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01 MAY 11 PM 4:41

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RECORDS AND
REPORTING

May 11, 2001

Mrs. Blanca S. Bayó
Director, Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
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Re: Docket No. 000121-TP (OSS)

Dear Ms. Bayó:

On May 9, 2001 BellSouth submitted a late-filed exhibit in the referenced matter. Unfortunately we erroneously labeled the document as Exhibit 26 when it should have been labeled as Exhibit 22, BST Penalty Plan results for Covad Examples. Enclosed is BellSouth Telecommunications, Inc. Corrected Late Filed Hearing Exhibit No. 22, which we ask that you file in the captioned docket.

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

Sincerely,

R. Douglas Lackey
R. Douglas Lackey (KA)

cc: All Parties of Record
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FPSC-RECORDS/REPORTING

BST Penalty Plan results for Covad Examples

In response to a request made during the hearing, BellSouth has attempted to ascertain what penalties would have been paid to Covad under BellSouth's plan for BellSouth's performance in December, 2000. In order to determine any penalties with accuracy, it is necessary to have the cell level data for both Covad and for BellSouth's corresponding and comparable data, to insure that "like-to-like" comparisons are done.

The cell level information for BellSouth's retail analogs is not available for December, 2000. The performance plan that BellSouth has proposed with the specific recommended analogs was not in place in Florida in December, and thus the necessary data to make these comparisons was not captured and retained. BellSouth has conducted an inquiry to determine whether the necessary information could be recovered from another source, but has been unable to conclude that the data could be recovered, and, if it could be recovered, whether it could be recovered within a reasonable time period and at a reasonable cost.

CERTIFICATE OF SERVICE
Docket No. 000121-TP

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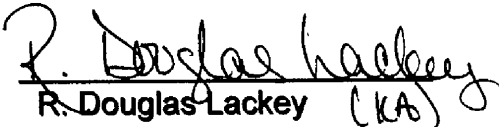
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**(+) Signed Protective
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BST Penalty Plan results for Covad Examples

In response to a request made during the hearing, BellSouth has attempted to ascertain what penalties would have been paid to Covad under BellSouth's plan for BellSouth's performance in December, 2000. In order to determine any penalties with accuracy, it is necessary to have the cell level data for both Covad and for BellSouth's corresponding and comparable data, to insure that "like-to-like" comparisons are done.

