V. Provisioning Domain Results and Analysis

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A. Test Results: Collocation and Network Design Verification and Validation Review (PPR6)

1.0 Description

The Collocation and Network Design Verification and Validation Review (PPR6) evaluated BellSouth processes, procedures, supporting systems, and tools for establishing and maintaining Alternative Local Exchange Carriers' (ALEC) ability to access Unbundled Network Elements (UNEs). The test also evaluated BellSouth's trunk forecasting methodology, which includes the treatment of proprietary information.

Collocation permits an ALEC to offer services to their customers, as well as allowing connection of these customers to the Public Switched Telephone Network (PSTN) through Inter-Office Facilities (IOF). The Network Design process allows an ALEC to establish a presence in a BellSouth switch when an ALEC requires dial tone from a BellSouth switch port.

Interconnection is the connection of separate pieces of equipment or transmission facilities within, between, or among telecommunication networks. The architecture of interconnection may include collocation arrangements, entrance facilities, and Mid-Span Fiber Meet arrangements. This test did not examine interconnection for other purposes such as from network to network (i.e., with an Inter-Exchange Carrier).

2.0 Business Process

This section describes BellSouth's collocation and network design business process.

2.1 Business Process Description

BellSouth provides collocation and network design planning services to facilities-based local exchange carriers in order to support the provisioning of UNEs.

2.1.1 Network Design

The purpose of the network design process is: i) to gather detailed information related to an ALEC's desired service offering, ii) to jointly determine the criteria necessary for network design and iii) to initiate the process of establishing ALEC services. ALEC services are based upon desired product offerings, which include determining collocation, trunk, and operator services requirements. The ALEC identifies and communicates the relevant network design characteristics to BellSouth based on the type of service the ALEC is interested in providing to its customer base. BellSouth assigns team members to coordinate network design activities with ALECs. A Project Manager in the Local Interconnection Service Center (LISC) is responsible for new trunking requests and local interconnection. The Pre-Sale Quality Team assists the ALEC with establishing a billing account while an Account Team Regional Collocation Coordinator (ATCC) serves as the main point of contact.

2.1.2 Collocation

A collocation arrangement is required for ALECs wishing to offer UNE services such as local loop and interoffice facilities. Collocation can take two general forms: virtual or physical.

Virtual Expanded Interconnection Service (VEIS), or virtual collocation, consists of an ALEC providing and transferring ownership of its telecommunication equipment to BellSouth.

BellSouth pays a fee to the ALEC for transfer of equipment ownership. Since ALECs do not have physical access to equipment, BellSouth performs the actual provisioning, maintenance, and repair activities at the instruction of the ALEC. Even though the physical equipment is located among BellSouth's own equipment arrangement, that equipment is dedicated to the ALEC.

Physical Expanded Interconnection Service (PEIS), or physical collocation, provides a secure area in or near a central office for the ALEC to own, install, maintain, and administer its own telecommunications equipment. Unlike virtual collocation, the ALEC has direct access to its equipment. There are variations of physical collocation that can be requested by the ALECs such as: Caged Collocation, Cageless Collocation, Shared Collocation, and Adjacent Collocation.

- Caged collocation provides ALECs with a secured environment whereby the ALEC's equipment is placed inside an enclosed cage.
- Cageless collocation enables an ALEC to collocate its equipment without the construction of an enclosed cage. With cageless collocation, BellSouth makes available collocation in single bay increments.
- Shared collocation allows for more than one ALEC to share cage collocation arrangement.
- Adjacent collocation is available when the central office lacks space for collocation equipment. In this case, the equipment is placed outside of the central office.

E-Application is the on-line system used by BellSouth to monitor and track collocation projects. E-Application is available for ALECs to submit new or augment collocation requests, as well as to review the status of collocation requests.

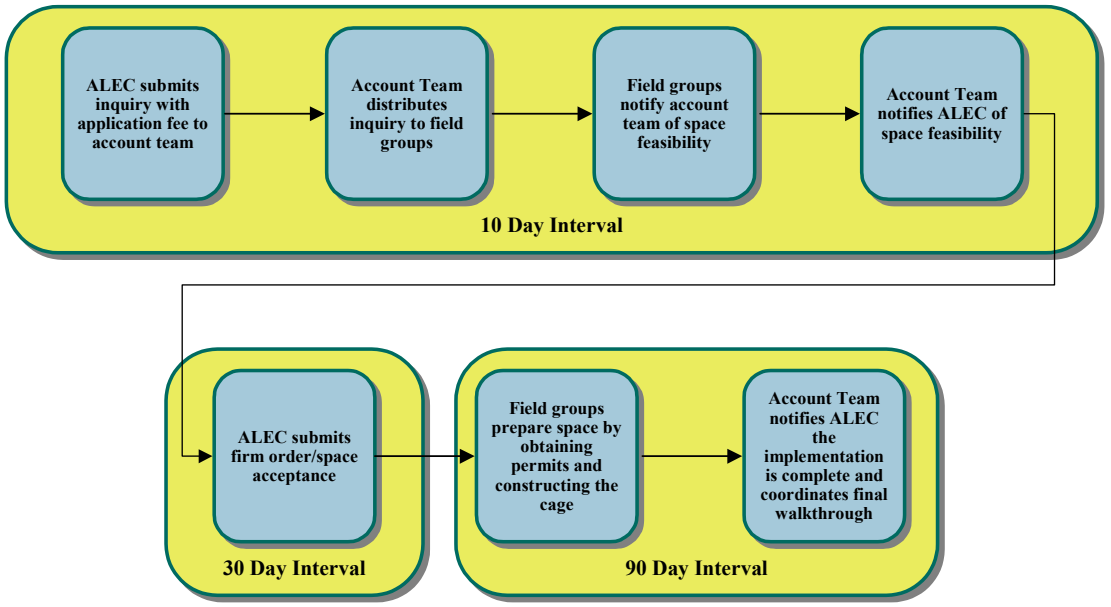
2.1.2.1 Collocation Process

The Account Team Regional Collocation Coordinator (ATCC) coordinates meetings between ALECs and BellSouth during the collocation project and schedules the space acceptance walkthrough upon completion. The general timeline of major functions within a collocation project is:

- BellSouth's Response to Application – 10 business days;
- ALEC Firm Order/Acceptance – 30 business days; and
- Completion of Order – 90 business days.

Figure 6-1 below depicts the collocation process and the associated timeline.

Figure 6-1: Collocation Process



To meet these timelines, the Interconnection Network Access Coordinator (INAC) tracks the progress of the collocation projects in the 3-Application system, which is updated by various internal groups working on the collocation project.

2.1.2.2 Termination of Space

The collocation process includes three ways for an ALEC to terminate space:

- Voluntary termination – The ALEC submits a disconnect application to terminate occupancy of the collocated space. The ALEC is required to vacate the space within 30 days after acceptance of the disconnect application and a BellSouth certified vendor must remove the equipment.
- Involuntary termination – The space is deemed involuntarily terminated when BellSouth is forced to terminate the ALEC's collocation arrangement due to nonpayment. In this case, BellSouth is responsible for the removal of collocation equipment and clearing the space. BellSouth will negotiate on a case-by-case basis reclaim of equipment by an ALEC.
- Abandonment – The space is considered abandoned when the ALEC halts payment for collocation services without submitting a disconnect application. If the ALEC wants to reclaim the equipment, BellSouth will negotiate on a case-by-case basis.

2.1.3 Trunk Forecasting

ALEC provisioning of local exchange services could cause significant changes in traffic loads carried by the BellSouth network. Therefore, ALECs complete trunk forecasts as outlined in their Interconnection Agreement with BellSouth and provide predicated traffic volumes so that BellSouth may make necessary plans to augment network facilities where necessary. ALECs are requested to provide the INAC with a five-year forecast for their anticipated traffic volume. Significant changes replacing the original forecast are to be provided to the INAC as soon as possible.

BellSouth stated that it shares trunking information only with internal organizations involved with trunking and equipment installation. The BellSouth employee responsible for forecasting a particular geographical area is able to access ALEC's forecasted data for that area only. BellSouth is obligated by the Interconnection Agreement to safeguard these proprietary and sensitive records. All ALEC forecasted data is destroyed after one year.

Trunking requests are submitted, tracked and monitored using the Common Access Front End (CAFÉ) and Exchange Access and Control Tracking (EXACT) systems. CAFÉ is the system used by ALECs to submit Access Service Requests (ASRs) for trunks while EXACT is the system used by BellSouth to monitor and track trunk requests.

3.0 Methodology

This section summarizes the test methodology.

3.1 Scenarios

Scenarios were not applicable to this test.

3.2 Test Targets and Measures

The test target was BellSouth's collocation and network design planning processes, which included reviews of the following processes and sub-processes:

- Collocation and network design;
  - Planning;
  - Project Management;
  - Resources;
  - Testing and implementation;
- Trunk Forecasting;
  - Forecast development;
  - Forecast security;
  - Forecast usage;
- Capacity Management Process; and
- Originating Line Number Screening (OLNS).

3.3 Data Sources

The data collection performed for this test centered on interviews and reviews of the following documentation supplied by BellSouth at the request of KPMG Consulting:

- Account Team Regional Collocation Center – Account Team Regional Collocation Coordinator Procedures;
- BellSouth Start-Up Guide;
- BellSouth Collocation Handbook;
- Draft Interconnection Agreement; and
- Florida Public Service Commission Order No. PSC-00-0941-FOF-TP – May 11, 2000.

3.4 Data Generation/Volumes

This test did not rely on generation or volume testing.

3.5 Evaluation and Analysis Methods

The evaluation methods performed for this test relied on the analysis of information obtained through interviews with and documentation provided by BellSouth personnel supporting collocation and network design processes. In addition, discussions were held with members of the ALEC community to understand their experiences with collocation and/or network design processes.

The Collocation and Network Design Verification and Validation Review (PPR6) included a checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the BellSouth Florida OSS Evaluation. These evaluation criteria, detailed in the Florida Master Test Plan, provided the framework of norms, standards and guidelines for the Collocation and Network Design Verification and Validation Review (PPR6).

The data collected were analyzed employing the evaluation criteria identified in Section 4.1 below.

4.0 Results

This section contains the overall test results.

4.1 Results Summary

The number of exceptions and observations issued during the life of the test is depicted in Table 6-1. For additional exception and observation information, refer to Appendices D and E, respectively. The test criteria and results are presented in Table 6-2.

Table 6-1: PPR6 Exception and Observation Count

Activity	Exceptions	Observations
Total Issued	0	2
Total Disposed as of Final Report Date	0	2
Total Open as of Final Report Date	0	0

Table 6-2: PPR6 Evaluation Criteria and Results

Test Reference	Evaluation Criteria	Results	Comments
Network Design			
PPR6-1	Network design projects are implemented through structured, documented methodologies.	Satisfied	BellSouth adheres to structured, documented methodologies to support the implementation of network design projects. The BellSouth Products and Services Interval Guide[258], Selective Call Routing Using Line Class Codes[259], and BellSouth's Market Service Description of SCR-LCC for OS/DA Branding Options[260] detail the methodology and structure for planning and implementing network design projects. The following documents also outline the methodology and structure for network design projects: ♦ Local Interconnection Quality Process Improvement, Issue 1a, October 2001; ♦ Operator Services and Repair Service for CLECs - Methods and Procedures for the CCM, Issue 4, June 8, 2001; ♦ OS/DA Process Flow Document, June 8, 2001; ♦ Selective Call Routing with Line Class Codes (OSDA) CWINS – Job Aide (Phase One), April 12, 2001; ♦ UNE-P/Reseller OA/DA branding Via OLNS Software, January 11, 2002; ♦ Unbundled Local Switching Technical Service Description, Issue 9, June 5, 2001; and ♦ Unbundled Network Element Combinations (UNEs) - Recent Change Memory Administration Group (RCMAG) Methods and Procedures, Issue A9, June 2001. KPMG Consulting reviewed the relevant network design forms and project artifacts and found that processes, as described in the methodology, are followed.

[258] Issue 5F, March 2002
[259] Version 3, August 28, 2001
[260] Version 1, April 30, 2001

Test Reference	Evaluation Criteria	Results	Comments
PPR6-2	BellSouth and ALEC responsibilities are defined and available for network design implementations.	Satisfied	BellSouth and ALEC responsibilities for network design implementations are defined in the BellSouth Start-Up Guide[261] and available on BellSouth's website. Responsibilities of BellSouth groups processing network design requests are found in the Local Interconnection Quality Process Improvement[262], the Operator Services and Repair Service for CLECs – Methods and Procedures for the CCM[263], and OS/DA Process Flow Document[264].
PPR6-3	A tracking tool is used to monitor and/or collect information on network design projects.	Satisfied	BellSouth uses tracking tools EXACT and CAFÉ to monitor and collect information on network design projects. EXACT is a system used to track information and critical dates pertaining to network design requests. KPMG Consulting observed EXACT in operation at the North Florida and South Florida Network Infrastructure Support Centers (NISC), as well as project artifacts from the EXACT system. CAFÉ is an on-line front-end system used by ALECs to submit and monitor Access Service Requests (ASRs), which are necessary when setting up trunks for call routing. ALECs set up a user ID and password to access CAFÉ and are able to view the status of their ASRs on this system, unless the requests are faxed. The ALEC can contact the ATCC or Project Manager for the status of its faxed requests. KPMG Consulting reviewed the relevant tracking tools and project artifacts and found that processes, as described, are followed.
PPR6-4	Formal processes exist to communicate network design decisions to ALEC and BellSouth participants.	Satisfied	Formal processes exist to communicate network design decisions and are found in Unbundled Local Switching Technical Service Description[265], UNE-P/Reseller OA/DA branding Via OLNS Software[266], OS/DA Process Flow Document[267], and Local Interconnection Quality Process Improvement[268]. During a May 30, 2001 interview with an Account Manager, KPMG Consulting found that the ALEC meets with a BellSouth Project Manager to discuss

[261] Issue 1.5, April 2002, sections 4.0 and 6.0
[262] Issue 1a, October 2001
[263] Issue 4, June 8, 2001
[264] June 8, 2001
[265] Issue 9, June 5, 2001, pages 16-17
[266] January 11, 2002
[267] June 8, 2001
[268] Issue 1a, October 2001

Test Reference	Evaluation Criteria	Results	Comments
			preliminary requirements. During this meeting, the ALEC and the Project Manager review a pre-planning checklist and identify design and planning activities. KPMG Consulting reviewed network design project artifacts that included a completed pre-planning checklist and documentation of a kickoff meeting between the ALEC and BellSouth. The ATCC serves as the primary point of contact for ALECs. Communication can occur through electronic, verbal and written correspondence.
PPR6-5	The network design implementation process includes dispute resolution and escalation procedures that are defined, documented and available to both the ALEC and BellSouth.	Satisfied	The network design implementation process includes dispute resolution and escalation procedures that are defined, documented and available to the ALEC and BellSouth. The escalation procedures for local service products are found on the BellSouth website at http://www.interconnection.bellsouth.com/contact/cleccare_esc.html under "CLEC Cares Escalation Procedures". Disputes for general network design items are escalated through the ATCC. The ATCC escalation process is available on the BellSouth website above under "CLEC Cares Escalation Procedures". Additionally, escalations and dispute resolution for trunk ordering are directed to the Local Interconnection Services Center (LISC). KPMG Consulting reviewed the LISC Escalation List, which ALECs can request from their Account Team.
PPR6-6	Procedures are in place for defining, estimating, documenting, and managing the design and costs of network design implementations.	Satisfied	Procedures for defining, estimating, documenting, and managing the design and costs of network design implementations are defined in the BellSouth Start-Up Guide[269], available on BellSouth's website, the Unbundled Network Element Combinations (UNEs) – Recent Change Memory Administration Group (RCMAG) Methods and Procedures[270], and the Unbundled Local Switching Technical Service Description[271]. The Standard Interconnection Agreement lists both recurring and non-recurring rates for Line Class Codes and Channel Dedicated Transport. KPMG Consulting reviewed project artifacts and found that procedures, as described, are followed.

