a consistent, documented methodology common to all vendors and systems included within the scope of the CCP Process Guide. As it relates to this assertion, "unit sizing" will be assessed according to the following:

Unit Sizing is the process of estimating the number of units (i.e., a unit is equal to 100 Change Request Development and Testing labor hours) that will be required to implement a Change Request.


As it relates to this assertion, "consistent" will be assessed according to the following processes:

- BellSouth completes a Rough Order of Magnitude for each Change Request feature to estimate the work effort based on documented criteria.
- BellSouth completes user requirements for each Change Request feature.
- BellSouth completes initial and updated unit sizing estimates based on modeling tools and guidelines.
- BellSouth completes unit sizing and reporting via Appendix IA quarterly as the following phases of the development lifecycle progress:
  - Prior to planning.
  - End of Design.

BellSouth asserts that as of June 24, 2004, BellSouth implemented a documented process that measures variances quarterly between unit sizing estimates and actual units required for implementation. As it relates to this assertion, "implemented" will be assessed based on the following:

- Methods and procedures exist that detail the process to create unit sizing variance reports, report distribution and variance levels that require explanations or action to be taken.

- Reports that compare initial unit sizing estimates to actual hours expended for each change request are reviewed by BellSouth Management.



William Stacy  
Network Vice President  
Interconnection Services

The following issues have been numbered sequentially and have not been prioritized based on the significance of the issue:

1. BellSouth's vendors utilize multiple processes (i.e., not a single consistent process), to generate unit sizing. The majority of Accenture Application Teams utilize modeling techniques and guidelines, however some Accenture Application Teams and Telcordia Teams develop unit sizing estimates based on team members' knowledge and experience with similar features and defects.
2. BellSouth distributes Appendix H, Appendix IA and the Detailed Capacity Report to the Competitive Local Exchange Carriers (CLECs). These documents should reflect BellSouth's initial unit sizing estimates for features and defects. PwC performed initial unit sizing testing procedures for a sample of 104 features and defects. PwC noted that for fourteen CRs, the Appendix H, Appendix IA or the Detailed Capacity Reports did not accurately reflect the BellSouth initial unit sizing estimate. Of the fourteen CRs, the variance reported ranged from .18 units to 166.15 units, with a median value of 1.93 units. In addition, PwC noted the following regarding the third quarter 2003, fourth quarter 2003 and first quarter 2004 Detailed Capacity Reports:
  - BellSouth could not provide sufficient detail to verify that two maintenance items were accurately included in the Detailed Capacity Report. The two maintenance items represented a total of .14 units.
  - The initial unit sizing estimates for specific features and defects in Releases 16.0 and 17.0 differed between the third quarter 2003, and Detailed Capacity Reports for subsequent quarters. The initial unit sizing estimates for specific features and defects should be consistent from quarter to quarter.
  - For twenty-eight Change Requests, BellSouth had inaccurately reported the Final Estimates on the Detailed Capacity Report. Of the twenty-eight CRs, the variances ranged from .07 units to 56.04 units, with a median value of 1.09 units.
3. PwC noted three instances where the initial unit sizing estimates from various application teams were aggregated inaccurately or incompletely, which resulted in a misstatement of the initial unit sizing. Additionally, there were two instances where BellSouth was unable to provide documentation regarding the initial unit sizing estimates from various application teams to support these initial unit sizing estimates.
4. BellSouth's documented methodology requires a Rough Order of Magnitude to be completed for each CLEC change request. However, PwC noted that BellSouth did not complete a Rough Order of Magnitude for one change request.
5. BellSouth's documented methodology requires BellSouth to accept or reject a change request within ten days of acknowledgement if no clarification is needed. PwC noted one instance where BellSouth accepted a change request and did not request clarification until twenty-eight days later. Subsequently, BellSouth notified the CLECs that they would be unable to support a portion of the change request.
6. In the BellSouth Change Control Process (CCP) Guide, Appendix IA section, PwC noted that the estimated release capacity for the Type IIs (flow-through), IVs, and Vs fields will be summed from the individual feature sizing information provided in Appendix H, thereby indicating that an Appendix H form will be completed for Type II (flow-through) Change Requests. However, in the Change Control Process (CCP) Guide, Appendix H section, PwC noted that Appendix H forms are only created for Features with a CCP Type of IV (BST Initiated) or V (CLEC Initiated). PwC noted that it is BellSouth's practice to only complete an Appendix H form for Type IV and V Change Requests.
7. BellSouth utilizes a standard form for initial unit sizing estimates. For nine defects, BellSouth was unable to provide the initial unit sizing estimate sizing forms.
8. BellSouth has not completed root cause analysis nor provided to management an explanation for variances where total units have increased or decreased greater than 25% for the quarter ended March 31, 2004. PwC noted that root cause analysis was not completed for features and defects that exceeded the variance threshold.

Supplementary Information

**SECTION V - EXECUTIVE OVERVIEW**

**A. Overview of Reports**

In order to verify that BellSouth has provided at least 50% of the total units for Type IV and Type V change requests implemented in 2003 and that BellSouth has established internal controls to provide reasonable assurance that the Monitoring and Reporting Post Release Capacity Utilization Report is accurately created, the management of BellSouth requested that PricewaterhouseCoopers LLP (PricewaterhouseCoopers) perform an independent examination. The initial independent examination addressed the following:

- BellSouth accurately reported, by category, the number of units dedicated to Change Requests (CRs) for the year ended December 31, 2003 and the quarter ended March 31, 2004 as received by BellSouth from its vendors, via the Monitoring and Reporting Post Release Capacity Utilization Report (the "Report(s)") dated June 29, 2004 and May 15, 2004 respectively, and that;
- At least 50% of the total Post Release-Development Units for Type IV and V CRs have been reported as CL&C CRs (Type V) for the year ended December 31, 2003, in the Report dated June 29, 2004, and that;
- BellSouth maintained internal controls for the 60 day period ended June 1, 2004, over the process of accepting feature and defect CR hours from vendors through the creation of the Report, dated May 15, 2004 designed to provide reasonable assurance regarding the accurate preparation of the Report.