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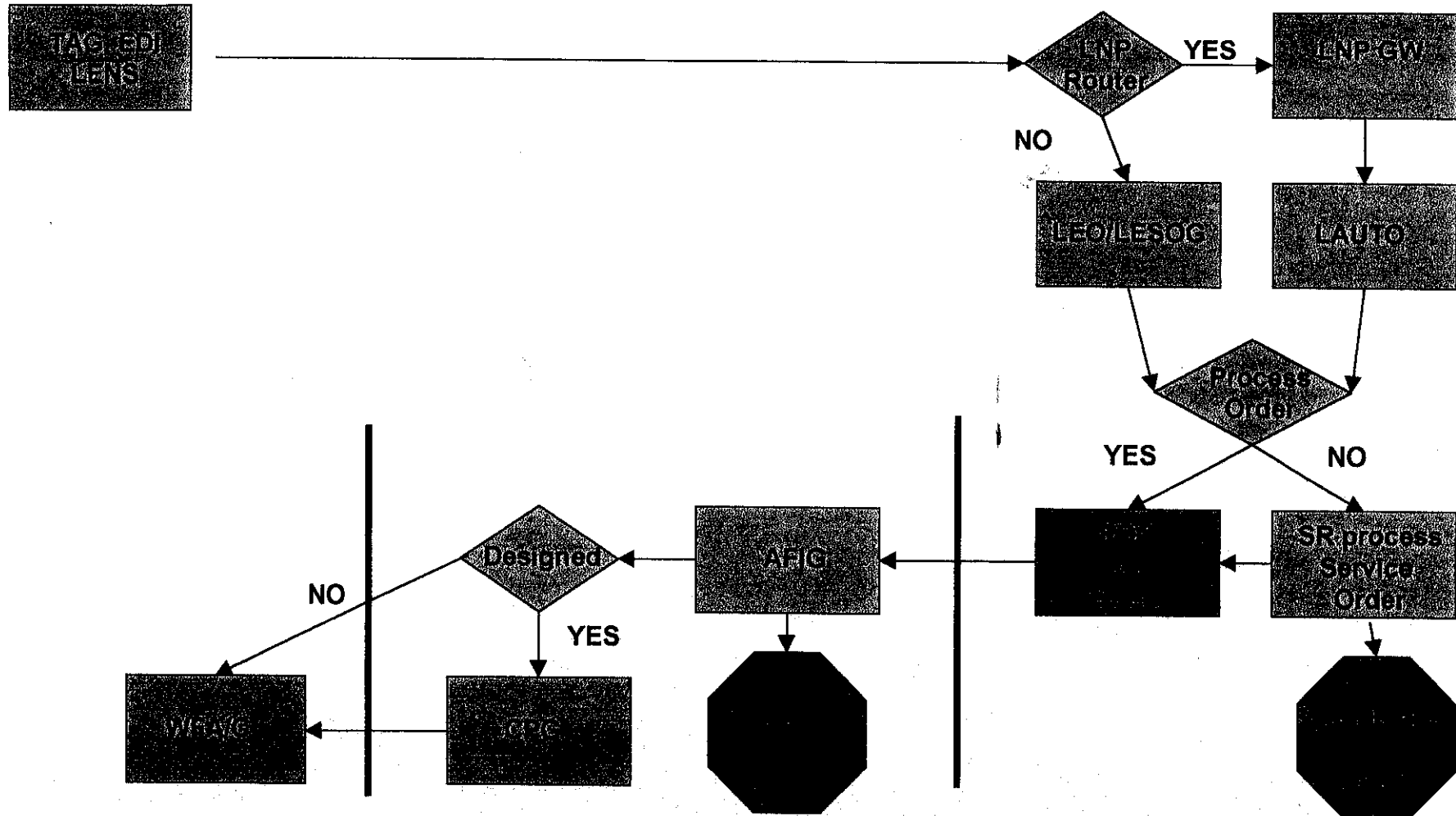
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DATE: 4-25-27-01

DOCUMENT NUMBER-DATE

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FPSC-RECORDS/REPORTING

Electronic Order Flow



13 November, 2000

Atlanta Local Operations



CHANGE CONTROL PROCESS

CCP2_16.DOC

VERSION 2.1A

FEBRUARY 16, 2001

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET

NO. 000121-7P EXHIBIT NO. 24

COMPANY/

WITNESS: Pate

DATE: 4-25-27-01

Issued: 2/16/01

Jointly Developed by the Change Control Sub-team comprised
of BellSouth and CLEC Representatives.

Transmittal Cover Sheet for Pate Rebuttal Exhibit RMP-1

This sheet transmits the
BellSouth Change Control Process Guide, Version 2.1a (Posted 2/16/01)
which consists of 95 pages.

BellSouth Telecommunications reserves the right to revise this document for any reason, with concurrence of the CLEC/BellSouth Review Board, including but not limited to, conformity with standards promulgated by various government or regulatory agencies, utilization of advance in the state of the technical arts, or the reflection of changes in the design of any equipment, techniques, or procedures described or referred to herein. **LIABILITY TO ANYONE ARISING OUT OF USE OR RELIANCE UPON ANY INFORMATION SET FORTH HEREIN IS EXPRESSLY DISCLAIMED, AND NO REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED, ARE MADE WITH RESPECT TO THE ACCURACY OR UTILITY OF ANY INFORMATION SET FORTH HEREIN.**

This document is not to be construed as a suggestion to any manufacturer to modify or change any of its products, nor does this document represent any commitment by BellSouth Telecommunications to purchase any product whether or not it provides the described characteristics.