[269] April 2002, Section 6.0
[270] Issue A9, June 2001
[271] Issue 9, June 5, 2001

Test Reference	Evaluation Criteria	Results	Comments
PPR6-7	Standards of delivery are established for network design implementations.	Satisfied	Standards of delivery are established for network design implementations and can be found in: ♦ The Unbundled Local Switching Service Description and Specifications Implementation Methods and Procedures; ♦ Unbundled Local Switching DMS 100 Implementation Methods and Procedures – Selective Routing; and ♦ Unbundled Local Switching Siemens Stromberg-Carlson Implementation Methods and Procedures. During a May 30, 2001 interview with an Account Manager, KPMG Consulting found that before the completion of network design projects, BellSouth performs various test calls to ensure standard delivery across network design implementations. KPMG Consulting confirmed that BellSouth performs these test calls by reviewing test call results for OS/DA trunks that occurred during April of 2002.
Collocation			
PPR6-8	Collocation projects are implemented through structured, documented methodologies.	Satisfied	BellSouth has structured and documented methodologies for implementing collocation projects. The BellSouth Collocation Handbook[272], BellSouth Standard Central Office Collocation Agreement[273] and BellSouth Remote Site Collocation Agreement[274] detail the methodology and structure for collocation implementations. Each ALEC is assigned to an ATCC who assists in the delivery of collocation projects. KPMG Consulting reviewed the relevant collocation forms and project documentation and found that processes, as described in the methodology, are followed.
PPR6-9	BellSouth and ALEC responsibilities are defined and documentation is available for collocation	Satisfied	BellSouth and ALEC collocation responsibilities are defined in the BellSouth Collocation Handbook[275], BellSouth Standard Central Office Collocation Agreement[276] and the BellSouth Start-Up Guide[277],

[272] Issue 10.1, March 2002, sections 2.1-2.2, 3.0-3.4
[273] Sections 6.0-6.13
[274] Sections 7.1-7.13
[275] Issue 10.1, March 2002, section 3.2
[276] Sections 6.2, 6.6 and 6.11

Test Reference	Evaluation Criteria	Results	Comments
	implementations.		available on BellSouth's website. Order No. PSC-00-0941-FOF-TP, issued by the Florida Public Service Commission on May 11, 2000, outlines the collocation responsibilities of both parties.
PPR6-10	A tracking tool is used to monitor and collect information on collocation projects.	Satisfied	BellSouth uses the e-Application tracking tool to monitor and collect information on collocation projects. Major milestones are tracked and status reports are regularly generated. KPMG Consulting observed the e-Application system in operation with BellSouth's CLEC Interconnection Sales Support Group. KPMG Consulting met with the CLEC Interconnection Sales Support Group, who explained the process for tracking collocation projects. KPMG Consulting then reviewed collocation project artifacts and found that processes, as described in the documentation, are followed.
PPR6-11	A formal process exists to communicate collocation decisions to BellSouth and ALEC participants.	Satisfied	BellSouth's formal process to communicate collocation decisions is found in the BellSouth Collocation Handbook[278]and the BellSouth Start-Up Guide[279]. The ATCC and the INAC serve as the primary points of contact for the ALECs. As the primary points of contact, the ATCC and INAC notify ALECs of issues related to collocation projects. Notification can be provided through electronic, verbal and written correspondence during the collocation provisioning process.
PPR6-12	The collocation implementation process includes dispute resolution and escalation procedures that are defined, documented, and available to both ALEC and BellSouth personnel.	Satisfied	The collocation implementation process includes dispute resolution and escalation procedures that are defined, documented, and available to both ALEC and BellSouth personnel on BellSouth's website at http://www.interconnection.bellsouth.com/contact/cleccare_esc.html under "CLEC Cares Escalation Procedures". Internal escalation process for ATCC is documented in Account Team Procedures – Account Team Information Package[280]. During a November 1, 2000 interview with the Director of Collocation and a March 27, 2001 interview with the INAC, KPMG Consulting found that an ALEC contacts the ATCC if an issue arises

[277] Issue 1.5, April 2002, sections 6.9.1.1, 6.9.2.1
[278] Issue 10.1, March 2002, section 3.2
[279] Issue 1.5, April 2002, section 6.9.2.1
[280] Version 7, August 7, 2001, chapter 7.0

Test Reference	Evaluation Criteria	Results	Comments
			before or during the collocation. The ATCC provides ALECs with an escalation contact list. If a dispute arises after the collocation implementation is completed, the INAC in the field may negotiate with the ALEC. The INAC serves as the Network collocation coordinator and advocate for customers. These responsibilities are outlined in the BellSouth Job Description[281].
PPR6-13	Standards and procedures are defined for ensuring that specifically trained personnel are assigned to a collocation project.	Satisfied	Standards and procedures are defined for ensuring BellSouth and ALECs select installers/contractors from the same pool of approved resources. These standards are described in the BellSouth Standard Central Office Collocation Agreement[282], BellSouth Remote Site Collocation Agreement[283] and the Services Supplier Certification Process for Detailed Engineering and Installation[284]. These are external documents available from BellSouth. Once certified by BellSouth, an ALEC may become an approved installer/contractor. The certification process is outlined in the Services Supplier Certification Process for Detailed Engineering and Installation[285]. BellSouth limits the number of vendors placed on its certified list to a manageable number. BellSouth personnel responsible for providing collocation support are required to complete job specific training. KPMG Consulting reviewed the following training manuals and determined that the manuals accurately describe the responsibilities and training of BellSouth personnel: ♦ Methods and Procedures for the Circuit Capacity Management (CCM) Organization – Issue 19, October 2000; ♦ Account Team Regional Collocation Center - Account Team Regional Collocation Coordinator Procedures – June 2001; ♦ Methods and Procedures for Circuit Capacity Management (CCM) for Collocation, Issue 12, November 16, 1999; ♦ Expanded Interconnection – INAC Procedures,

[281] Job Code: Y0021 – June 15, 1993
[282] Section 6.6
[283] Section 7.6
[284] Issue 5, January 2000, Section 2.7
[285] Issue 5, January 2000, Sections 1.3, 1.9, 1.11, 1.13

Test Reference	Evaluation Criteria	Results	Comments
			September 8, 1998; and ♦ Management of Central Office Record Drawings in the Multi-Vendor Environment, Technical Reference 73564, Issue 3, January 2000.
PPR6-14	Procedures are defined for ensuring that project staffs are available to resolve issues for collocation projects.	Satisfied	Procedures are defined for ensuring that project staffs are available to resolve collocation project issues. These procedures are defined in the Account Team Regional Collocation Center – Account Team Regional Collocation Coordinator Procedures[286], the Collocation Program Manager Responsibilities, and Infrastructure Planning INAC. The ATCC, Collocation Program Manager and INAC provide support for collocation projects. The ATCC contacts the appropriate support team to gather information for specific issues. The Collocation Program Manager coordinates and tracks applications and escalates issues that may delay the due dates. Additionally, the INAC manages and coordinates the network inputs and responses for collocation requests.
PPR6-15	Procedures are defined for ensuring ALECs have the same access to their collocation facilities as BellSouth has to its own facilities.	Satisfied	ALECs have the same access to their collocation facilities as BellSouth has to its own facilities. Once security badges are issued, ALECs have access to BellSouth central offices 24 hours a day, seven days a week. Procedures are defined for ALECs to access collocation facilities in the BellSouth Standard Central Office Collocation Agreement[287], BellSouth Remote Site Collocation Agreement, [288]Draft Interconnection Agreement[289], and Building Keys and Locking System Guidelines[290], all of which are external documents. KPMG Consulting confirmed that these documents define the access and security procedures for both ALEC and BellSouth vendors and employees. KPMG Consulting also confirmed through interviews with an ALEC that ALECs have access to their collocation facilities as outlined in BellSouth documentation[291].

[286] June 2001, Section 2.0
[287] Section 6.5
[288] Section 7.5
[289] Version 4Q01, December 2001, Attachment 4, Physical Collocation, Section 5.8 and Attachment 4, Remote Site Physical Collocation, Section 5.6
[290] BSP 770-130-001BT, Issue F, May 2001
[291] ALEC Interview Summary, March 21, 2001.

Test Reference	Evaluation Criteria	Results	Comments
PPR6-16	Formal procedures are in place to quantify and track scope changes during collocation implementations.	Satisfied	Formal procedures that quantify and track scope changes during collocation implementations are described in the BellSouth Standard Central Office Collocation Agreement[292] and BellSouth Remote Site Collocation Agreement[293]. Deviations from the planned collocation projects resulting from augmentations are monitored and tracked. ALECs can monitor augments on the e-Application system. If BellSouth deviates from the planned schedule and BellSouth and the ALEC cannot agree on a new one, BellSouth can request an extension from the Florida Public Service Commission. KPMG Consulting reviewed the relevant collocation documentation and project artifacts and found that processes, as described in the procedures, are followed. KPMG Consulting also observed the e-Application system in operation at BellSouth's CLEC Interconnection Sales Support Group.
PPR6-17	Procedures are in place for defining, estimating, documenting, and managing the design and costs of collocation implementations.	Satisfied	Procedures for defining, estimating, documenting, and managing the design and costs of collocation implementations are found in the BellSouth Standard Central Office Collocation Agreement[294] and BellSouth Remote Site Collocation Agreement[295]. Collocation project costs include both recurring and non-recurring elements. Costs vary depending on collocation space and size while some costs are standardized in accordance to applicable tariffs. Tariffed rates are documented in the Access Services Tariff (Section E20) and available to ALECs on BellSouth's website. Variable rates for collocation implementations are documented in the Draft Interconnection Agreement[296]. If a rate is not identified in the tariff, the parties negotiate for the specific service or function as part of their contract negotiations. KPMG Consulting reviewed relevant documentation and project artifacts and found that processes, as described in the procedures, are followed.

[292] Section 6.6
[293] Section 7.6
[294] Sections 6.14 and 6.7
[295] Sections 7.14 and 7.7
[296] Version 4Q01, December 2001, Attachment 4, Physical Collocation, Section 1.6 and Attachment 4, Remote Site Physical Collocation, Section1.6 and Exhibit D

Test Reference	Evaluation Criteria	Results	Comments
PPR6-18	Standards of delivery are established for collocation implementations.	Satisfied	Standards of delivery are established for collocation implementations in the BellSouth Standard Central Office Collocation Agreement[297] and BellSouth Remote Site Collocation Agreement[298]. The BellSouth Vendor Certification Group performs internal quality audits of the collocation sites using Engineering and Installation Standards Central Office Equipment Quality Review Checklist. BellSouth then performs a walkthrough with the ALEC at the completion of a collocation project. If the ALEC is satisfied with the collocation space, the ALEC signs off on the project. If the collocation project is found to be unacceptable, the ALEC works with the ATCC to resolve the issues.
Trunk Forecasting			
PPR6-19	Procedures are defined for developing, monitoring, and implementing trunk forecasting.	Satisfied	Procedures for developing, monitoring, and implementing trunk forecasting activities are defined in the following documents: ♦ Draft Interconnection Agreement, Version 4Q01, December 2001, Attachment 3, Network Interconnection, Sections 4.0, 5.7, and 5.8; and ♦ Trunk Traffic Engineering Concepts and Applications, available from Telcordia. KPMG Consulting reviewed documentation and trunk forecasting artifacts and found that procedures, as described, are followed.
PPR6-20	Procedures are defined for ensuring the confidentiality of ALEC-provided forecast information.	Satisfied	Procedures for ensuring confidentiality of ALEC-provided forecast information are found in the following documents: ♦ Draft Interconnection Agreement, Version 4Q01, December 2001, Attachment 3, Network Interconnection, Section 5.7.1; and ♦ CPNI and Wholesale Information Training Package, August 23, 2001. The CPNI and Wholesale Information Training Package contain guidelines for handling proprietary and sensitive records in order to safeguard ALEC information.
PPR6-21	Standards and procedures are defined for ensuring that BellSouth uses trunk	Satisfied	Standards and procedures for ensuring that BellSouth uses trunk forecasts are defined in Trunk Traffic Engineering Concepts and Applications.

[297] Section 6.5
[298] Section 7.5

Test Reference	Evaluation Criteria	Results	Comments
	forecasting.		This document defines the industry standards and procedures for trunk forecasting. During a March 9, 2001 interview with the CCM organization, KPMG Consulting found that BellSouth facilities planners use trunk forecasting when planning for new facilities. Through the Interconnection Agreement, BellSouth requests ALECs to provide forecasting information. Both the CCM and the Switch Capacity Management group monitor the accuracy of forecasts of trunks and switches to evaluate future need. KPMG Consulting reviewed General Trunk Forecasts and confirmed that BellSouth uses trunk forecasting information provided by ALECs. KPMG Consulting reviewed the General Trunk Forecasts and trunk forecast artifacts and found that procedures, as described, are followed.
Capacity Management			
PPR6-22	Procedures are defined to ensure adequate and complete capacity management processes.	Satisfied	Procedures to ensure adequate and complete capacity management processes are defined in the Comprehensive Business Plan: Virtual Collocation and Physical Collocation[299] and Corporate Real Estate and Services Guidelines[300]. The Corporate Real Estate and Services Guidelines describe project and facility planning used by BellSouth to support office equipment, floor space and building maintenance. During a January 25, 2001 interview with the Sales Support director and a January 26, 2001 interview with the Director of Collocation, KPMG Consulting learned that BellSouth forecasts future collocation applications in order to ensure that adequate staff is available to handle the orders. Each field group submits forecasts of the expected workload. KPMG Consulting reviewed the tracking workbook updated by the field, including the INAC Tracking Sheet and the Florida Collocation Status Report. Additionally, BellSouth applies algorithms to calculate and process the collocation load, as described in the Comprehensive Business Plan: Virtual Collocation and Physical Collocation. During a March 9, 2001 interview with the Circuit Capacity Management organization, KPMG Consulting learned that BellSouth trunk forecasts

[299] May 23, 2000
[300] March 2001, Section II

Test Reference	Evaluation Criteria	Results	Comments
			are produced monthly to ensure adequate trunks are available to handle future traffic volume. KPMG Consulting reviewed completed trunk forecasts and found that procedures, as described, are followed.
Operator Services			
PPR6-23	Procedures are defined and established for developing and monitoring OS/DA implementations.	Satisfied	Procedures for developing and monitoring OS/DA implementations are defined in the following documents: ♦ Branding DMS TOPS Implementation Methods and Procedures; ♦ BellSouth Operator Services (OPS) Reseller/UNEP CLEC Pre-Ordering and Ordering Guide For Operator Services - Custom Branding/Unbranding via OLNS Software, Issue 1.0, July 2001; and ♦ UNE-P/Reseller OA/DA branding Via OLNS Software, January 11, 2002. Exception 156 was issued on February 22, 2002 in conjunction with TVV4 testing effort. KPMG Consulting found that BellSouth did not properly establish Line Class Codes (LCCs) for OS/DA services as requested. Furthermore, KPMG Consulting found that BellSouth did not properly perform test calls as outlined in the Unbundled Local Switch (Selective Carrier Routing Switched Based) Service Description and Specifications Implementation Methods and Procedures – Issue 4, June 2001, Unbundled Local Switching 1AESS Implementation Methods and Procedures – June 2001 and Unbundled Local Switching Siemens Telecom Networks EWSD Implementation Methods and Procedures – May 2000. BellSouth noted that test calls were not placed since the LCCs were never established. BellSouth began placing test calls in April of 2002, and KPMG Consulting was able to review the test call results. After further retesting activities, Exception 156 was satisfied and closed on June 12, 2002.

5.0 Parity Evaluation

A parity evaluation was not required for this test.

6.0 Final Summary

This section summarizes the number of test evaluation criteria discussed above and the number that was satisfied or not satisfied at the conclusion of the test.

6.1 Summary of Findings

There were 23 evaluation criteria considered for the Collocation and Network Design Verification and Validation Review (PPR6). All 23 evaluation criteria received a satisfied result.

As all evaluation criteria are satisfied, KPMG Consulting considers the Collocation and Network Design Verification and Validation Review (PPR6) test area satisfied at the time of the final report delivery.

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B. Test Results: Provisioning Process Evaluation (PPR9)

1.0 Description

The Provisioning Process Evaluation (PPR9) was a review of the BellSouth processes, systems, and interfaces that provide provisioning support for Alternative Local Exchange Carrier (ALEC) and Reseller orders. This evaluation focused on activities starting when an order enters the BellSouth Service Order Communication System (SOCS)[301], through downstream systems, interfaces, and processes, concluding at service activation. The provisioning process consists of the following three components: assignment, translations, and dispatch/service activation. Assignment is the BellSouth process of applying the designated telephone numbers, office equipment, and facilities required for the service ordered. Translation is the programming of the services and features into the switch. Dispatch/Service Activation is the point at which all items are combined to provide the requested service. In certain instances, wholesale orders require a fourth component, provisioning coordination, during which an ALEC and BellSouth coordinate their provisioning efforts to minimize customer disruption. BellSouth's capacity management practices were also included in the Provisioning Process Evaluation (PPR9).

The objective of this test was to evaluate whether the provisioning environment supporting wholesale orders demonstrates parity with the provisioning environment for BellSouth retail orders. Additionally, this test verified the existence of procedures for ALEC service order provisioning coordination and BellSouth capacity management.

2.0 Business Process

This section describes BellSouth's Plain Old Telephone Service (POTS), Unbundled Network Element (UNE) and Special Services provisioning processes as well as the BellSouth centers responsible for these processes. Processes included in this section are: (i) non-designed and designed service provisioning processes, (ii) coordination processes, (iii) capacity management processes.

The provisioning process begins when information is received from the BellSouth centers responsible for order processing. For a description of the order entry process, refer to Manual Order Processing Evaluation (PPR7).

2.1 Business Process Description

2.1.1 Provisioning Process Description – Non-Designed and Designed Orders

Depending on the type of service being delivered, provisioning activities are categorized as non-designed or designed. A description of the provisioning process for each type of service is provided below.

Non-Designed:

Manually issued service orders for non-designed service such as SL1 UNE Loops originate in the Local Carrier Service Center (LCSC). Local Exchange Navigation System (LENS), Telecommunications Access Gateway (TAG) and Electronic Data Interchange (EDI) are used by the ALECs for electronic order submission. From these organizations and systems, orders flow into SOCS. SOCS directs orders into the Service Order Analysis and Control (SOAC) system,

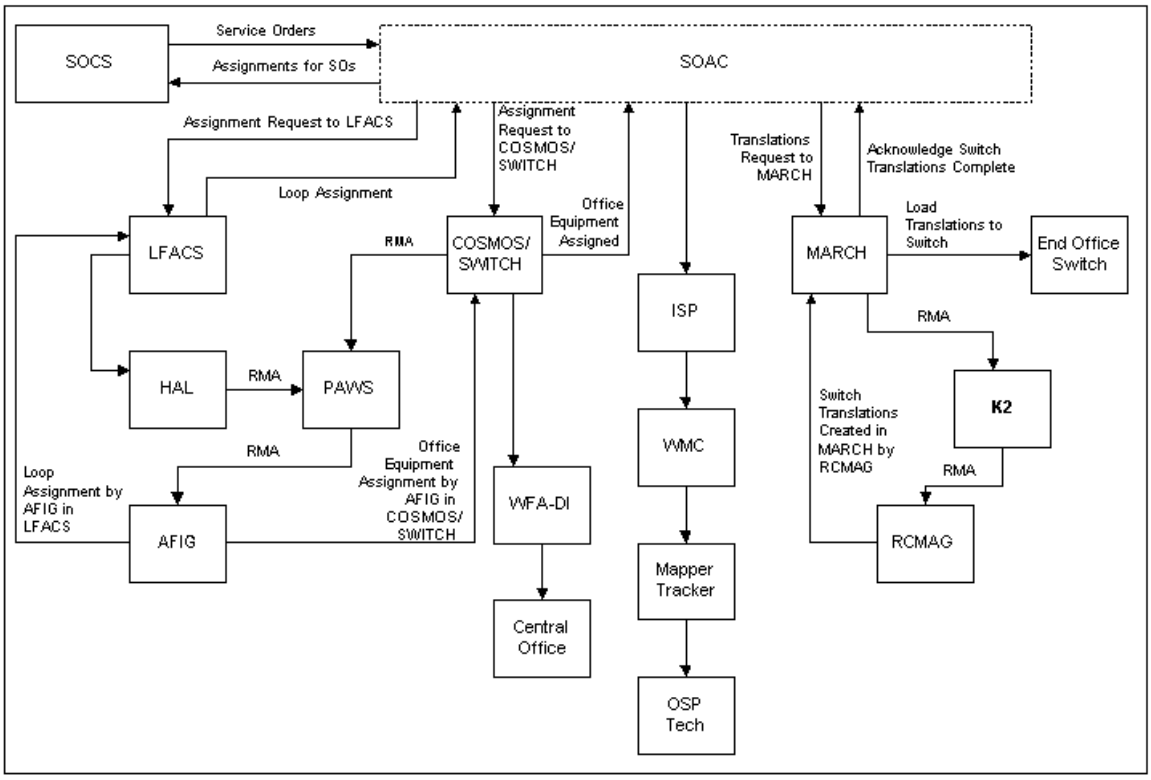
[301] SOCS is the BellSouth Service Order Processor

which is an operational support system used by BellSouth to coordinate the order management and provisioning processes. SOAC schedules and manages tasks performed by other provisioning systems, such as facility assignment, translation, and network activation. SOAC sends orders to: Loop Facility Assignment and Control System (LFACS) for automated loop assignment; to Computer System for Mainframe Operations (COSMOS), which is being replaced by Frame Operations Management System (SWITCH/FOMS)[302], for automated office equipment or switch port assignment; and to the Memory Administration Recent Change History (MARCH) for automated features assignment. LFACS, COSMOS, SWITCH/FOMS, and MARCH return status report messages to SOAC on loop and office equipment assignments, as well as on translation requests. Work Force Administration (WFA) transmits completion information to SOAC for dispatch tickets as they are completed in the field. SOAC relays this information to SOCS.