In addition, in order to verify that BellSouth has followed a consistent, documented methodology to create unit sizing estimates, BellSouth requested that PricewaterhouseCoopers perform a second independent examination. Specifically, the second independent examination addressed the following:

- BellSouth's process for calculating unit sizing estimates for all Change Request (CR) types has been performed from July 1, 2003 to May 31, 2004 with a consistent, documented methodology common to all vendors and systems included within the scope of the Change Control Process (CCP) guide, available on the BellSouth Interconnection website ([interconnection.bellsouth.com](http://interconnection.bellsouth.com)), and that;
- BellSouth has created reporting for the quarter ended March 31, 2004 that identifies the variances between initial unit sizing estimates and actual hours reported by vendors, and that;
- As of June 24, 2004, BellSouth implemented a documented process that measures variances between unit sizing estimates and actual units required for implementation.

**B. Objective of Supplementary Test Information**

The objective of this information is to provide a description of BellSouth's processes to accept, accumulate, and report Change Request hours to be included on the Monitoring and Reporting Post Release Capacity Utilization Report and the process to develop and report initial unit sizing estimates for features and defects.

**SECTION VI -- UNIT SIZING AND ACTUALS REPORTING PROCESSES**

BellSouth has implemented a process to accept, accumulate, and report Change Request hours included on the Monitoring and Reporting Post Release Capacity Utilization Report. BellSouth has documented methods and procedures that describe the process to be followed when creating the Monitoring and Reporting Post Release Capacity Utilization Report. These methods and procedures include the following:

- Features and defects are assigned a categorization type (i.e., Type IV for BellSouth initiated CRs) based on their expected impact to CLECs and the party that originated the request.
- BellSouth identifies all features and defects that have been implemented in a quarter and queries vendors to provide actual hours expended in association with the implementation of each feature and defect. BellSouth ensures that all features and defects are included in vendor queries by reconciling project charter features and defects with release implementations.
- BellSouth vendors provide the total actual hours incurred during the implementation of each Feature and Defect to BellSouth.
- BellSouth compares the total actual hours received from vendors to estimates received from the vendors to identify large variances.
- BellSouth assigns to separate individuals the responsibilities of accepting actual hours from vendors and preparing the Monitoring and Reporting Post Release Capacity Utilization Report. BellSouth reconciles total actual hours received from vendors to total actual hours reported via the Monitoring and Reporting Post Release Capacity Utilization Report.
- BellSouth converts the hours reported by vendors into units by dividing the total number of hours by 100.
- BellSouth Management reviews and approves a draft version of the Monitoring and Reporting Post Release Capacity Utilization Report prior to distribution to CLECs.
- BellSouth Change Control distributes "Appendix I: Monitoring and Reporting Post Release Capacity Utilization" to the CLECs via email within forty-five days of the end of each Quarter.

BellSouth Telecommunications, Inc.  
Unit Sizing and Actual Unit Reporting Processes

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BellSouth has implemented a process to develop and report initial and updated unit sizing estimates for features and defects. BellSouth has documented methods and procedures that describe the process to be followed when creating and reporting initial unit sizing estimates. These methods and procedures include the following:

- The Application Planning (AP) team provides a Rough Order of Magnitude (ROM) estimate for all CLEC initiated Change Requests (CR). This estimate is provided in terms of the level of impact (Small, Medium or Large) to the various applications and the feature or defect as a whole.
- The AP team reviews the available documentation in order to provide a draft impact analysis (i.e., Draft High Level Conceptual Design), to be used to create the planning and feasibility estimates.
- The AP team requests initial estimates from the impacted applications and teams based on the available documentation. Each application team creates and populates their initial estimates based on estimate modeling tools and guidelines specific to each application.
- The AP team then compiles the estimates from each application team to create the initial feature/defect unit sizing estimate. The AP team also creates an Appendix H for Type IV and V CRs.
- The initial estimates are communicated via Appendix H to CLECs in the form of the Change Review Package, which is sent 5-7 business days prior to the Change Review Meetings. During the Quarterly Change Review Meetings, the change requests are prioritized by the participants of the meeting. Status updates are provided monthly but prioritization occurs quarterly.
- Once scoped for a release, the initial unit sizing by category is published and communicated to the CLEC community via the quarterly "*Appendix IA: Reporting Pre-Release Estimated Capacity Forecasting Used for Capacity Planning Only*" and the supporting documentation "*Release XX.X Detailed Capacity Report*". Within the "*Release XX.X Detailed Capacity Report*" the initial estimate is outlined by the CR and category type.
- Once the initial sizing estimate is created and more information is communicated about the feature or defect, updated estimates are created using the same estimate modeling tools and guidelines.
- Updated estimates for the End of Design milestone are published and communicated to the CLEC community via the quarterly "*Appendix IA: Reporting Pre-Release Estimated Capacity Forecasting Used for Capacity Planning Only*" and the supporting documentation "*Release XX.X Detailed Capacity Report*".
- After the feature or defect has been implemented, BellSouth produces a variance report that compares the estimates to actuals.