This document is not to be construed as a contract. It does not create an obligation on the part of BellSouth Telecommunications or the Competitive Local Exchange Carriers to perform any modification, change or enhancement of any product or service.

Nothing contained herein shall be construed as conferring by implication, estoppel or otherwise, any license or right under any patent, whether or not the use of any information herein necessarily employs an invention of any existing or later issued patent.

Issued: 02/16/01

Jointly Developed by the Change Control Sub-team comprised
of BellSouth and CLEC Representatives.

VERSION CHANGE HISTORY

This section list changes made to the baseline Electronic Interface Change Control Process document since the last issue. New versions of this document may be obtained via BellSouth's Web site.

Version	Issue Date	Section Revised	Reason for Revision
1.0	04/14/98		Initial issue.
1.2	2/28/00	All	<p>The EICCP Documentation has been modified to incorporate:</p> <ul style="list-style-type: none"> - Multiple Change Request Types (CLEC Initiated, BST Initiated, Industry Standards, Regulatory and System Outages) - Incorporated manual process - Defined cycle times for process intervals and notifications - Defect Notification process - Escalation Process - Modified Change Control forms to support process changes - Changed EICCP to CCP
1.3	3/14/00	All	<p>The CCP Documentation has been modified to incorporate:</p> <ul style="list-style-type: none"> - Type 6 Change Request, CLEC Impacting Defect - Increased number of participants at Change Review meetings - Changed cycle time for Types 2-5 Step 3 from 20 days to 15 days - Defined Step 4 of the Defect Notification process to include communicating the workaround to the CLEC community - Web Site address for Change Control Process - Notification regarding the Retirement and

			<p>Introduction of new interfaces</p> <ul style="list-style-type: none"> - New status codes for Defect Change Requests - New status codes: 'S' for Scheduled Change Requests and 'I' for Implemented Change Requests (types 2-5 Change Requests) - Removed reference to EDI Helpdesk. Electronic Communications Support (ECS) will be the first point of contact for Type 1 System Outages. - Word changes to provide clarification throughout the document.
1.4	4/12/00	All	<p>The CCP Documentation has been modified to incorporate:</p> <ul style="list-style-type: none"> - Type 1 and 6 Notifications will be communicated to CLECs via e-mail and web posting - Step 3 Cycle Time (Types 2-5) changed from 15 business days to 20 business days - Verbiage to Step 10 (Types 2-5) regarding BellSouth presenting baseline requirements - Introduction and Retirement of New Interfaces Section - Dispute Resolution Process - Testing Environment Section - Word changes to provide clarification throughout the document - Monthly Status Meeting Agenda Template - RF1870 Change Request Form changes
1.5	4/26/00	Section 1 Section 8 Section 11	<ul style="list-style-type: none"> - Updated CCP web site address - Updated Escalation Contacts for Types 2-6 - Added definitions for Account Team and Electronic Communications Support (ECS)
1.6	7/20/00	Section 1 Section 2	<ul style="list-style-type: none"> - Added "testing" under process changes - Clarification provided in "Change Review Participants" description

			Participants" description.
		Section 4	- Added statement regarding submittal of Change Requests
		Part 2	- Clarification provided for documentation changes for business rules
			- Step 2-Added email notification
			- Step 3-Removed "Cancellation by BellSouth"
			- Step 3-Clarification on reject reasons
		Section 5	- Step 3-Clarification on internal validation activities
			- Step 4-Changed cycle time from 5 to 4 bus days for develop workaround
			- Added defect implementation range
		Section 6	- Changed prioritization from "by interface" to "by category"
			- Changed timeframe for receiving a Change Request prior to a Change Review Meeting from 33 to 30 business days
			- Modified the prioritization voting rules
		Section 7	- Updates to the Introduction and Retirement of Interfaces
			- Added Type 6 escalation turnaround time
		Section 8	- Changed 3 rd Level Escalation contacts for Types 2-6
		Section 11	- Removed "Cancellation by BellSouth" and "Defect Cancelled" definitions
		Appendix A	- Removed "Cancellation by BellSouth" from Change Request Form and Checklist
			- Added Letter of Intent Form
		Appendix C	- Changes to the following forms: Preliminary Priority List, CCP User Registration Form. Added the following forms: Defect Notification Sample, CR Log Legend.
		Appendix D	- Added BellSouth Versioning Policy