The Address Facility Inventory Group (AFIG) and the Recent Change Memory Administration Group (RCMAG) work orders that do not flow through the assignment and translations systems automatically. Orders that fall out of these systems for manual intervention take the form of a Request for Manual Assistance (RMA). The Provisioning Analyst Workstation System (PAWS) is the work management system used to monitor and distribute RMA work for office equipment or switch ports and loop assignments within the AFIG. Orders that fall out of MARCH also take the form of an RMA. The RCMAG uses the K2 work management system to route translation RMAs from MARCH to the staff within the RCMAG.

[302] BellSouth is gradually replacing COSMOS with SWITCH/FOMS; KPMG Consulting observed AFIG personnel using both COSMOS and SWITCH/FOMS.

Figure 9-1: Non-Designed Provisioning Flow

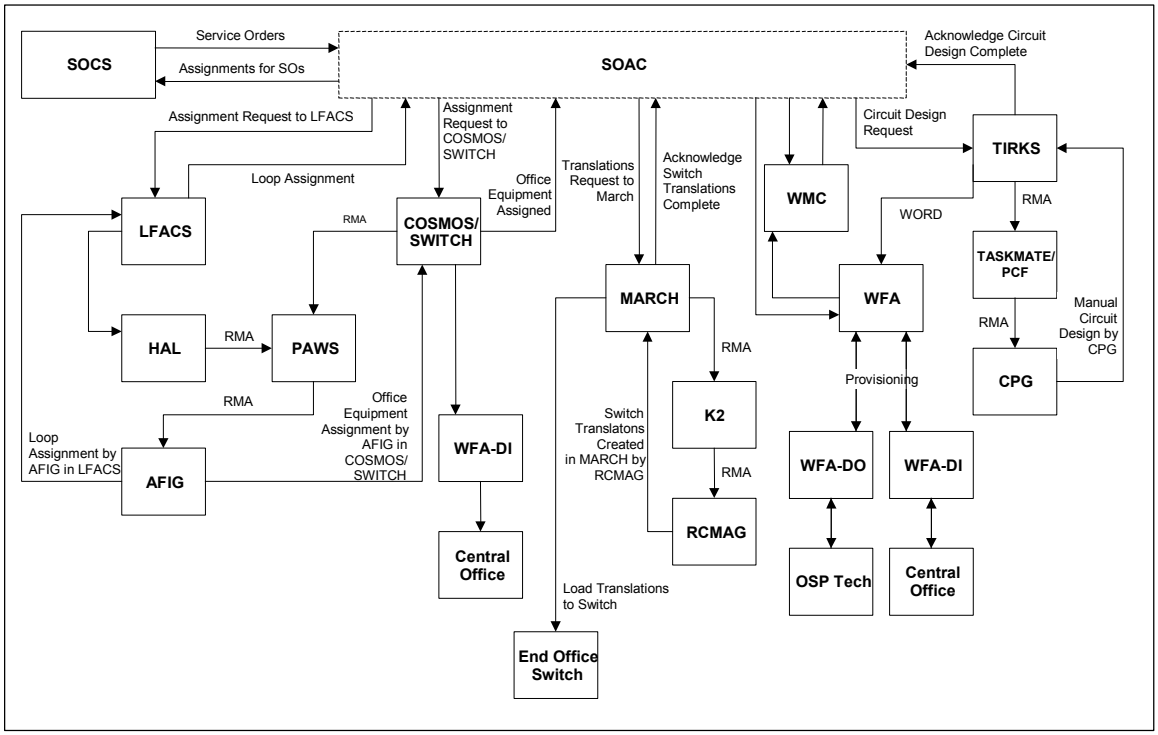


Designed Circuits:

Designed circuit orders (such as SL2 loops) are sent from SOCS to SOAC, which routes the service order to LFACS for automated loop assignments, if needed; to Trunk Integrated Record Keeping System (TIRKS) where a Work Order Record Detail (WORD) document is created; to COSMOS or SWITCH/FOMS if central office work is necessary; and to MARCH for necessary translations work. WFA transmits completion information to SOAC for dispatch tickets that were completed. SOAC relays the outputs from these systems to SOCS.

TASKMATE and the Process Control Feature (PCF) are systems used to sort and distribute RMAs in the circuit design process in the Circuit Provisioning Group (CPG). Orders for designed circuits may also fall out of the automated provisioning flow in the assignment and/or the translations processes, where errors are addressed by the AFIG and RCMAG using PAWS and K2, respectively. TIRKS, LFACS, COSMOS, SWITCH/FOMS, MARCH and WFA update SOAC with circuit design details, facility assignments, translations and dispatch completions. As with non-designed orders, SOAC relays this information to SOCS.

Figure 9-2: Designed Provisioning Flow



2.1.2 Provisioning Process Description – Work Center Roles

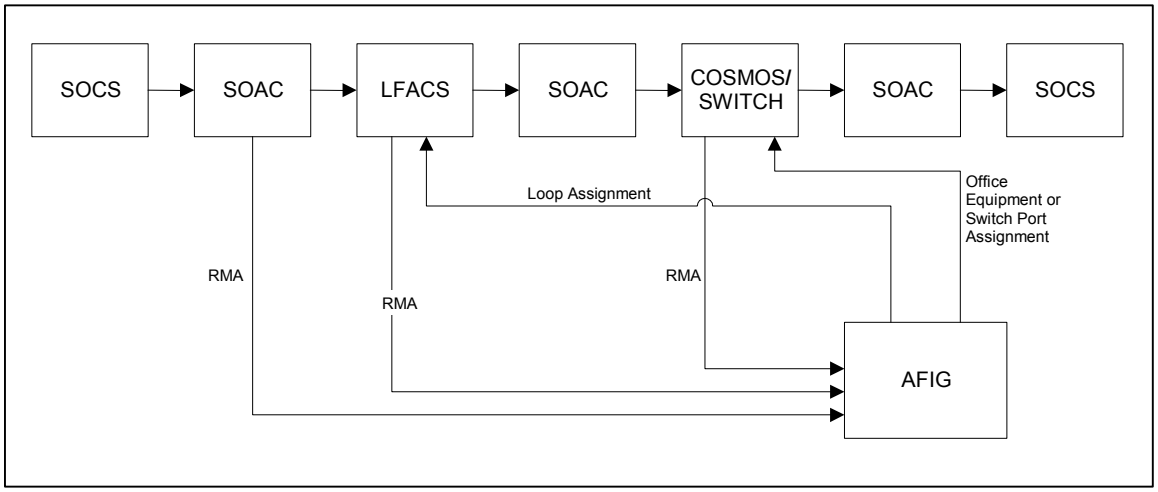
BellSouth employs a variety of work centers that coordinate activities throughout the provisioning process as illustrated in Figure 9-1 and Figure 9-2. A detailed description of the individual roles of each center is provided below.

Address Facility Inventory Group (AFIG)

The Address Facility Inventory Group (AFIG) is part of BellSouth's Network Infrastructure Support Center (NISC). The primary function of the AFIG is to assign facilities, such as loops, switch ports and cable pairs, to wholesale and retail service orders, as well as maintaining the address and facility inventory databases. The AFIG also handles engineering issues, such as cable rearrangements, network plans, and large projects. The AFIG handles RMAs for orders that fall out of the flow-through process and assists technicians in the field with facility information for retail and wholesale service orders. The AFIG is organized geographically into two centers, which are located in North and South Florida[303].

[303] The South Florida AFIG has a separate UNE group within its center. The group assigns and provides field support for UNE orders. All other AFIG functions that involve UNE orders, such as engineering work orders, are worked along with retail orders.

Figure 9-3: Work Flow Process in the AFIG



SOCS sends the order to SOAC, which determines if the order requires loop facilities and office equipment or switch ports. If a loop facility is required, SOAC directs the order to LFACS for automated loop assignment. If an assignment of office equipment, switch ports, or cable pair is required, LFACS routes the order to SOAC which then routes the order to SWITCH/FOMS and/or COSMOS, where the needed facilities are mechanically assigned. LFACS, SWITCH/FOMS and COSMOS relay assignment information back to SOAC, which then updates SOCS. Following assignment, the orders continue on to downstream systems.

Orders that fall out of the flow-through assignment process, such as RMAs, are routed to the Hands-off Assignment Logic (HAL) system before they are sent to PAWS. HAL emulates a Facilities Assignment Specialist (FAS). If HAL cannot work the RMA, the order flows to PAWS. An FAS retrieves the RMA from PAWS and works the order manually. After the FAS works the RMA, the order is sent back into service order flow and on to downstream systems. Wholesale and retail RMAs are processed in an identical manner.

Circuit Provisioning Group (CPG)

The Circuit Provisioning Group (CPG) is part of BellSouth's NISC and is responsible for the design of special circuits for all of BellSouth.

The sequencing of orders worked by the CPG is Record Issue Date (RID) driven. The RID is the date by which circuit design must be complete to avoid delay of provisioning completion of Special Service or Access Service Orders. The objective of the CPG is to create and distribute circuit designs to downstream provisioning centers through TIRKS on or before the RID.

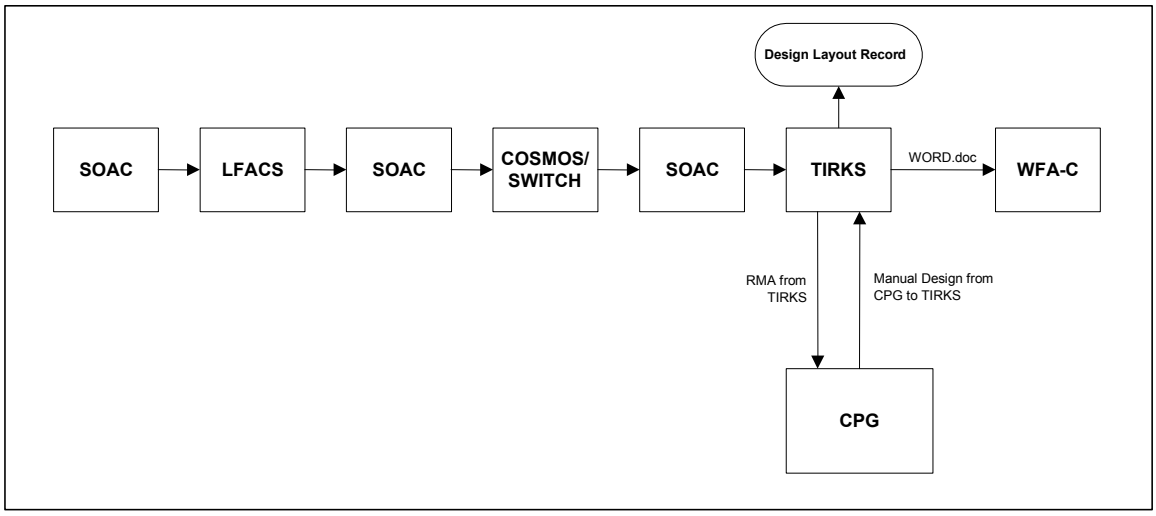
The CPG is organized into the following major functional groups:

- The High Capacity Group is responsible for the design of non-channelized circuit orders[304] and is subdivided into North and South Florida groups;
- The Carrier Group is responsible for the design of all channelized circuit orders;
- The DS0 Group is responsible for the design of low-rate DS0 circuits;

[304] DS1 or DS3 and other High Capacity Circuits

- The Project Group is responsible for all orders of 24 or more circuits[305];
- The Message Group is responsible for switch access type circuits and trunking;
- The Service Order Analysis and Control (SOAC) Group is responsible for ensuring that all service orders move through the system and issues are handled; and
- The Technical Support Group is responsible for methods and procedures (M&P), the coordination of issues with different groups, and the monitoring of all systems problems.

Figure 9-4: Work Flow Process in the CPG



Orders flow into SOAC and automatically move through TIRKS, where a WORD document is created and downloaded into WFA for downstream systems to view. The WORD document contains vital information needed to work the order, such as customer name, circuit IDs, central office assigned, etc. All orders are processed according to the RID, which is displayed on the work group lists. Both retail and wholesale orders flow through the systems in the same manner.

Each functional group within the CPG has error codes to identify orders that fall out of the flow-through process. The groups that typically handle RMAs are the SOAC Group, the DS0 Group, the High Capacity Circuit Group, and the Message Group. The TASKMATE system sorts RMAs by work group and distributes them to CPG personnel.

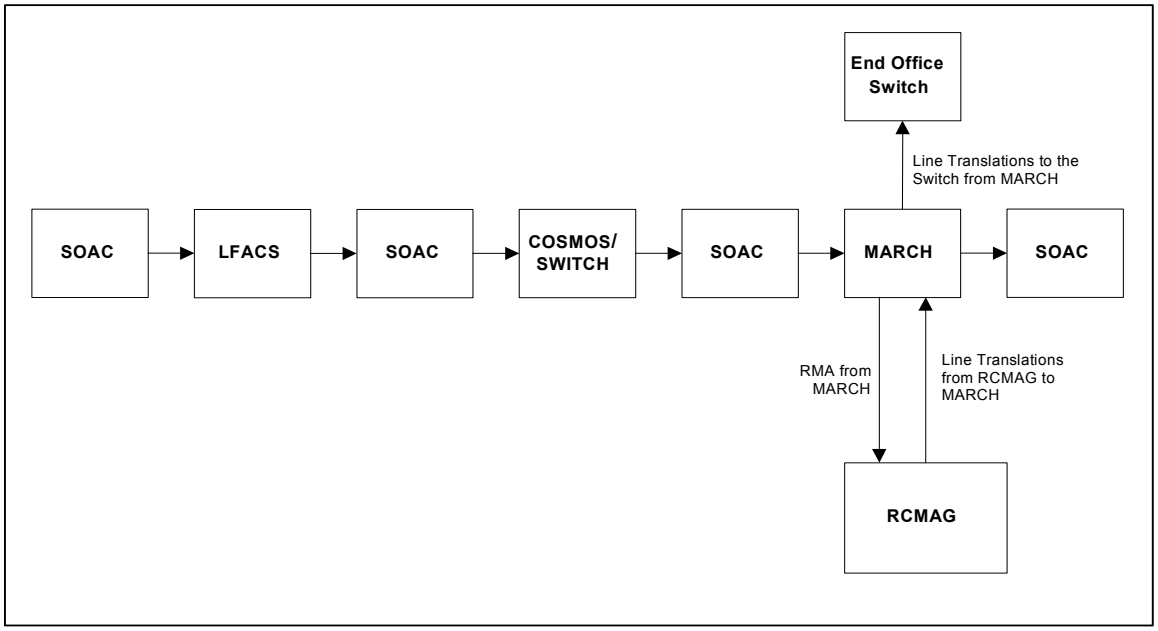
Recent Change Memory Administration Group (RCMAG)

The Recent Change Memory Administration Group (RCMAG) is a part of BellSouth's NISC. The RCMAG completes line translations for service features on orders that fall out of the MARCH system in the automated translation process.

An order that has fallen out of the automated translation process is routed to the RCMAG as an RMA via the K2 system. The RCMAG Line Translation Specialists (LTSs) are also responsible for handling field assist calls from technicians and for participating in coordinated hot cuts.

[305] Typically involve orders such as central office cut-overs, rearrangements, and other major planning arrangements.

Figure 9-5: Work Flow Process in the RCMAG



The RCMAG receives orders through MARCH that are mechanically routed through the SOAC system. If there are no problems with the order, it flows through MARCH automatically for line translation. The MARCH system sends orders to the switch on the due date, where they are either eligible for automated provisioning or fall out for manual intervention. Fall-out orders are mechanically sent to LTSs via the K2 system for manual translations. The K2 system is a database and work scheduling system that acts as a user-friendly interface with MARCH. K2 assigns the RMAs to LTSs according to due date, with past due orders receiving priority. Work is distributed to the LTSs based on an individual's skill set as it is defined in K2, which organizes orders according to switch type. A network manager monitors the K2 system every 15 minutes to ensure that all service order types are completed by the scheduled due date.

Complex Translations Group (CTG)

The Complex Translations Group (CTG) is a part of the NISC. The CTG is responsible for completing switch translations for Centrex, area code overlays, area code splits, and new NXXs. Orders are faxed, phoned, and e-mailed into the System Administrator (SA) Group from the business offices. Logs are kept of all fax orders, which are sent back to the business offices for verification. The SA Group enters orders into WFA – Dispatch In (WFA-DI) for the CTG to process. The CTG works from WFA-DI to enter the required switch translations. The system used to input and document switch translations is the Mechanized Translation System (MTS). The orders are driven by the translations due date, which is ten days to two weeks ahead of the order due date. Orders not completed by the translations due date are the first to be completed the next business day. CTG personnel are organized according to central office, with each individual responsible for all of the complex translations in their assigned central office(s).

Work Management Centers (WMC)

The Work Management Centers (WMC) are the dispatch centers for BellSouth. WMC clerks ensure technicians are dispatched on orders and handle calls from technicians in the field. The structure of the WMCs in Florida was changed in January 2001 to include a separate Wholesale Services Group to handle coordinated conversions in each WMC. Each WMC has a slightly varied organization; a typical organization includes a division between non-designed and designed orders, in addition to a wholesale services group. For example, a WMC may be comprised of the following groups:

- Wholesale Services Group – handles services for wholesale orders, including coordinated conversions;
- Field Assist (FA) Group – receives calls from technicians in the field for a variety of reasons, such as address problems or a technician's TechNet[306] is down;
- Central Office Group – loads orders that have not been automatically assigned to technicians' terminals by central office area;
- Special Services Dispatch Administrative Center (SSDAC) – is responsible for loading all of the special services orders and screening orders to determine if dispatch is necessary; and
- Provisioning Administrative Center (PAC) – works on non-designed orders that fall out of the systems; the PAC fixes incorrect addresses and are also responsible for manual service order completion.

Designed and Non-Designed service orders follow slightly different order flows in the WMC.

SOAC distributes designed orders to the WMC after the order passes through the necessary upstream provisioning groups. The order enters the WFA systems (either dispatch in (DI) or dispatch out (DO)) in the WMC. The SSDAC Group oversees the loading of the orders and, when dispatch is not determined automatically, determines if a dispatch is needed. If central office work is required, WFA-DI is used to send the order to the appropriate central office. If outside plant work is necessary, the SSDAC sends the order to an outside plant technician through WFA-DO to the technician's TechNet. After the central office and/or fieldwork is completed, the technician sends the order back through WFA-DI or WFA-DO, as appropriate, for service order completion.

Non-designed orders flow from SOAC to the WMC from upstream systems for dispatch. From SOAC, the orders flow into the Installation Support Package (ISP), which logs the order and assigns it a Tracking Ticket Number (TTN). The order then flows to the technician via MapperTracker, which enables technicians to view orders, on the assigned due date. When the outside plant work is completed, the order is completed in MapperTracker and sent back through SOAC to continue to downstream systems for billing. WMC clerks also use Loop Maintenance Operating System (LMOS) for non-designed orders that fall out of the automated dispatch process for purposes of dispatch scheduling, order assignment, maintenance tickets, and as a record keeper for maintenance and installation history.

Central Office – Field Work Group (CO-FWG)

The main function of the Central Office – Field Work Group (CO-FWG) is to provision and maintain the BellSouth network, including end user circuits and internal BellSouth infrastructure.

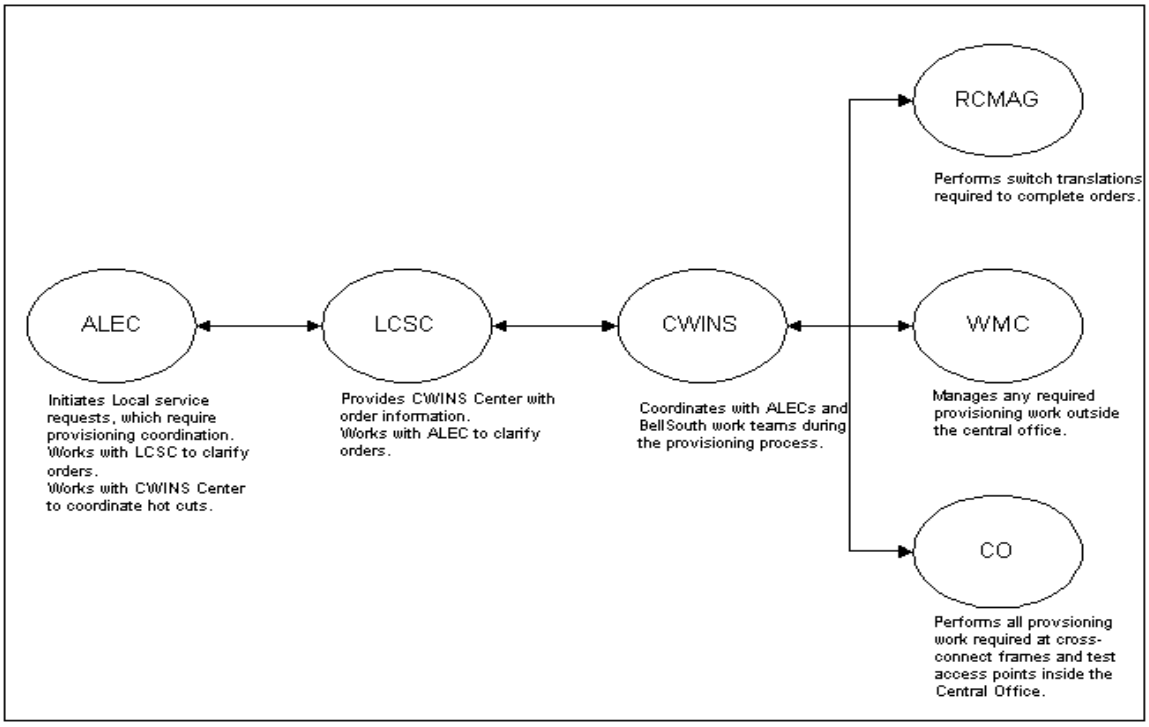
[306] Handheld device used to view orders in the field

The group receives service orders from the WMC via WFA-DI and ensures that the circuit is set up on the BellSouth network. The CO-FWG also participates in planned functions, such as test runs of the network (acceptance testing of equipment installations) and terminal voltage checks (periodic preventive maintenance of network elements).

Several steps are undertaken prior to the due date for end user circuits, including pre-wiring, verification of dial tone, and verification of telephone number. Once the order is completed, WFA-DI is updated for the business offices and upstream systems to complete any additional work necessary to finish the order. Designed circuit orders are also updated in COSMOS. Scheduling in the central office is done according to due dates.

2.1.3 Coordination Process Description

Figure 9-6: BellSouth Coordination Process Overview



The Customer Wholesale Interconnect Network Services (CWINS) Center has three locations: Birmingham, Alabama; Duluth, Georgia; and Jacksonville, Florida. The Jacksonville center became fully operational on June 25, 2001. Although each center serves specific ALECs within a defined geographic region, all three centers are redundant from a functional perspective. The centers are divided into a Screening Group, a Provisioning Group, and a Maintenance & Repair (M&R) Group. The provisioning process begins after the LCSC issues the service order; the order flows downstream and picks up facility assignments via the AFIG and is designed, if necessary, at the CPG. Upon entering the CWINS Center, an order progresses directly to a Maintenance Administrator (MA) in the Screener Group. MAs receive and view orders in SOCS and WFA at least 48 hours prior to the due date. MAs document vital information (such as cable and pair, central office location, order number) onto a cut-sheet for each order and pass this information downstream to the Electronic Technicians (ET) for circuit turn-up. The MA completes the following tasks 48 hours prior to the due date:

- Ensures that the order is delayed in MARCH;
- Verifies that the order is a coordinated conversion and the conversion time;
- Verifies the cable and pair;
- Calls the ALEC to verify the details of the service order;
- Verifies that a central office work ticket has been loaded; and
- If fieldwork is needed, calls the WMC to request coverage.

The MA conducts the following tasks 24 to 48 hours prior to the conversion due date:

- Verifies that the wiring was completed by the Wired and Office Tested (WOT) date;
- Tests the circuit(s) for ALEC dial tone using Switched Access Remote Testing System (SARTS);
- Performs an Automatic Number Announcement Circuit (ANAC) to verify that the telephone number is correct; and
- Uses Coordinate Cut Scheduling System (CCSS) to stamp the order when the screening is completed.

The MA enters all action taken in the WFA – Control (WFA-C) comments log. Once the screening process is complete, the MA routes the order to an ET for test and turn-up and passes along the cut-sheet for the tester to use.

For test and turn-up of a service order that is a central office coordinated conversion, an ET completes the following tasks and logs them into the WFA Operational Support Systems Log (OSSLOG) as they are completed:

- Contacts the ALEC to confirm conversion schedule;
- Hands-off work ticket to the central office;
- Initiates bridge with central office technician and supervisor to initiate conversion pretest activity;
- Waits for the central office to advise that it is ready to begin the conversion;
- Starts the CCSS timer as the central office begins the cut;
- Receives notice from the central office technician that the cut is complete along with the ANAC number and stops the CCSS timer;
- Calls ALEC to notify that the conversion is complete and to receive ALEC acceptance of the circuit;
- Releases the order in MARCH once the ALEC has accepted the circuit; and
- Completes the order in WFA and ensures that the SOCS goes into completion status.

For test and turn-up of a coordinated field conversion, the ET performs the following tasks and records them in the OSSLOG:

- Contacts the ALEC to confirm the conversion schedule;
- Verifies WFA-DO to ensure an outside technician is assigned to the cut;

- Receives a call from the outside technician/WMC technician assigned to the cut to begin pretest activity, which includes a check for dial tone on the ALEC pair and an ANAC on the BellSouth-side of the conversion;
- Receives notice that the field technician is ready to begin the coordinated conversion;
- Starts the CCSS timer as the field technician begins the cut;
- Receives notice from the field technician that the cut is complete and receives ANAC number, if applicable, and stops the CCSS timer;
- Notifies the ALEC that the conversion is complete;
- Upon acceptance of the circuit by the ALEC, releases the order in MARCH; and
- Completes the order in WFA-C and ensures that SOCS completion goes to CPX status.

For xDSL orders, the CWINS Center offers ALECs the option of cooperative testing.

In addition to the CWINS Center, other BellSouth provisioning centers have a role in the coordination process, particularly the CO-FWG and the WMC. The CO-FWG uses slightly different processes for designed and non-designed coordinated orders. Coordinated, non-designed orders are handled like any other non-designed order; the central office receives the order in WFA-DI. All of the preliminary work, such as the verification of dial tone and BellSouth telephone number (TN), is completed before the coordinated due date. The Frame Due Time tag on the order indicates that the order is a coordinated conversion. The central office waits for a call from the CWINS Center to begin the conversion; once the call is received, the conversion is made via conference call. The process for designed orders requiring coordination is nearly identical. The major difference involves the issuance of appointment tickets. For designed conversion orders, the CWINS Center creates a work ticket two days in advance of the coordination date. The CWINS Center issues an immediate test assist ticket and, as with non-designed coordinated conversions, calls the central office to work the cut at the time of appointment.

The WMC has separate Wholesale Service Groups (WSG) within the WMCs to work coordinated conversions. The WSGs identify coordinated conversions as soon as they enter into the WMC systems and contact other groups involved with the conversions, such as the CO-FWG, fieldwork groups, and the CWINS Center. On critical dates leading up to the coordinated cut due date, the WSG ensures that the proper course of events is followed to ensure that needed technicians are assigned and the order is completed on schedule. The WSG participates in the conference call during the conversion and manages resolution of dispatch problems that may endanger the completion of the order within the allotted time frame.

2.1.4 Capacity Management Process Description

Network Centers

BellSouth's Network Centers include the WMC, the NISC and the CO-FWG. Capacity management in Network Centers is based on force model data within each respective group. The data consist of service order completions, inward movement, circuits in service, dispatches, productive hours, overtime hours, undistributed hours and work force. This data is recorded monthly and annually for each work group in order to identify historical trends and productivity levels. Each force model develops ratios that indicate workload tasks to work unit drivers. Work unit drivers are inward movement and access lines in service, which are divided into the

following product lines: residence, business, UNE and specials. BellSouth's Finance Organization maintains the forecast models and uses them to develop force requirements for each plan year. BellSouth's Corporate Real Estate and Services (CRES) project group is responsible for carrying out the procurement of physical assets needed to accommodate force size growth.

Network and Carrier Services – Local Services Centers

BellSouth's Local Services Centers include the LCSCs and the CWINS Centers. Similar to the Network Centers, the Local Services Centers rely on forecasts and force models in their capacity management processes. The forecasting organization within the Local Services Centers group provides general estimates based on specific products or product groups, in service and inward units and historical data. The forecasts contain monthly and annual projections and are completed at least twice per year. If necessary, ad hoc forecasts are developed (e.g. new products offering, regulatory changes).

For the LCSC, forecasts are developed for resale, Unbundled Network Elements-Loop (UNE-L) and Unbundled Network Elements-Platform (UNE-P) product types independently. LNP volumes are based on the UNE forecasts. LCSC force sizing projections take into account the historical and expected ratio of units to LSRs, electronic versus manual order receipt ratios, historical and projected flow-through rates, standard time increments, overtime rates, historical and projected undistributed time, labor contracts and training of current and new employees. The provisioning group within the CWINS Center employs an inward forecast using UNE product projections. The CWINS Centers main force sizing component is based on standard time increments per item per work function performed. CWINS Center provisioning work functions include screening orders, turn-up/conversion, calling before dispatch, and handling pending facilities issues and delayed appointments. CWINS Center force assessments also take into account overtime rates, historical and projected undistributed time, labor contracts, and training of current and new employees.

The LCSCs and CWINS Centers force sizing models generate several outputs, including force and force-related expense budgets and capital budgets. Data and projections derived from the force models allow the centers to plan for recruitment (management and non-management), training activities, and for physical requirements including floor space, furniture, computers and other hardware, software, licensing, call distribution and control systems, etc. As with the Network Centers, CRES is responsible for managing projects to accommodate growth in the force size of the Local Services Centers.

3.0 Methodology

This section summarizes the test methodology.

3.1 Scenarios

Scenarios were not applicable to this test.

3.2 Test Targets and Measures

The test target was the BellSouth provisioning process, which included the following processes and sub-processes:

- Provisioning process parity;
  - Order entry;

- Workflow management;
- Workforce management;
- Service activation process;
- Service design process;
- Assignment process;
- Service activation/installation intervals;

- Provisioning coordination process;
  - Provision orders requiring coordination with ALECs;
  - Request coordination;
  - Notification of provisioning schedule;
  - Coordinate provisioning; and
- Provisioning capacity management process.

3.3 Data Sources

The data collected for the test included the following BellSouth documents:

- Call Receipt & Non-Designed Screening – UNE Maintenance Network Services – Customer Services;
- Activity Flow – Provisioning for Non-Designed Services;
- System Flows;
- Activity Flow – Provisioning for Designed Services;
- Central Office UNE Line Sharing Provisioning and Maintenance;
- Unbundled Non-Designed (SL1) Voice Grade Loops – SL1 Wiring and Testing Work Steps;
- WMC Procedures – Unbundled Network Elements-SL1 & SL2;
- The BellSouth Start-Up Guide – BellSouth Interconnection Services;
- AFIG UNE M&P;
- CPG Job Aid – Unbundled Network Elements (UNE) – EELs (Enhanced Extended Links);
- WFA-DI Use in the NISC Complex Translation Group;
- BOCRIS Reference; and
- Local Service Centers Force Sizing Model Process and Force Models.

3.4 Data Generation/Volumes

This test did not rely on data generation or volume testing.

3.5 Evaluation and Analysis Methods

The Provisioning Process Evaluation (PPR9) included a checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the BellSouth OSS Evaluation. These evaluation criteria provided the framework of norms, standards, and guidelines for the Provisioning Process Evaluation (PPR9).

The Provisioning Process Evaluation (PPR9) was conducted through a series of visits to BellSouth centers involved in the provisioning process. Directors, first level managers, and front-line employees were interviewed to develop an understanding of the functions within each center. KPMG Consulting observed employees in each center performing the functions of their respective groups.

Prior to conducting the test, a structured interview questionnaire and detailed evaluation criteria were developed to facilitate the process and ensure a consistent approach. KPMG Consulting test evaluators received detailed information during interviews and site visits regarding center processes, systems, documentation, and employee execution of the work. The interviewees received a summary of the interview notes and were given the opportunity to provide comments or clarification as appropriate.

During the interview process, each work group was asked if the systems used in their center differentiated between wholesale and retail in the processing and distribution of the orders. KPMG Consulting observed the various queues of work in each of these centers. The team reviewed BellSouth provisioning process and system documentation.

The data collected were analyzed employing the evaluation criteria detailed in Section 4.1 below.

4.0 Results

This section identifies the overall test results.

4.1 Results Summary

The number of exceptions and observations issued during the life of the test is depicted in Table 9-1. For additional exception and observation information, refer to Appendices D and E, respectively. The test criteria and results are presented in Table 9-2.

Table 9-1: PPR9 Exception and Observation Activity

Activity	Exceptions	Observations
Total Issued	1	0
Total Disposed of as of Final Report Date	1	0
Total Open as of Final Report Date	0	0

Table 9-2: PPR9 Evaluation Criteria and Results

Test Reference		Result	Comments
Parity in the Systems			
PPR9-1	Order processing systems prioritize orders using the	Satisfied	Order processing systems prioritize orders in the sequence in which they were input for both retail

Test Reference	Evaluation Criteria	Result	Comments
	same method for retail and wholesale.		and wholesale. SOCS does not have separate ordering and distribution procedures for wholesale and retail. This information was confirmed in an interview with personnel at the LCSC and BellSouth Retail Business Office. Evidence of this was also found through a review of BellSouth flow charts. KPMG Consulting observed BellSouth Retail Business Office (March 22, 2001) and LCSC (September 20, 2000, and February 5, 2001) personnel process orders that flowed into SOCS on a first in, first out basis.
PPR9-2	The method for prioritizing orders in the translations group systems is the same for retail and wholesale.	Satisfied	The method for prioritizing orders in the translations group systems is by due date for both retail and wholesale. The RCMAG receives RMAs from MARCH via K2 and reenters the orders into MARCH when the translation problem is resolved. The CTG receives and works orders in WFA-DI or WFA-C and MTS. Both wholesale and retail orders are prioritized according to due date and without consideration of the order's wholesale or retail origin. On three separate dates between January 30 and February 14, 2002, KPMG Consulting observed translation center personnel accessing both retail and wholesale orders according to due date.
PPR9-3	The method for prioritizing orders in the problem resolution systems is the same for retail and wholesale.	Satisfied	The method for prioritizing orders in the AFIG, RCMAG and CPG is according to critical date for both retail and wholesale. The AFIG and RCMAG prioritize according to due date, and the CPG prioritizes according to RID. Between January 29 and February 14, 2002[307], KPMG Consulting observed AFIG, RCMAG and CPG personnel employing the same systems and working orders according to critical date and without consideration of the order's wholesale or retail origin.
PPR9-4	The method for prioritizing orders in the facility group systems is the same for	Satisfied	The method for prioritizing orders in the facility group is according to critical date and without consideration of the order's wholesale or retail

[307] AFIG North Florida January 29, 2002; AFIG South Florida February 11, 2002; RCMAG North Florida January 30, 2002; RCMAG South Florida February 12, 2002; and CPG February 14, 2002.