		All	Word changes to provide clarification throughout the document.
2.0	08/23/00	<p>Cover</p> <p>Section 3</p> <p>Section 5</p> <p>Section 10</p> <p>Section 11-Terms & Definitions</p> <p>Appendix A</p> <p>All</p>	<ul style="list-style-type: none"> - Removed "Interim" from cover. - Updated Type 6 definition to incorporate new defect and expedited feature definitions. - Replaced Section 5, Defect Notification Process with a "Draft" Defect/Expedite Notification Process. - Reduced the implementation interval for validated defects (High Impact) from 4 - 30 business days to 4 - 25 business days, best effort. - Added Internet Web sites for EDI and TAG Testing Guidelines - Updated definition for Defect. Added definitions for Expedited Feature, High, Medium and Low Impacts. - Modified Change Request Forms (RF1870 and RF1872) to include email address for Change Control. Also added High, Medium and Low Assessment of Impact Levels. - Referenced the handling of expedites and expedite notification where appropriate.
2.1	02/09/01	<p>Section 1 – Introduction</p> <p>Section 3 – Introduction</p> <p>Section 4 – Part 1 Type 1 Detail Process Flow</p>	<ul style="list-style-type: none"> - Added new language to the 8th bulleted item – "including User Guides that support OSS systems currently within the scope of CCP" - Added two new bulleted items dealing with the coordination of test agreements, and questions regarding existing documentation. - Added "language" for Types 2, 3, 4 & 5 – "Type xx changes may be managed using the Expedited Feature Process as discussed in Section 4, Part 3." - Type 6 – CLEC Impacting Defects – Added new defect definition. - Added #4 to the Activities – Step 1

			<ul style="list-style-type: none"> - Added additional sentence to Activity #1 – Step 2
		Section 4 – Part 2 – Types 2-5 Process Flow	<ul style="list-style-type: none"> - Added Activity #5 – Step 4
		Section 4 – Part 3 – Expedited Feature Process	<ul style="list-style-type: none"> - Added new Expedited Feature Process definition and flow
		Section 5 – Part 3 – Defect Process	<ul style="list-style-type: none"> - New Defect title page and definition. - Table 5-1 – Step 1 – Activity - #4 – Attach related requirements and specifications documents. These attachments must include the following, if appropriate. - Table 5-1 – Step 2 – Cycle Time – Replaced old cycle times with: 4 hrs for High Impact, 1 Bus Day for Medium and Low Impact. - Table 5-1 – Step 3 – Cycle Time – Replaced old cycle times with: 2 Bus Day for High Impact, and 3 Bus Days for Medium and Low Impact - Table 5-1 – Step 3 – Outputs – Added new bullet – “Status provided for High Impact Defects to originator via email with 24 hours” - Table 5-1 – Step 4 – Activity – Added language to Activity #3 - ...and to the CLEC community via email and web posting. - Table 5-1 – Step 4 – Cycle Time – Replaced old cycle times with: 2 Bus Days for High Impact and 4 Bus Days for Medium and Low Impact. - Table 5-1 – Step 5 – Activity – Added language to #1 - ...to the CLECs and BellSouth. Added language to Activity #2 - ...defect is implemented. - Table 5-1 – Step 5 – Cycle Time – Replaced old cycle times to reflect: Validated High Impact Defects will be implemented within a 4-25 business day range best effort - Medium