Test Reference	Evaluation Criteria	Result	Comments
	retail and wholesale.		origin. In the AFIG, PAWS distributes RMAs according to due date. In the CPG, TASKMATE distributes RMAs to CPG personnel, who view the RMAs through PCF. Orders are worked based on RID; orders that are in jeopardy status (past due) are worked first. These centers use the same systems for wholesale and retail. On three separate days between January 29 and February 14, 2002[307], KPMG Consulting observed AFIG and CPG personnel access and work both retail and wholesale orders from the same systems according to critical date.
PPR9-5	The method for prioritizing orders in the engineering center for retail circuit provisioning systems is the same as those used for resale circuit provisioning.	Satisfied	The method for prioritizing orders in the CPG is according to RID for retail and resale circuits and is without consideration of the order's wholesale or retail origin. Orders that fall out of the automated provisioning process as RMAs are distributed to CPG personnel through TASKMATE/PCF for manual design. On February 14, 2002, KPMG Consulting observed CPG personnel accessing both retail and wholesale orders from the same systems according to critical date.
PPR9-6	The method for prioritizing orders in the engineering center for retail circuit provisioning systems is the same for UNE circuit provisioning.	Satisfied	The method for prioritizing orders in the engineering center is according to RID for both retail and UNE circuits and is without consideration of the order's wholesale or retail origin. Orders that fall out of the automated provisioning process as RMAs are distributed to CPG personnel through TASKMATE/PCF for manual design. On February 14, 2002, KPMG Consulting observed engineering center personnel accessing both retail and wholesale orders from the same systems according to critical date.
PPR9-7	Engineering systems prioritize orders using the same method for retail and wholesale.	Satisfied	Engineering systems prioritize orders based on work completion date and do not consider the order's wholesale or retail origin. On February 14, 2002, KPMG Consulting observed engineering personnel access and work orders according to critical date.
PPR9-8	The method for prioritizing orders in the dispatch systems is the same for	Satisfied	The method for prioritizing orders in the dispatch systems is according to due date and is without consideration of the order's wholesale or retail

Test Reference	Evaluation Criteria	Result	Comments
	retail and wholesale.		origin. The systems used in the WMC are the same for both wholesale and retail services. On January 31, 2002, KPMG Consulting observed dispatch center personnel access and process orders and verified that the systems are prioritized by due date for both retail and wholesale orders.
PPR9-9	The method of prioritizing orders in the inventory center systems is the same for retail and wholesale.	Satisfied	Inventory center systems prioritize orders according to due date and without consideration of the order's wholesale or retail origin. Inventory management and RMA resolution is handled consistently for both wholesale and retail orders. On January 29 and February 11, 2002, KPMG Consulting observed inventory center personnel access and work both retail and wholesale orders using PAWS.
Parity in Execution			
PPR9-10	The execution of work in the order processing centers is comparable for retail and wholesale.	Satisfied	The execution of work in the order processing centers is done according to when an order is placed for both retail and wholesale. BellSouth personnel stated that in the Retail Business Office, which handles retail services exclusively, a customer calls in to place an order for new service, transfer of service, new service features, to disconnect service, or for billing questions. The BellSouth service representative uses RNS or ROS to place the customer's request, and the order is sent downstream to SOCS and the provisioning systems and organizations. The service representative gives the customer a date by which their request is due to be fulfilled. Calls are answered in the order they are received. ALEC orders can be placed to the LCSC electronically via LENS, EDI or TAG, or manually via fax. Mechanized orders are submitted and either flow through or fall out for manual intervention in the LCSC. Manual orders enter the LCSC and are time stamped via a fax server. Local Order Imaging System (LOIS) creates an image of each page of the order, which the LCSC personnel use to view the LSR at a later date. Orders received via fax are entered into the LON system for tracking. If the order does not need clarification and is error-free, a

Test Reference	Evaluation Criteria	Result	Comments
			service representative will process the order and use the LON system to fax a FOC to the ALEC. The order is then sent to downstream systems for provisioning. All orders are processed in the order they are received. KPMG Consulting observed Retail Business Office (February 15, 2002) and LCSC (September 20, 2000, and February 5, 2001) personnel processing retail and wholesale orders in a comparable manner.
PPR9-11	The order processing centers are staffed with personnel who have comparable skill sets for retail and wholesale.	Satisfied	The order processing centers are staffed with personnel who acquire the skill sets necessary to perform the requisite job functions through training programs for both retail and wholesale. All potential BellSouth employees must pass an initial qualification test prior to being hired. KPMG Consulting found that training for LCSC personnel lasts from ten weeks to five months depending on the individual's experience within the company and the functional group within which personnel are placed. LCSC personnel are typically trained as subject matter experts for a specific product/service area, such as resale, UNE or complex services. New service representatives are paired with an experienced staff member for at least one week after training has ended. Retail Business Office personnel go through an initial eight week training course that covers subjects such as new orders, change orders, transfers of address, billing, repair, collections, and ethics. After completing this course, business office personnel are assigned to an incubator group for four weeks where they handle live calls, but have a dedicated supervisor to monitor them. During the course of his/her career, a representative receives additional training on such areas as new products, updates on procedures, and customer service training.
PPR9-12	The order processing centers have hours of operation that are the same for retail and wholesale.	Satisfied	The order processing centers have similar hours of operation for analogous product types for both retail and wholesale. The differences are a result of normal working hours in the businesses that represent BellSouth wholesale customers. KPMG Consulting found that the Retail Business Office, which handles retail consumer accounts, is open Monday through Saturday, 7 a.m. to 7

Test Reference	Evaluation Criteria	Result	Comments
			p.m., and is closed on Thanksgiving and Christmas. The retail account service centers that handle business accounts are open Monday through Friday from 8 a.m. to 6 p.m.; and are closed on January 1, Memorial Day, July 4, Labor Day, Thanksgiving and Christmas. The LCSC is open Monday through Saturday, 7 a.m. to 7 p.m. for consumer resale customers. For business resale, complex, and UNE customers, the LCSC is open Monday through Friday, 8 a.m. to 6 p.m. The LCSC is closed on January 1, Memorial Day, July 4, Labor Day, Thanksgiving and Christmas. LCSC hours of operation can be found on the BellSouth interconnection website at http://www.interconnection.bellsouth.com/centers/html/lcsc.html.
PPR9-13	The execution of work in the translation centers is the same for retail and wholesale.	Satisfied	The execution of work in the translation centers is done according to due date for both retail and wholesale orders. All work executed in the RCMAG is performed based on due date and without consideration of the order's wholesale or retail origin. All work in the CTG is executed based on due date and without consideration of the order's wholesale or retail origin. On three separate days between January 30 and February 14, 2002, KPMG Consulting observed translation center personnel using the same systems and work processes for both retail and wholesale orders within each translation center.
PPR9-14	The translation centers are staffed with personnel who have comparable skill sets for retail as wholesale.	Satisfied	The translation centers are staffed with personnel who are trained to work both retail and wholesale orders. KPMG Consulting found that all LTSs at the RCMAG perform all functions and work orders without consideration of the order's wholesale or retail origin. CTG personnel are organized according to switch type and central office, where they work on both wholesale and retail orders. On three separate days between January 30 and February 14, 2002, KPMG Consulting observed personnel at the translation centers work on both

Test Reference	Evaluation Criteria	Result	Comments
			retail and wholesale orders.
PPR9-15	The translation centers have hours of operation that are the same for retail and wholesale.	Satisfied	The RCMAG and CTG are the BellSouth translation centers used for both BellSouth wholesale and retail operations. Therefore, the hours of operation are identical for retail and wholesale.
PPR9-16	The execution of work in the problem resolution centers is the same for retail and wholesale.	Satisfied	The execution of work in the problem resolution centers is done according to critical date for both retail and wholesale orders. All work in the AFIG and the RCMAG is prioritized by due date, and processes are the same for wholesale and retail. All work in the CPG is prioritized by RID date. Processes are the same for wholesale and retail. On five separate days between January 29 and February 14, 2002, KPMG Consulting observed AFIG, RCMAG and CPG personnel using the same systems and work processes for both retail and wholesale orders.
PPR9-17	The problem resolution centers are staffed with personnel who have comparable skill sets for retail as wholesale.	Satisfied	The BellSouth problem resolution centers, including the AFIG-South Florida, AFIG-North Florida, RCMAG and CPG, process both retail and wholesale orders. Training is required for all personnel in these centers. Orders for both retail and wholesale are processed in the same manner.
PPR9-18	The problem resolution centers have hours of operation that are the same for retail and wholesale.	Satisfied	The problem resolution centers handle both retail and wholesale issues. KPMG Consulting found that the AFIG, RCMAG and CPG each handle both retail and wholesale orders. Therefore, there are no differences in the hours of operation.
PPR9-19	The execution of work in the facilities centers is the same for retail and wholesale.	Satisfied	The execution of work in the facilities centers is done according to critical date using identical processes for both retail and wholesale; work is executed without consideration of the order's wholesale or retail origin. On three separate days between January 29 and February 14, 2002, KPMG Consulting observed AFIG and CPG personnel using the same systems and work processes for both retail and wholesale orders.
PPR9-20	The facilities centers are staffed with personnel who have comparable skill sets	Satisfied	The BellSouth facilities centers, including the AFIG-South Florida, AFIG-North Florida and the CPG, process both retail and wholesale orders.

Test Reference	Evaluation Criteria	Result	Comments
	for retail as wholesale.		Training is required for all personnel in these centers. Orders for both retail and wholesale are processed in the same manner.
PPR9-21	The facilities centers have hours of operation that are the same for retail and wholesale.	Satisfied	The AFIG and CPG handle both retail and wholesale issues. KPMG Consulting found that all centers handle both retail and wholesale orders. Therefore, there are no differences in the hours of operation.
PPR9-22	The execution of work in the engineering center is the same for retail and wholesale.	Satisfied	The execution of work in the engineering center is according to RID date, using identical work processes for the both retail and wholesale orders; work is executed without consideration of the order's wholesale or retail origin. On February 14, 2002, KPMG Consulting observed engineering center personnel using the same systems and work processes for both retail and wholesale orders.
PPR9-23	The engineering centers are staffed with personnel who have comparable skill sets for retail as wholesale.	Satisfied	The BellSouth engineering center (CPG) processes both retail and wholesale orders. Training is required for all personnel in the CPG. Orders for both retail and wholesale are processed in the same manner.
PPR9-24	The engineering centers have hours of operation that are the same for retail and wholesale.	Satisfied	The CPG centers handle both retail and wholesale issues. KPMG Consulting found that all centers handle both retail and wholesale orders. Therefore, there are no differences in the hours of operation.
PPR9-25	The execution of work in the dispatch centers is the same for retail and wholesale.	Satisfied	The execution of work in the dispatch centers is based on due date and appointment time; work is executed without consideration of the order's wholesale or retail origin. On January 31, 2002, KPMG Consulting observed dispatch center personnel using the same systems and work processes for both retail and wholesale orders.
PPR9-26	The dispatch centers are staffed with personnel who have comparable skill sets for retail as wholesale.	Satisfied	The BellSouth dispatch centers are staffed with personnel who have comparable skills and are required to complete the same training curriculum for performing retail and wholesale work. Requirements for coordinated conversions are unique and are handled by the wholesale services group within each WMC. Other functions for wholesale orders are handled in the same manner as retails orders. All dispatch center personnel

Test Reference	Evaluation Criteria	Result	Comments
			are required to attend the same training curriculum.
PPR9-27	The dispatch centers have hours of operation that are the same for retail and wholesale.	Satisfied	The BellSouth dispatch centers handle both retail and wholesale issues. KPMG Consulting found that all dispatch centers handle both retail and wholesale orders. Therefore, there are no differences in the hours of operation.
PPR9-28	The execution of work in the inventory centers is the same for retail and wholesale.	Satisfied	The execution of work in the inventory centers is according to due date and without consideration of the order's wholesale or retail origin. On January 29 and February 11, 2002, KPMG Consulting observed inventory center personnel using the same systems and work processes for both retail and wholesale orders.
PPR9-29	The inventory centers are staffed with personnel who have comparable skill sets for retail as wholesale.	Satisfied	The BellSouth inventory centers including the AFIG-North Florida and the AFIG-South Florida process both retail and wholesale orders. Training is required for all personnel in these centers. Orders for both retail and wholesale are processed in the same manner.
PPR9-30	The inventory centers have hours of operation that are the same for retail and wholesale.	Satisfied	The BellSouth inventory centers handle both retail and wholesale issues. KPMG Consulting found that all inventory centers handle both retail and wholesale orders. Therefore, there are no differences in the hours of operation.
Parity in Methods and Procedures			
PPR9-31	M&Ps in the order-processing center are comparable for retail and wholesale.	Satisfied	M&Ps in the order-processing center are comparable for retail and wholesale. The Retail Business Office maintains standard M&P documentation for all BellSouth product offerings on the online Orbit application. The LCSC maintains standard M&P documentation for resale and UNE product offerings in the online CDIA application. An example of documentation used within the retail order processing center is Reuse and Reuse Facilities Relation Orders. The following are examples of documentation used within the wholesale order processing center: ♦ LNP Gateway Releases - Network Services –

Test Reference	Evaluation Criteria	Result	Comments
			Customer Services; and ♦ Remote Call Forwarding.
PPR9-32	M&Ps in the translations center are the same for retail and wholesale.	Satisfied	M&Ps in the translations center are the same for retail and wholesale. The RCMAG and CTG, maintain standard M&P documentation both on site and on the BellSouth intranet. The following are examples of documents used in the translations centers: ♦ Area Communication Service & Systems Communications Service – Description and Specification Implementation M&Ps; and ♦ Unbundled Local Switching (Selective Carrier Routing, Switched Based) – Service Description and Specifications Implementation M&Ps.
PPR9-33	M&Ps in the problem resolution centers are the same for retail and wholesale.	Satisfied	M&Ps in the problem resolution centers are the same for retail and wholesale. The AFIG, RCMAG and CPG each maintain standard M&P documentation. The AFIG and CPG also maintain additional UNE documentation. M&Ps are located on site and on the Bellsouth intranet. The following are examples of documentation used in the problem resolution centers: ♦ PAWS Web; and ♦ Present Architecture for Provisioning Dedicated Hi-Capacity Services.
PPR9-34	M&Ps in the facilities centers are the same for retail and wholesale.	Satisfied	M&Ps in the facilities centers are the same for retail and wholesale. The AFIG and CPG both maintain standard M&P documentation. Each center also maintains additional UNE documentation. The following are examples of documentation used in the facilities centers: ♦ AFIG UNE M&P; and ♦ CPG Job Aid – 2-Wire Analog Port and Voice Grade Loop Combination PBX Trunks.
PPR9-35	M&Ps in the engineering center are the same for retail and wholesale.	Satisfied	M&Ps in the engineering center are the same for retail and wholesale. The CPG maintains standard M&P documentation. The CPG also maintains additional UNE documentation. The following are examples of documentation

Test Reference	Evaluation Criteria	Result	Comments
			used in the engineering center: ♦ Present Architecture for Provisioning Dedicated Hi-Capacity Services; and ♦ CPG Job Aid – 2-Wire Analog Port and Voice Grade Loop Combination PBX Trunks.
PPR9-36	M&Ps in the dispatch center are the same for retail and wholesale.	Satisfied	M&Ps in the dispatch center are the same for retail and wholesale. The WMC maintains standard M&P documentation. The WMC also maintains additional UNE documentation. M&Ps are located on site and on the BellSouth intranet. The following are examples of documentation used in the dispatch centers: ♦ WMC Job Aid – SL2 Designed; ♦ WMC Job Aid – SL1 Non-Designed; and ♦ WMC Procedures–Unbundled Network Elements – SL1 and SL2.
PPR9-37	M&Ps in the inventory center are the same for retail and wholesale.	Satisfied	M&Ps in the inventory center are the same for retail and wholesale. The AFIG maintains standard M&P documentation. The AFIG also maintains additional UNE documentation. The following are examples of documentation used in the inventory centers: ♦ AFIG UNE M&P; and ♦ PAWS Web.
Support Provisioning Coordination Process			
PPR9-38	Coordinated provisioning procedures are documented and followed.	Satisfied	Coordinated provisioning procedures are documented in several BellSouth internal M&P documents, including: ♦ Turn-up Non-Designed Combined Inside and Outside Conversions, Network Services – Customer Services; ♦ Turn-up Designed Combined Inside and Outside Conversions, Network Services – Customer Services; and ♦ Checklist for the UNE Provisioning of Coordinated Conversions, Network & Carrier Services. During observations at the Atlanta CWINS Center on February 20, 2001, KPMG Consulting

Test Reference	Evaluation Criteria	Result	Comments
			observed CWINS Center personnel following the documented coordinated provisioning procedures.
PPR9-39	Coordinated provisioning performance measures and process improvement practices are defined and tracked.	Satisfied	Performance measures are defined, tracked and controlled. CWINS Center activity is due date driven. The center has an internal annual goal of 90% due date met for all types of coordinated orders and average telephone queue times of no more than 45 seconds. The CWINS Center has a 95% timeliness benchmark for hot cuts, which is documented in BellSouth performance metric P-7. The CWINS Centers conduct six month and one year performance reviews of personnel, as well as performing coaching on a regular basis. The coordinated provisioning process improvement practices are complete. The Action Request (AR) process is used to suggest changes to processes and procedures. The AR is submitted online to Staff Support in Atlanta. Staff Support determines whether or not changes are needed and sends notification to center personnel, if necessary.
PPR9-40	Coordination Center manual coordination procedures with ALECs are defined and consistent.	Satisfied	The procedures for notification of the completion of manually provisioned orders are defined and consistent in all internal method and procedure documents. The documented procedures state that the CWINS Center notifies a designated ALEC contact directly after the COT or outside plant technician completes the order. The CWINS Center coordination procedures are defined in multiple documents, including: ♦ Turn-up Non-Designed Inside Cut Only Conversion, Interconnection Services, UNE; ♦ Turn-up Non-Designed Outside Cut Only Conversion, Interconnection Services, UNE; and ♦ Turn-up Designed combined Inside and Outside Conversions – Network Services-Interconnection Services, UNE.
PPR9-41	ALEC manual coordination procedures for order processing, translations, and dispatch centers are defined and consistent.	Satisfied	Manual coordination procedures between the order processing centers, translation centers, and dispatch centers are defined and consistent. The procedures are defined in the following documentation: ♦ BellSouth Interface Agreements;

Test Reference	Evaluation Criteria	Result	Comments
			♦ Escalation Procedures for the Unbundled Network Element (UNE) Center; and ♦ Non-Switched, Unbundled Network Element Combinations – Network Services-Customer Services.
PPR9-42	Processes for handling and tracking errors and exceptions are defined.	Satisfied	KPMG Consulting reviewed the following BellSouth documentation and found that processes for handling and tracking errors and exceptions are defined. ♦ Checklist for the UNE Provisioning of Coordinated Conversions, Network & Carrier Services; ♦ Unbundled Non-Designed (SL1) Voice Grade Loops, Wiring & Testing Work Steps; and ♦ Turn-up Non-Designed Inside Cut Only Conversion, Interconnection Services, UNE. KPMG Consulting observed that these documents are readily available to the CWINS Center and central office personnel.
PPR9-43	Escalation procedures are defined and documented.	Satisfied	KPMG Consulting reviewed the following BellSouth documentation and found that internal and external escalation procedures are defined. ♦ Escalation Procedures for the Unbundled Network Element (UNE) Center; ♦ Provisioning – UNEC Escalation Contact List-Atlanta[308]; ♦ Provisioning – UNEC Escalation Contact List-Birmingham[309]; and ♦ Provisioning – UNEC Escalation Contact List-Fleming Island[310].
PPR9-44	Processes within the ALEC coordination center and central offices are defined and documented.	Satisfied	KPMG Consulting reviewed the following BellSouth documentation and found that processes within the CWINS Center and central offices are defined and documented. ♦ Turn-up Non-Designed Outside Cut Only Conversions – Interconnection Services; ♦ Turn-up Non-Designed Inside Cut Only

[308] http://www.interconnection.bellsouth.com/centers/html/provcwin.html
[309] http://www.interconnection.bellsouth.com/centers/html/provcwinbhm.html
[310] http://www.interconnection.bellsouth.com/centers/html/cwinflemisl.html

Test Reference	Evaluation Criteria	Result	Comments
			Coordinated Conversion – Interconnection Services; ♦ Turn-up Designed Combined Inside and Outside Conversions – Network Services-Interconnection Services, UNE; and ♦ Unbundled Non-Designed (SL1) Voice Grade Loops, Wiring & Testing Work Steps.
Capacity Management			
PPR9-45	There are established processes for evaluating and adjusting system infrastructure utilization, based on current and forecasted volumes.	Satisfied	The Network Centers (which include the WMC, CO-FWG and the NISC groups) and the Local Services Centers (which includes the LCSC and CWINS Centers) use force-sizing models driven by historical, present and projected work volumes to evaluate future needs for system infrastructure adjustment. BellSouth did not appear to have formal and documented processes for capacity management in several functional centers that are involved in the provisioning of retail, resale, and wholesale orders. Exception 48 was issued to address this concern. In response to this exception, BellSouth provided KPMG Consulting with documents that defined BellSouth's capacity management process. KPMG Consulting reviewed the documents and determined that BellSouth does have a documented capacity management process and Exception 48 was closed. BellSouth uses the following documents in this process: ♦ Network Centers Force Sizing Model Process and Force Models; ♦ Local Service Centers Force Sizing Model Process and Force Models; and ♦ Corporate Real Estate and Services (CRES) Project Management Process Overview.
PPR9-46	There are established processes for evaluating and adjusting office equipment utilization, based on current and forecasted volumes.	Satisfied	BellSouth has established processes for evaluating and adjusting office equipment utilization, based on current and forecasted volumes. During initial testing, it was not apparent that BellSouth had established processes for evaluating and adjusting office equipment utilization, based on current and forecasted

Test Reference	Evaluation Criteria	Result	Comments
			volumes. Exception 48 was issued to address this concern. In response to this exception, BellSouth provided KPMG Consulting with documents that outlined BellSouth's capacity management process. KPMG Consulting reviewed the documents and determined that BellSouth does have a documented capacity management process and Exception 48 was closed. The Network Centers and the Local Services Centers use force-sizing models driven by historical, present and projected work volumes to adjust office equipment utilization. BellSouth uses the following documents in this process: ♦ Network Centers Force Sizing Model Process and Force Models; ♦ Local Service Centers Force Sizing Model Process and Force Models; and ♦ Corporate Real Estate and Services (CRES) Project Management Process Overview.
PPR9-47	There are established processes for evaluating and adjusting office space utilization, based on current and forecasted volumes.	Satisfied	BellSouth has established processes for evaluating and adjusting office space utilization, based on current and forecasted volumes. During initial testing, it was not apparent that BellSouth had established processes for evaluating and adjusting office space utilization based on current and forecasted volumes. Exception 48 was issued to address this concern. In response to this exception, BellSouth provided KPMG Consulting with documents that outlined BellSouth's capacity management process. KPMG Consulting reviewed the documents and determined that BellSouth does have a documented capacity management process and Exception 48 was closed. The Network Centers and the Local Services Centers use force-sizing models driven by historical, present and projected work volumes to adjust office space utilization. The Corporate Real Estate and Services (CRES) Group handles new office space and office supply projects. BellSouth uses the following documents in this process: ♦ Network Centers Force Sizing Model

Test Reference	Evaluation Criteria	Result	Comments
			Process and Force Models; ♦ Local Service Centers Force Sizing Model Process and Force Models; ♦ Corporate Real Estate and Services (CRES) Project Management Process Overview; and ♦ Long-Term Space Proposal, Network Services – Customer Services, Jacksonville FL, April 2001.
PPR9-48	There are established processes for evaluating and adjusting personnel utilization, based on current and forecasted volumes.	Satisfied	BellSouth has established processes for evaluating and adjusting personnel utilization, based on current and forecasted volumes. During initial testing, it was not apparent that BellSouth had established processes for evaluating and adjusting personnel utilization based on current and forecasted volumes. Exception 48 was issued to address this concern. In response to this exception, BellSouth provided KPMG Consulting with documents that outlined BellSouth's capacity management process. KPMG Consulting reviewed the documents and determined that a formal and documented process for capacity management did exist and Exception 48 was closed. The Network Centers and the Local Services Centers use force modeling, which is driven by historical, present and projected work volumes to adjust personnel utilization. BellSouth uses the following documents in this process: ♦ Network Centers Force Sizing Model Process and Force Models; ♦ Local Service Centers Force Sizing Model Process and Force Models; and ♦ Corporate Real Estate and Services (CRES) Project Management Process Overview.
PPR9-49	There are established processes for incorporating capacity management plans into the business plan.	Satisfied	BellSouth has established processes for incorporating capacity management plans into the business plan. During initial testing, it was not apparent that BellSouth had established processes for incorporating capacity management plans into the business plan. Exception 48 was issued to address this concern. In response to this exception,

Test Reference	Evaluation Criteria	Result	Comments
			BellSouth provided KPMG Consulting with documents that outlined BellSouth's capacity management process. KPMG Consulting reviewed the documents and determined that BellSouth does have a documented capacity management process and Exception 48 was closed. BellSouth's Finance Organization maintains the forecast models and uses them to develop force requirements for each plan year. Outputs from the respective Network Centers' models are presented to the State/Network Vice President (NVP) as an element of their annual force and budget planning cycle. The LCSC's and CWINS Center's force sizing models generate force and force-related expense budgets and capital budgets. The force model data are used to authorize force allocation given to center management in order to allow plans for any necessary growth. BellSouth uses the following documents in this process: ♦ Network Centers Force Sizing Model Process and Force Models; ♦ Local Service Centers Force Sizing Model Process and Force Models; and ♦ Corporate Real Estate and Services (CRES) Project Management Process Overview.
ADSL Line Splitting			
PPR9-50	ADSL Line Splitting procedures are documented and defined.	Satisfied	ADSL Line Splitting installation methodologies and associated M&Ps are defined and complete. Due to the lack of commercial activity on the line splitting product, KPMG Consulting was unable to determine whether there was adherence to these M&Ps by BellSouth.

5.0 Parity Evaluation

The Provisioning Process Evaluation (PPR9) is a parity and evaluative review of the provisioning processes, systems and interfaces required for retail and wholesale orders. As indicated in the Table 9-3, the results of the Provisioning Process Evaluation demonstrate that there is parity between BellSouth retail and ALECs in the subject matter covered by this examination.

6.0 Final Summary

This section summarizes the number of test evaluation criteria discussed above and the number that was satisfied or not satisfied at the conclusion of the test.

6.1 Summary of Findings

There were 50 evaluation criteria considered for the Provisioning Process Evaluation (PPR9). All 50 evaluation criteria received a satisfied result.

As all evaluation criteria are satisfied, KPMG Consulting considers the Process Evaluation (PPR9) area satisfied at the time of the final report delivery.

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C. Test Results: Provisioning Verification and Validation (TVV4)

1.0 Description

The Provisioning Verification and Validation (TVV4) test evaluated BellSouth's proficiencies when provisioning Alternative Local Exchange Carrier (ALEC) orders. ALEC orders were evaluated to determine whether BellSouth personnel: (i) provisioned the orders accurately as ordered via the ALEC Local Service Request (LSR) on the Firm Order Confirmation Due Date (FOC DD), and (ii) adhered to provisioning guidelines in BellSouth's documented methods and procedures (M&P).

Provisioning tests were performed on orders submitted through BellSouth manual and electronic interfaces for Resale, Unbundled Network Elements-Platform (UNE-P), and Unbundled Network Elements-Loop (UNE-L) delivery methods. The test also examined the effects of provisioning service elements, including switch translations (STs), directory listings (DL), coordinated and non-coordinated UNE-Loop migrations, Local Number Portability (LNP) activation, High-Capacity loops, Digital Subscriber Loop (xDSL), ADSL Line Sharing loops, and Completion Notices[311] (CNs). Sample orders were selected from the test bed and from commercial ALEC orders and analyzed for the types of provisioning elements required such as M&P adherence and timeliness requirements.

Test methods included: (i) verification of physical provisioning for both live ALEC commercial installations and test bed accounts, and (ii) verification of test bed account service and feature provisioning by analyzing a variety of BellSouth system outputs.

2.0 Business Process

This section describes BellSouth's provisioning business process.

2.1 Business Process Description

BellSouth performs provisioning activities to establish services requested by customers. In order to migrate, install, change or disconnect services, ALECs submit LSRs manually to the BellSouth Local Carrier Service Center (LCSC), or electronically through (i) Electronic Data Interface (EDI), (ii) Telecommunications Access Gateway (TAG), (iii) Graphical User Interface (GUI) Robust Telecommunications Access Gateway (RoboTAG)[312]; (iv) Local Exchange Navigation System (LENS), and (v) Manual Interface (MI) for Resale, UNE-Platform (UNE-P) and UNE-Loop (UNE-L) delivery. After receipt and processing of the LSR, BellSouth generates a Firm Order Confirmation (FOC) notification to the ALEC that confirms the due date and time (if applicable).

Once the FOC is generated, non-designed orders proceed to downstream systems and organizations, including the Address Facility Inventory Group (AFIG) for facility assignment, the Recent Change Memory Administration Group (RCMAG) for translations work, the Work Management Center (WMC) for installation orders that require dispatch of outside plant technicians, and the Central Office-Frame Work Group (CO-FWG) for installation orders that

[311] Completion Notices were verified through a report that was generated by a KPMG Consulting internal system.
[312] As of April 3, 2002, the FPSC has removed RoboTAG from the Florida OSS test (Order # PSC-02-0450-PCO-TP) because BellSouth no longer supports the application.

require central office work. Designed orders flow to the Circuit Provisioning Group (CPG) for circuit design, but otherwise follow the same provisioning process as non-designed orders. BellSouth notifies the ALECs that the LSR was provisioned via a CN.

Elements of the provisioning process include:

- Directory Listing (DL) – A DL is modified based on information contained in the LSR. BellSouth provisions changes to the DL and directory assistance database on the due date. An exception to this process involves Local Number Portability (LNP) service requests. An LNP request requires the ALEC to submit a DL service request to retain or make changes to the DL. BellSouth is expected to perform the LNP DL provisioning at Frame Due Date plus one day or less.
- Switch Translations – The ALEC LSR is analyzed for feature changes. All feature changes are provisioned in the BellSouth switch on the due date and availability is expected upon completion of provisioning activity.
- Loop Conversions[313] – Existing BellSouth lines are migrated to the ALEC collocation facility inside a BellSouth central office. BellSouth frame technicians migrate the lines at the main distribution frame (MDF) on the due date. The conversion is expected to occur on the Frame Due Date for non-coordinated conversions. During coordinated conversions, the cut occurs on the Frame Due Date and starts at the Frame Due Time (FDT) as indicated on the LSR. Cases involving Integrated Loop Carrier (IDLC) migrations require outside technicians to perform field work on the due date and time.
- Local Number Portability (LNP) – BellSouth coordinates actions with the ALEC acquiring the account. BellSouth sets the 10-digit trigger in their switch and releases the Number Portability Administration Center (NPAC) subscriber record so that the CLEC can then activate the subscription record through the NPAC. NPAC is the agency that maintains LNP databases, thereby allowing customers to retain their existing telephone number when they migrate to an ALEC.
- High Capacity Circuits – BellSouth provisions high capacity facilities requested by ALECs. DS1 service provides an ALEC with a 4-wire transmission path that carries digital signals at speeds of 1.544 Mbps simultaneously in both directions. DS3 service carries digital signals at speeds of 44.736 Mbps, equal to 28 DS1s. High capacity circuits can include such services as interoffice facilities (IOF), which are DS1 or DS3 circuits that run between central offices (COs) and a Point of Presence (POP) and loops, which are DS1 circuits that run from a CO, or a POP, to a customer location.
- Unbundled Network Elements (UNE) Loops – Physical connectivity is established from a subscriber location to a local serving office (BellSouth central office) where the ALEC maintains a collocation arrangement. UNE-loops are available in several varieties including Digital Signal, level 0 (DS0), Digital Signal, level 1 (DS1), Integrated Services Digital Network (ISDN), Digital Subscriber Line (xDSL), Asynchronous Digital Subscriber Line (ADSL), Line Sharing and Extended Enhanced Loops (EEL).

3.0 Methodology

This section summarizes the test methodology.

[313] Also referred to as Loop Migrations or Hot Cuts

3.1 Scenarios

Provisioning test elements and analysis were based on a representative set of Resale, UNE-P, UNE-loop and high capacity circuit scenarios identified in Appendix A of the Florida Master Test Plan (MTP). For many of the provisioning scenarios, ALECs conducting business in Florida allowed KPMG Consulting to observe commercial installations of their orders. The scenarios tested during the Provisioning Verification and Validation (TVV4) test included:

- Installation of new services for Resale, UNE-P and UNE-Loop (including xDSL and ADSL Line sharing) delivery methods:
  - With DL changes; and
  - Without DL changes.
- Migration of BellSouth services to UNE-loops, specifically:
  - Analog loops without number porting; and
  - Analog loops with number porting.
- Resale and UNE-P service requests that required switch translations, specifically:
  - Plain Old Telephone Service (POTS) (Business and Residential);
  - ISDN (Business and Residential);
  - Private Branch Exchange (PBX) trunks;
- Installation of High Capacity Circuits, specifically:
  - DS1; and
  - IOF (DS1 and DS3).

3.2 Test Targets and Measures

A variety of provisioning tests were performed on orders submitted through BellSouth electronic and manual interfaces for Resale, UNE-P and UNE-Loop delivery.

The test targets were BellSouth's provisioning of Resale, UNE-P and UNE-Loop services and included reviews of the following provisioning processes:

- Directory Listing Validation;
- xDSL Provisioning Validation;
- ADSL Line Sharing Provisioning Validation;
- Hi-Capacity Circuit (IOF/DS1/DS3) Provisioning Validation;
- Loss of Line Report Validation;
- Intercept Messaging (Disconnected Orders) Validation;
- UNE-Loop[314] (Local Number Portability (LNP) and Integrated Digital Loop Carrier (IDLC)) Migration Validation;

[314] UNE-L migrations are also referred to as Hot Cuts.

- Service Order Completion Notice Validation;
- Customer Service Records (CSR) Validation;
- Switch Feature Translations Validation including Operator Services/Directory Assistance (OS/DA), Originating Line Number Screening (OLNS); and
- Unbundled Dark Fiber circuits Validation.

3.3 Data Sources

Data collected for the test included the following BellSouth documents:

- BellSouth Business Rules-Local Ordering, CG-LEOO-024, Issue 9R, November 9, 2001;
- UNE – Switched Combos[315] – Re-bundled Residence and Business 2-Wire, Network & Carrier Services User Guide, UG-RRBU-001, Issue 1e, September 2000;
- Telephone Number Administration (NA) Methods and Procedures, BSP, 194-100-013BT, Issue 4, August 2001;
- Service Order Communication System (SOCS) User Guide, The Service Order Section 8, Version 1.0, 10/98;
- USOC-to-FID Charts for Switch Translation Verification, Derived from Recent Change Memory Administration Group (RCMAG) Methods and Procedures;
- Central Office UNE Line Sharing Job Aid – Provisioning Line Sharing, Draft Version 3 – August 16, 2000;
- UNEC Method and Procedures for Unbundled ADSL Capable Loops, Unbundled HDSL Capable Loops, and Unbundled Copper Loops, Version: Draft 1.0, Issue Date: 2/27/00;
- UAL, UHL, and UCL New Install Checklist, Issue number 1.1, 12/13/00; and
- Job Aid for DS1.

3.4 Data Generation/Volumes

This test relied on data generated as part of the Pre-Order, Order and Provisioning (POP) Functional Evaluation (TVV1) and live commercial ALEC orders.

3.5 Evaluation and Analysis Methods

The primary focus of Provisioning Verification and Validation (TVV4) was to evaluate BellSouth's ability to provision ALEC orders. Both KPMG Consulting test bed orders, which were submitted as part of the POP Functional Evaluation (TVV1), and live ALEC commercial installations were evaluated against the following standards:

- Accuracy – The extent to which BellSouth provisioned services and features as specified on the LSRs.
- Timeliness – The degree to which the orders were provisioned on the due dates and times.

[315] Also referred to as UNE-Platform (UNE-P)

- Timeliness and Accuracy of Notifications – The accuracy of information and timeliness of the notifications[316] relative to the LSR that BellSouth sent to the ALECs.
- Communications and Coordination – The ability of BellSouth to coordinate work activities and communicate with the ALECs when physical work required coordination.
- Compliance with Methods and Procedures (M&P) – BellSouth's compliance with internal M&Ps to the extent that the M&Ps affected the provisioning outcomes.

Evaluation methods for provisioning tests involved reviewing KPMG Consulting transactions submitted as part of the POP Functional Evaluation (TVV1). KPMG Consulting completed the following activities as part of this review:

- Switch Translation – A sample of Resale and UNE-P orders was generated from the population of LSRs. Features on LSRs were compared to the Switch Translation screen printouts provided by BellSouth. Discrepancies were analyzed and documented.
- Directory Listing (DL) - A sample of Resale, UNE-P, and UNE-Loop was derived from the population of LSRs including telephone numbers with and without DL requests. The LSRs were compared to the BellSouth Directory Listings database and discrepancies were analyzed and reported for each telephone number.
- Loop Migrations (Hot Cuts) – Data were gathered during field inspections of hot cut activities in BellSouth central offices. Information about telephone contacts from the Customer Wholesale Interconnection Network Services (CWINS) Center were logged and analyzed for compliance with BellSouth M&Ps.
- High Capacity Circuits – Information was gathered during installation inspection in BellSouth central offices and premises locations.
- Local Number Portability (LNP) - Information about LNP provisioning was gathered from information stored in the Number Portability Administration Center (NPAC) database and from logs of telephone calls made from BellSouth switches. LNP information was gathered during observations of ALEC commercial installations.
- Completion Notices (CN) – Required field inputs contained in CNs and timeliness of SOCs were analyzed.
- Customer Service Records (CSR) – Information contained within CSRs was evaluated for accuracy against field inputs from submitted LSRs and pre-activity CSRs.
- Loss of Line Report – Information contained within the Loss of Line reports was evaluated for accuracy against fields in service order files. Lines that matched the Line Loss criteria were expected to appear on the Line Loss report.
- Disconnect Orders – A sample of Resale and UNE-P orders was pulled from the population of LSRs. Disconnect orders were reviewed to verify that the proper intercept message was placed on the disconnected lines.

The Provisioning Verification and Validation (TVV4) test included a checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the BellSouth OSS Evaluation. These evaluation criteria provided the framework of norms, standards, and guidelines

[316] Examples of notifications include CNs, Jeopardy's and Line Loss reports

for the Provisioning Verification and Validation (TVV4) test. The data collected were analyzed employing the evaluation criteria identified in Section 4.1 below.

4.0 Results

This section contains the overall test results.

4.1 Results Summary

The number of exceptions and observations issued during the life of the test is depicted in Table 4-1. For additional exception and observation information, refer to Appendix D and E, respectively. The test criteria and results are presented in Table 4-2 below.

Table 4-1: TVV4 Exception and Observation Activity

Activity	Exceptions	Observations
Total Issued	10	18
Total Disposed as of Final Report Date	8	18
Total Remaining Open as of Final Report Date	2	0

Table 4-2: TVV4 Evaluation Criteria and Results

Test Reference	Evaluation Criteria	Result	Comments
Directory Listing			
TVV4-1	BellSouth's directory assistance database contains required field inputs.	Not Satisfied	BellSouth's directory assistance database does not contain required field inputs. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. KPMG Consulting reviewed 217 directory listing orders from April 2001 – August 2001 to determine if BellSouth provisioned the directory listings accurately. BellSouth provisioned 197 directory listings (91%) accurately. Examples of discrepancies included: listings not appearing in the database as well as listings containing incorrect information. KPMG Consulting continued to validate the available directory listing data. The continued analysis resulted in a total of 430 directory listings reviewed with 409 (95.1%) provisioned correctly. Based on BellSouth provided information, which indicated that service

Test Reference	Evaluation Criteria	Result	Comments
			representatives received supplemental training, business rules were updated to reflect the most current procedures and a system fix was scheduled to correct orders that contained a hunting feature. KPMG Consulting continued testing although the hunting feature correction was not implemented. KPMG Consulting subsequently reviewed 141 directory listings from December 2001– February 2002. BellSouth provisioned 135 (95.7%) directory listings accurately. The hunting feature was not tested. To test the hunting feature fix, KPMG Consulting reviewed an additional 152 directory listings from April 2002 - May 2002. BellSouth provisioned 130 (85.5%) directory listings accurately. KPMG Consulting issued Exception 171 as a result of additional discrepancies that were identified during the April to May 2002 review. Exception 171 remains open.
TVV4-2	BellSouth provisions directory listings on the due date.	Satisfied	BellSouth provisions directory listings on the due date. In the absence of a documented BellSouth standard for provisioning timeliness, KPMG Consulting applied a benchmark of 95%. During initial testing, KPMG Consulting reviewed 74 directory listings from April 2001– June 2001 to determine if BellSouth provisioned the listings on the due date. BellSouth provisioned 49 (66.2%) directory listings on the due date. As a result, KPMG Consulting issued Exception 82. Based on BellSouth's response, KPMG Consulting continued testing. KPMG Consulting reviewed a total of 276 directory listings from April 2001 – October 2001 to determine if BellSouth provisioned the listings on the due date. BellSouth provisioned 263 (95.2%) directory listings on the due date. Based

Test Reference	Evaluation Criteria	Result	Comments
			on these results, Exception 82 was closed.
Switch Translation			
TVV4-3	BellSouth's switch translations contain required field inputs.	Not Satisfied	BellSouth's switch translations do not contain accurate field inputs. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. During initial testing, KPMG Consulting reviewed 435 switch translations from April 2001 - October 2001 to determine if BellSouth provisioned features and services accurately. BellSouth provisioned 409 (94%) switch translations accurately. As a result, KPMG Consulting issued Exception 84. Based on BellSouth's response, KPMG Consulting conducted a retest. BellSouth trained their service reps, updated their internal M&Ps to correctly identify features codes when provisioning services, and a system fix was scheduled to correct orders that contained a hunting feature. KPMG Consulting conducted the retest even though the hunting feature correction was not implemented. During retesting, KPMG Consulting reviewed 162 switch translations from December 2001 – February 2002 to determine if BellSouth provisioned features and services accurately. BellSouth provisioned 161 (99.4%) switch translations accurately. KPMG Consulting continued retesting to determine whether the hunting feature fix was implemented successfully. KPMG Consulting reviewed 134 switch translations from April – May 2002. BellSouth provisioned 120 (90%) switch translations accurately. KPMG Consulting updated Exception 84 to detail the discrepancies. The discrepancies involved the provisioning of hunting services and LPICs. Exception 84 remains open.

Test Reference	Evaluation Criteria	Result	Comments
High Capacity Circuit Provisioning			
TVV4-4	BellSouth provisions DS1/DS3 circuits according to documented M&P tasks.	Satisfied	BellSouth provisions DS1/DS3 circuits according to documented M&P tasks. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. During testing, KPMG Consulting observed BellSouth technicians install 135 (14 Test Bed, 121 commercial) DS1/DS3 circuits (619 M&P tasks) from July 2001 to April 2002. BellSouth provisioned 595 tasks (96.1%) in accordance with documented methods and procedures.
TVV4-5	BellSouth meets the DS1 loop percent missed installation appointment parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM Metric P-3: Percent Missed Installation Appointments measures for DS1 circuits. Metric P-3 measures the extent to which BellSouth provisions DS1 circuits for customers by the scheduled due date. The defined standard is parity against retail average. KPMG Consulting reviewed 105 commercial DS1 service orders in July 2001, March - April 2002. BellSouth provisioned 103 (98.1%) commercial DS1 service orders on the confirmed due date. BellSouth provisioned 1,920 (97.3%) of the 1,974 retail DS1 service orders on the confirmed due date. The retail results cover the May through July 2001 and April 2002 periods only.
TVV4-6	BellSouth meets the IOF percent missed installation appointment parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM Metric P-3: Percent Missed Installation Appointments measures for IOF circuits. Metric P-3 measures the extent to which BellSouth provisions IOF circuits for customers by the scheduled due date. The defined standard is parity against the retail average. KPMG Consulting reviewed 16

Test Reference	Evaluation Criteria	Result	Comments
			commercial IOF service orders. BellSouth provisioned all 16 (100%) commercial IOF service orders on the confirmed due date. BellSouth provisioned 5,098 (99%) of 5,150 retail IOF service orders on the confirmed due date. The retail results cover the March and April 2002 periods only.
TVV4-7	BellSouth meets the DS1 percentage of orders placed in jeopardy due to pending facilities parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM Metric P-2: Percentage of Orders Put in Jeopardy Due to Pending Facilities for DS1 Orders for wholesale. The P-2 SQM measures the extent to which BellSouth places orders in jeopardy due to pending facilities. The defined standard is parity against retail average. KPMG Consulting reviewed 92 commercial DS1 loop service orders to determine if BellSouth generated a jeopardy notice due to lack of facilities when warranted. BellSouth generated 1 (1.1%) jeopardy notice due to pending facilities. BellSouth generated jeopardy notices for 9.7% (241/2475) of their retail DS1 service orders due to pending facilities. The retail results cover the July 2001 and April 2002 periods only.
TVV4-8	BellSouth meets the IOF percentage of orders placed in jeopardy due to pending facilities parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM Metric P-2: Percentage of Orders Put in Jeopardy due to Pending Facilities for IOF Service Orders for wholesale orders. The P-2 SQM measures the extent to which BellSouth places orders in jeopardy due to pending facilities. The defined standard is parity against retail average. KPMG Consulting reviewed 16 commercial IOF loop service orders to determine if BellSouth generated a jeopardy notice due to lack of facilities when warranted. BellSouth generated 0

Test Reference	Evaluation Criteria	Result	Comments
			(0%) jeopardy notices due to pending facilities. BellSouth generated jeopardy notices for 36.2% (1182/5209) of their retail DS1 service orders due to pending facilities. The retail results cover the March and April 2002 periods only.
TVV 4-9	BellSouth meets the percentage of troubles within 30 days of service order completion for DS1 circuit parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM P-9: Percentage Troubles within 30 Days of Service Order Completion for DS1 circuits. The P-9 SQM measures the quality of services installed, focusing on the percentage of average monthly new order installations that were free of troubles 30 calendar days following installation. The standard is parity against the retail average. KPMG Consulting reviewed 90 commercial DS1service order trouble history reports for August 2001and May 2002 to determine if trouble reports were opened for each circuit provisioned, within 30 days of the Service Order Completion. Five trouble reports (5.6%) were generated within 30 days of the Service Order Completion BellSouth's retail results during the same time period were 5.4%. Although the test percentage is below the retail parity requirement, the statistical evidence is not strong enough to conclude that the performance is below standard with confidence. The inherent variation in the process is large enough to have produced the substandard result, even with a process that is operating above the parity requirement. The p-value, which indicates the chance of observing this result when the requirement is being met, is .5433. This value exceeds .0500, which is the threshold to determine a statistical conclusion of failure.
TVV 4-10	BellSouth meets the percentage of troubles within 30 days of service order completion for IOF	Satisfied	BellSouth meets the parity performance requirements for SQM P-9- Percentage Troubles within 30 Days of Service Order Completion for IOF circuits.

Test Reference	Evaluation Criteria	Result	Comments
	circuit parity performance requirement.		Completion for IOF circuits. The P-9 SQM measures the quality of services installed, focusing on the percentage of average monthly new order installations that were free of troubles 30 calendar days following installation. The standard is parity against the retail average. KPMG Consulting reviewed 16 commercial IOF service order trouble history reports for August 2001, April and May 2002 to determine if a trouble report was opened for each circuit provisioned within 30 days of the Service Order Completion. One trouble report (6.3%) was generated within 30 days of the Service Order Completion. BellSouth's retail results during the same time period were 7.1%.
Hot Cut Provisioning			
TVV4-11	Hot cuts are provisioned according to documented M&P tasks.	Satisfied	BellSouth provisions hot cuts according to documented M&P tasks. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. KPMG Consulting observed BellSouth technicians install 372 commercial analog circuits (3162 tasks) from December 6, 2000 to December 18, 2001. BellSouth provisioned 3123 tasks (98.8%) in accordance with BellSouth documented methods and procedures.
TVV4-12	BellSouth meets the coordinated customer conversion interval performance benchmark.	Satisfied	BellSouth meets the performance benchmark for SQM metric P-7: Coordinated Customer Conversion Interval. The P-7 SQM measures the timeliness of BellSouth's installation services focusing on the average time to install service. The defined standard for Coordinated Conversion Intervals is 95% of the orders completed within a 15-minute per line interval. KPMG Consulting reviewed 143

Test Reference	Evaluation Criteria	Result	Comments
			commercial coordinated conversion orders from December 6, 2000 to December 18, 2001 to determine if the orders were completed within the 15-minute per line interval. BellSouth provisioned 138 (96.6%) coordinated conversions orders within the 15-minute interval.
TVV4-13	BellSouth meets the coordinated customer conversion performance benchmark.	Satisfied	BellSouth meets the performance benchmark for SQM metric P-7A: Coordinated Customer Conversions. The P-7A SQM measures the timeliness of BellSouth's installation service focusing on the average time to begin installation of service. The defined standard is 95% within 15 minutes of the scheduled start time. KPMG Consulting reviewed 128 commercial coordinated conversions to determine if the hot cut began within 15 minutes of the scheduled start time. BellSouth began provisioning 124 (96.9%) commercial coordinated conversions within 15 minutes of the Frame Due Time as it appeared on the FOC.
TVV4-14	BellSouth meets the hot cut circuit percent installation appointment parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM metric P-3: Percent Missed Installation Appointments measure for hot cut circuits. The P-3 SQM measures the extent to which BellSouth provisions hot cut circuits for customers by the scheduled due date. The defined standard is parity against retail average. KPMG Consulting reviewed 143 commercial hot cut service orders from December 6, 2000 to December 18, 2001. BellSouth provisioned 141 (98.6%) commercial hot cut service orders on the due date. BellSouth's retail results during the same time period were 94.3%.
TVV4-15	BellSouth meets the percentage of troubles within 30 days of service order completion for hot cut circuit parity	Satisfied	BellSouth meets the parity performance requirements for SQM P-9: Percentage Troubles received within 30 Days of Service Order Completion for hot cut circuits.

Test Reference	Evaluation Criteria	Result	Comments
	performance requirement.		circuits. The P-9 SQM measures the quality of services installed, focusing on the percentage of average monthly new order installations that were free of troubles 30 calendar days following installation. The standard is parity against the retail average. KPMG Consulting reviewed 372 commercial hot cut circuit installations from December 6, 2000 to December 18, 2001. Trouble reports related to these installations were reviewed to determine if these reports were opened within 30 days of the Service Order Completion. Fifteen (4.1%) trouble reports were generated within 30 days of the Service Order Completion. BellSouth's retail results during the same time period were 5.7%.
TVV4-16	BellSouth meets the percent provisioning troubles received within 7 days of a completed service order for hot cut benchmark.	Satisfied	BellSouth meets the performance benchmark for SQM P-7C: Percent Provisioning Troubles Received Within Seven Days of a Completed Service Order for Hot Cut Services. The P-7C SQM measures the quality of services installed, focusing on the percentage of average monthly new order installations that were free of troubles seven calendar days following installation. The defined standard is less than 5%. KPMG Consulting reviewed 372 commercial hot cut circuit installations to determine if a trouble report was opened for each circuit provisioned within seven days of the Service Order Completion. One (.03%) trouble report was generated within seven days of the Service Order Completion during the same time period.
xDSL Installations			
TVV4-17	BellSouth provisions xDSL circuits according to documented M&P tasks.	Satisfied	BellSouth provisions xDSL circuits according to documented M&P tasks. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%

Test Reference	Evaluation Criteria	Result	Comments
			of 95%. KPMG Consulting observed Bellsouth technicians install 98 commercial xDSL circuits (953 M&P tasks) from January 16, 2001 to December 31, 2001. BellSouth provisioned 945 tasks (99.2%) in accordance with documented methods and procedures.
TVV4-18	BellSouth meets the percentage of orders put in jeopardy due to pending facilities for xDSL orders parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM metric P-2: Percentage of Orders Put in Jeopardy Due to Pending Facilities for xDSL orders. The P-2 metric measures the extent to which BellSouth places orders in jeopardy due to pending facilities. The defined standard is parity against retail average. KPMG Consulting reviewed 98 commercial xDSL service orders from January 16, 2001 to December 31, 2001 to determine if BellSouth generated a jeopardy notice due to lack of facilities when warranted. BellSouth generated 13 (13.3%) jeopardy notices due to pending facilities. BellSouth's retail results during the same time period were 15.44%.
TVV4-19	BellSouth meets the percent missed installation appointment measure for xDSL service orders parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM metric P-3: Percent Missed Installation Appointments measures for xDSL service orders. The P-3 SQM measures the extent to which BellSouth provisions xDSL service orders for customers by the scheduled due date. The defined standard is parity against retail average. KPMG Consulting reviewed 85[317] commercial xDSL service orders from January 16, 2001 to December 31, 2001. BellSouth provisioned 84 (98.2%) commercial xDSL service orders on the due date. BellSouth's retail results during the same time period were 88.94%.

[317] The sample size evaluated in the criterion excludes 13 pending facilities orders as identified in TVV4-18.

Test Reference	Evaluation Criteria	Result	Comments
TVV4-20	BellSouth meets the cooperative acceptance testing for xDSL service benchmark..	Satisfied	BellSouth meets the performance benchmark for SQM metric P-8: Cooperative Acceptance Testing for xDSL service orders. The P-8 SQM measures the extent to which BellSouth provisions xDSL service orders for customers with cooperative acceptance testing. The defined standard for xDSL loops tested is 95%. KPMG Consulting reviewed 80 commercial xDSL service orders from January 16, 2001 to December 31, 2001. BellSouth provisioned 80 (100%) commercial xDSL service orders with cooperative acceptance testing.
TVV4-21	BellSouth meets the percentage troubles within 30 days of service order completion for xDSL circuit parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM P-9: Percentage Troubles within 30 Days of Service Order Completion for xDSL circuits. The P-9 SQM measures the quality of services installed, focusing on the percentage of average monthly new order installations that were free of troubles 30 calendar days following installation. The standard is parity against the retail average. KPMG Consulting reviewed 85 commercial xDSL circuit installations from January 16, 2001 to December 31, 2001 that completed to determine if trouble reports were opened for each circuit provisioned within 30 days of the Service Order Completion. Two (2.4 %) trouble reports were generated within 30 days of the Service Order Completion. BellSouth's retail results during the same time period were 9.4%.
Intercept Messaging			
TVV4-22	BellSouth switch translations for disconnect orders are provisioned with the proper intercept-recording message.	Satisfied	BellSouth switch translations for disconnect orders are provisioned with the proper intercept-recording message. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. During initial testing, KPMG Consulting

Test Reference	Evaluation Criteria	Result	Comments
			reviewed 181 disconnect orders from April – October 2001 to determine if BellSouth disconnected the service and applied the proper intercept message. BellSouth disconnected 141 (77.9%) orders accurately. As a result, KPMG Consulting issued Exception 76. As a result of this exception, BellSouth modified business rules and adjusted hunting feature codes. During retesting KPMG Consulting reviewed 20 disconnect orders from December 2001– February 2002. Of these, BellSouth provisioned 18 (90%) disconnect orders accurately. KPMG Consulting updated Exception 76 to reflect the additional failures. During the second retest, KPMG Consulting reviewed 59 disconnects from April – May 2002. BellSouth provisioned 55 (93%) disconnect orders accurately. Exception 76 was amended to reflect these findings. Although the test percentage is below the benchmark of 95%, the statistical evidence is not strong enough to conclude that the performance is below the 95% benchmark with confidence. The inherent variation in the process is large enough to have produced the substandard result, even with a process that is operating above the benchmark standard. The p-value, which indicates the chance of observing this result when the benchmark is being met, is .3412. This value exceeds .0500, which is the threshold to determine a statistical conclusion of failure. Based on these results, Exception 76 was closed.
Completion Notice (CN) Validation			
TVV4-23	BellSouth service order completion notices accurately reflect the Completion Notice (CN) due date.	Satisfied	BellSouth CNs accurately reflect the CN due date. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark

Test Reference	Evaluation Criteria	Result	Comments
			of 95%. KPMG Consulting reviewed 2,486 CNs from April 2001 – January 2002 to determine if BellSouth provisioned the requested service on the confirmed due date. BellSouth generated 2,369 (95.3%) CNs accurately.
CSR Validation			
TVV4-24	BellSouth Post Order Customer Service Records (CSRs) contain required field inputs from Local Service Records (LSRs).	Satisfied	BellSouth Post Order CSRs contain required field inputs from LSRs. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. During initial testing, KPMG Consulting reviewed 255 Post Order CSRs from April – October 2001 to determine if they were updated accurately. BellSouth updated 177 (69.8%) Post Order CSRs accurately. As a result, KPMG Consulting issued Exception 112. BellSouth trained their service reps, implemented a fix for their Exchange Access and Control Tracking (EXACT) system, and implemented a CSR formatting fix. During retesting KPMG Consulting reviewed 83 Post Order CSRs from December 2001– February 2002 to determine if they were updated accurately. BellSouth updated 72 (87%) Post Order CSRs accurately. KPMG Consulting amended Exception 112 to reflect the additional failures. During the second retest, KPMG Consulting reviewed 113 CSRs from April – May 2002. BellSouth provisioned 105 (93%) CSRs accurately. Exception 112 was amended to reflect these findings. Although the test percentage is below the benchmark of 95%, the statistical evidence is not strong enough to conclude that the performance is below the 95% benchmark with confidence. The inherent variation in the process is large

Test Reference	Evaluation Criteria	Result	Comments
			enough to have produced the substandard result, even with a process that is operating above the benchmark standard. The p-value, which indicates the chance of observing this result when the benchmark is being met, is .2049. This value exceeds .0500, which is the threshold to determine a statistical conclusion of failure. Based on these results, Exception 112 was closed.
Verification of the Switch Translations for OS/DA			
TVV4-25	BellSouth switch translations for telephone numbers with OS/DA service are consistent with field inputs from submitted LSRs.	Satisfied	BellSouth switch translations for telephone numbers with OS/DA service are consistent with field inputs from submitted LSRs. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. During initial testing, KPMG Consulting reviewed 36 switch translations from September 2001 – November 2001 to determine if BellSouth updated the switch translations accurately. BellSouth provisioned 21 switch translations (58.3%) accurately. KPMG Consulting issued Exception 156. As a result of this exception, BellSouth built the appropriate line class codes in the switches. During the retest, KPMG Consulting reviewed 58 OS/DA requests from April 2002. BellSouth provisioned 55 (94.8%) OS/DA requests accurately. Although the test percentage is below the benchmark of 95%, the statistical evidence is not strong enough to conclude that the performance is below the benchmark with 95% confidence. The inherent variation in the process is large enough to have produced the substandard result, even with a process that is operating above the benchmark standard. The p-value, which indicates the chance of observing this result when the benchmark is being met, is .5594. This value exceeds .0500, which is the

Test Reference	Evaluation Criteria	Result	Comments
			threshold to determine a statistical conclusion of failure. Based on these results, Exception 156 was closed.
Originating Line Number Screening (OLNS)			
TVV4-26	BellSouth provisions Unbranded OS/DA service accurately via the OLNS platform.	Satisfied	BellSouth provisions Unbranded OS/DA service accurately via the OLNS platform. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. KPMG Consulting reviewed 13 Unbranded OS/DA service orders during April 2002, via the OLNS platform, to determine if BellSouth provisioned the service accurately. BellSouth provisioned 8 (62%) Unbranded OS/DA service orders accurately. As a result, KPMG Consulting issued Exception 167. BellSouth corrected a table setting. KPMG Consulting conducted a retest. During the retest, KPMG Consulting reviewed 31 Unbranded OS/DA service orders during June 2002, via the OLNS platform, to determine if BellSouth provisioned the service accurately. BellSouth provisioned 31 (100%) Unbranded OS/DA service orders accurately. Based on these results, Exception 167 was closed.
CN Data Integrity			
TVV4-27	The completion date on BellSouth's CN corresponds with the FOC due date and reflects the date when the actual work was finished.	Satisfied	The completion date on BellSouth's CN corresponds with the promised due date and reflects the date when the actual work was finished. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. During initial testing, KPMG Consulting reviewed 43 orders during September 2001 to determine if BellSouth completed

Test Reference	Evaluation Criteria	Result	Comments
			all physical and systems work on the FOC due date. BellSouth completed 38 (88.3%) orders in a timely manner. As a result, KPMG Consulting issued Exception 130. BellSouth could not determine the causes of the discrepancies and recommended that KPMG Consulting conduct a retest. Based on BellSouth's response, KPMG Consulting conducted a retest During retesting, KPMG Consulting reviewed 88 CNs during December 2001 to determine if BellSouth completed all physical and systems work on the promised due date. BellSouth completed 77 (88%) orders in a timely manner. KPMG Consulting updated Exception 130 to reflect the additional failures. As a result, service representatives were trained. During the second retest, KPMG Consulting reviewed 70 CNs during April 2002. BellSouth provisioned 68 (97%) orders in a timely manner. Based on these results, Exception 130 was closed.
End-to-End Validation for Services and Features			
TVV4-28	BellSouth provisioned switch translations and updated customer service records in accordance with the submitted LSRs.	Not Satisfied	BellSouth does not provision switch translations and update the CSRs in accordance with the submitted LSRs. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. During initial testing, KPMG Consulting reviewed 22 orders from April 2001 – October 2001, to determine if the switch translations and CSRs were updated accurately. BellSouth provisioned 6 (27.2%) orders where switch translations and CSRs were updated accurately. As a result, KPMG Consulting issued Exception 84 and Exception 112. KPMG Consulting verified BellSouth's response to Exception 112 and Exception 84. Based on BellSouth's response, KPMG Consulting conducted a retest.

Test Reference	Evaluation Criteria	Result	Comments
			During retesting, KPMG Consulting reviewed 39 orders from December 2001– February 2002 to determine if the switch translations and CSRs were updated accurately. BellSouth provisioned 32 (82%) orders where switch translations and CSRs were updated accurately. KPMG Consulting updated Exception 112 and Exception 84 to reflect the additional failures. During the second retest, KPMG Consulting reviewed 51 orders from April 2002 – May 2002 to determine if the switch translations and CSRs were updated accordingly. BellSouth provisioned 41 (79%) orders where switch translations and CSRs were updated accurately. KPMG Consulting updated Exception 112 and Exception 84 to reflect the additional failures. KPMG Consulting closed Exception 112 (see criterion TVV4-24). Based on these results, Exception 84 remains open.
TVV4-29	BellSouth provisioned directory listings and updated the customer service records in accordance with the submitted LSRs.	Not Satisfied	BellSouth does not provision directory listings and update the CSRs in accordance with the submitted LSRs. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. During initial testing, KPMG Consulting reviewed 16 orders from April – October 2001 to determine if the directory listings and CSRs were updated accurately. BellSouth provisioned 10 (62.5%) orders where directory listings and CSRs were accurately updated. As a result, KPMG Consulting issued Exception 112. KPMG Consulting verified BellSouth's response to Exception 112. KPMG Consulting conducted a retest. During retesting, KPMG Consulting reviewed 25 orders from December 2001– February 2002 to determine if the directory listings and CSRs were updated accurately. BellSouth provisioned 20 (80%) orders where directory listings and

Test Reference	Evaluation Criteria	Result	Comments
			CSRs were updated accurately. KPMG Consulting updated Exception 112 to reflect the additional failures. During the second retest, KPMG Consulting reviewed 105 orders from April – May 2002. BellSouth provisioned 83 (80%) orders accurately. Exception 112 was amended to reflect these findings. KPMG Consulting closed Exception 112 (see criterion TVV4-24). Exception 171 was issued to address these additional discrepancies. Based on these results, Exception 171 remains open.
ADSL Line Sharing			
TVV4-30	BellSouth provisions ADSL line sharing circuits according to documented M&P tasks.	Satisfied	BellSouth provisions ADSL line sharing circuits according to documented M&P tasks. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. KPMG Consulting observed BellSouth technicians install 158 commercial ADSL Line Sharing circuits (862 tasks) from January 8, 2001 to May 9, 2001. BellSouth provisioned 857 tasks (99.4%) in accordance with BellSouth documented methods and procedures.
TVV4-31	BellSouth meets the ADSL line sharing circuit percentage of orders given jeopardy notices parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM metric P-2: Percentage of Orders Given Jeopardy Notices for ADSL line sharing circuits. The P-2 SQM measures the extent to which BellSouth places orders in jeopardy. The defined standard is parity against retail average. KPMG Consulting reviewed 158 commercial ADSL Line Sharing service orders from January 8, 2001 to May 9, 2001 to determine if BellSouth generated a jeopardy notice when warranted. Ten of the orders were ALEC orders. The remaining 148 orders were Bellsouth.net and excluded from the calculation of this metric. BellSouth generated 0 (0%)

Test Reference	Evaluation Criteria	Result	Comments
			jeopardy notices against these 10 installations. BellSouth's retail results during the same time period were 24%.
TVV4-32	BellSouth meets the ADSL line sharing service order percent missed installation appointment parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM metric P-3: Percent Missed Installation Appointments measures for ADSL line sharing service orders. The P-3 SQM measures the extent to which BellSouth provisions ADSL line sharing service orders for customers by the scheduled due date. The defined standard is parity against retail average. KPMG Consulting reviewed 158 commercial ADSL line sharing service orders from January 8, 2001 to May 9, 2001. Ten were commercial orders. The remaining 148 orders were Bellsouth.net and excluded from the calculation of this metric. All 10 (100%) commercial orders completed on the due date. BellSouth's retail results during the same time period were 100%.
TVV 4-33	Parity exists between ADSL loop qualification information provided to ALECs and BellSouth's retail equivalent.	Satisfied	Parity exists between ADSL loop qualification information provided to ALECs and BellSouth's retail ADSL offering. KPMG Consulting reviewed loop qualification queries on 127 commercial Florida telephone numbers from June to August 2001. The results were compared to determine if ALECs had access to the same loop qualification data that was available to BellSouth.net. Upon review, KPMG Consulting has determined that parity exists between the loop qualification information provided.
TVV 4-34	BellSouth ADSL Line Sharing Firm Order Confirmation (FOC) messages are consistent with field inputs from ALEC submitted LSRs.	Satisfied	BellSouth ADSL Line Sharing Firm Order Confirmation (FOC) messages are consistent with field inputs from ALEC submitted LSRs. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. KPMG Consulting reviewed 141

Test Reference	Evaluation Criteria	Result	Comments
			commercial FOC messages from June to August 2001 to determine if BellSouth provisioned FOC messages accurately. BellSouth provisioned 141 (100%) FOC messages accurately.
TVV 4-35	Parity exists between ADSL Line Sharing Completion Notices (CN) messages provided to ALECs and BellSouth's retail equivalent.	Satisfied	Parity exists between ADSL Line Sharing Completion Notices (CN) messages provided to ALECs and BellSouth's retail equivalent. KPMG Consulting reviewed both ALEC and BellSouth.net ADSL Line Sharing SOC messages to determine if parity exists between the delivery of the SOC message and actual service activation. KPMG Consulting observed 100 commercial ADSL Line Sharing orders from June to August 2001with an ALEC and 137 ADSL Line Sharing orders with BellSouth.net. 99 (99%) ALEC orders and 137 (100%) BellSouth.net orders were provisioned accurately at the time the CN message was delivered by BellSouth. Although the test percentage is below parity, the statistical evidence is not strong enough to conclude that the performance is below parity with 95% confidence. The inherent variation in the process is large enough to have produced the substandard result, even with a process that is operating above the benchmark standard. The p-value, which indicates the chance of observing this result when parity is being met, is 0.422. This value exceeds .0500, which is the threshold to determine a statistical conclusion of failure.
TVV4-36	BellSouth meets the ADSL line sharing service order percentage troubles within 30 days of service order completion parity performance requirement.	Satisfied	BellSouth meets the parity performance requirements for SQM P-9: Percentage Troubles within 30 Days of Service Order Completion for ADSL line sharing service orders. The P-9 SQM measures the quality of services installed, focusing on the percentage of average monthly new order installations that were free of troubles 30 calendar days following installation. The

Test Reference	Evaluation Criteria	Result	Comments
			standard is parity against the retail average. KPMG Consulting reviewed a random sample of 150 commercial ADSL line sharing service orders from January 8, 2001 to May 9, 2001 to determine if trouble reports were opened for each circuit provisioned within 30 days of the Service Order Completion. Five (3.3%) trouble reports were generated within 30 days of the Service Order Completion. BellSouth's retail results for the same time period were 7%.
Unbundled Dark Fiber			
TVV4-37	BellSouth dark fiber installations are provisioned according to documented M&Ps.	Satisfied	BellSouth provisions dark fiber installations according to documented M&P tasks. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. KPMG Consulting performed a post-transactional review of all available commercial dark fiber circuits. Nine dark fiber circuits, with a total of 60 tasks, were reviewed from April 1, 2001 to June 30, 2001. BellSouth provisioned 57 tasks (95%) in accordance with BellSouth documented methods and procedures.
TVV4-38	Unbundled Dark Fiber installations are provisioned on the due date.	Satisfied	BellSouth provisions dark fiber installation on the due date. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. KPMG Consulting reviewed 9 commercial dark fiber installations to determine if BellSouth provisioned the requested service on the due date. BellSouth provisioned all 9 (100%) commercial dark fiber orders on the due date.
Loss of Line Reporting			
TVV4-39	BellSouth reports ALEC Loss of Line activity	Satisfied	BellSouth reports ALEC Loss of Line activity accurately.

Test Reference	Evaluation Criteria	Result	Comments
	accurately.		activity accurately. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. During initial testing, KPMG Consulting reviewed 736 commercial orders from December 2001 to determine if BellSouth accurately updated the Loss of Line report. BellSouth updated 455 (61.8%) orders accurately within the Loss of Line report. As a result, KPMG Consulting issued Exception 139. BellSouth made changes to their systems to include all lost lines on the CLEC Line Loss Report. During the retest, KPMG Consulting reviewed 5,469 commercial orders during May 2002 to determine if BellSouth accurately updated the Loss of Line report. BellSouth updated 4,744 (87.3%) orders accurately within the Loss of Line report. KPMG Consulting updated Exception 139 to reflect the additional discrepancies found during the retest. Exception 139 remains open. During the second retest, KPMG Consulting reviewed 117 commercial orders during June 2002 to determine if BellSouth accurately updated the Loss of Line report. BellSouth updated 109 (93.2%) orders accurately within the Loss of Line report. Although the test percentage is below the benchmark of 95%, the statistical evidence is not strong enough to conclude that the performance is below the 95% benchmark with confidence. The inherent variation in the process is large enough to have produced the substandard result, even with a process that is operating above the benchmark standard. The p-value, which indicates the chance of observing this result when the benchmark is being met, is .2316. This value exceeds .0500, which is the threshold to determine a statistical conclusion of failure.

Test Reference	Evaluation Criteria	Result	Comments
			Based on these results Exception 139 is closed.
TVV4-40	BellSouth produces timely ALEC Loss of Line Reports.	Satisfied	BellSouth produces timely ALEC Loss of Line reports. In the absence of a documented BellSouth standard for accuracy of provisioning, KPMG Consulting applied a benchmark of 95%. During initial testing, KPMG Consulting reviewed 455 commercial entries from December 2001 to determine if BellSouth updated the Loss of Line report in a timely manner. BellSouth updated 323 (71%) commercial entries on the Loss of Line report in a timely manner. As a result, KPMG Consulting issued Exception 158. As a result of this exception, BellSouth updated the ALEC web site to accurately reflect the time interval for the posting of an entry to the Line Loss Report. Based on the time interval changes, KPMG Consulting analyzed 451 commercial entries from December 2001. BellSouth updated 438 (97%) entries to the Line Loss Report in a timely manner. Based on these results, Exception 158 was closed.

5.0 Parity Evaluation

A parity evaluation was not required for this test.

6.0 Final Summary

This section summarizes the number of test evaluation criteria discussed above and the number that was satisfied or not satisfied at the conclusion of this test.

6.1 Summary of Findings

There were 40 evaluation criteria considered for the Provisioning Verification and Validation (TVV4) test. Thirty-six evaluation criteria received a satisfied result. Four criteria received a not satisfied result.

Due to the not satisfied evaluation criteria (TVV4-1, TVV4-3, TVV4-28, and TVV4-29), it is KPMG Consulting's opinion that significant issues remain unresolved in the TVV4 testing area.