		<p>Part 1 – Change Review-Prioritization – Release Package Development and Approval</p> <p>Section 7 – Introduction and Retirement of Interfaces</p> <p>Section 8 – Escalation Process</p> <p>Section 8 – Dispute Resolution Process</p> <p>Appendix A</p> <p>Appendix C</p>	<p>4-25 business day range, best effort. Medium Impact will be implemented within 90 bus day, best effort. Low Impact will be implemented best effort.</p> <ul style="list-style-type: none"> - Part 1 – Change Review Meeting – 4th paragraph NOTE: Added language to address meetings would occur in March, June, September and December - Part 2 – Change Review Meeting – 4th bullet – Added new bullet - ...BellSouth's estimate of the size and scope of each Change Request. - Part 4 – Developing and Approving Release Packages – 1st bulleted item: New language - Retirement of Interfaces – 1st paragraph sentence: New language - Retirement of Versions – New Language - Retirement of Versions – Appeal Language - New Language for Type 6 High Impact Issues and Medium and Low Impact issues. - Types 2-6 Changes – 1st paragraph – new language. - Types 2-6 Changes – Contact List for High, Medium and Low Impact escalations. - New definition language - Updated CR form & checklist - Updated RF1874 User Registration Form
2.1A	02/15/01	All	<ul style="list-style-type: none"> - Updated various sections of the document to change "language" from defect/expedite to defect and/or expedited features. - Changed reference from Section 9.0 to Section 11.0 – Terms and Definitions where

		Section 8	appropriate. - Minor "cosmetic" changes throughout document. - New 2 nd Level Escalation Contacts for Types 2-6
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1.0 INTRODUCTION

This document establishes the process by which BellSouth Telecommunications (BST) and Competitive Local Exchange Carriers (CLECs) will manage requested changes to the BellSouth Local Interfaces, the introduction of new interfaces, and provide for the identification and resolution of issues related to Change Requests. This process will cover Change Requests that affect external users of BellSouth's *Electronic Interface Applications*, associated manual process improvements, performance or ability to provide service including defect/expedite notification. This process shall be referred to as the Change Control Process.

All parties should recognize that deviations from this process might be warranted where unanticipated circumstances arise such that strict application of these guidelines may not result in their intended purpose. Furthermore, deviations may be required due to specific regulatory and business requirements. Parties shall provide appropriate web notification to the CLEC/BST Change Control Team participants prior to deviating from the processes established within this document. All parties will comply with all legal and regulatory requirements.

The Change Control Process will cover change requests for the following interfaces and associated manual processes that have the potential to impact the interfaces connected to BellSouth:

- Local Exchange Navigation System (LENS)
- Electronic Data Interchange (EDI)
- Telecommunications Access Gateway (TAG)
- Trouble Administration Facilitation Interface (TAFI)
- Electronic Communications Trouble Administration (EC-TA) Local
- CLEC Service Order Tracking System (CSOTS)

The types of changes that will be handled by this process are as follows:

- Software
- Hardware
- Industry Standards
- Product and Services (i.e., new services available via the in-scope interfaces)
- New or Revised Edits
- Process (i.e., electronic interfaces and manual processes relative to order, pre-order, maintenance and testing)
- Regulatory
- Documentation (i.e., business rules for electronic and manual processes relative to order, pre-order, maintenance, including User Guides that support OSS systems currently within the scope of CCP)
- Defects

The scope of the Change Control Process **does not** include the following which are handled through existing BellSouth processes:

- BonaFide Requests (BFR)
- Production Support (i.e. adding new users to existing interfaces, existing users requesting first time use of existing BST functionality)
- Contractual Agreements
- Collocation
- Coordination of test agreements will continue to be supported by the Account Team
- Questions regarding existing documentation should be handled by the Account Team. However, if documentation needs to be changed for clarification purposes, a defect change request should be submitted through Change Control

OBJECTIVES OF THE CHANGE CONTROL PROCESS:

- Support the Industry guidelines that impact Electronic Interfaces and manual processes relative to order, pre-order, maintenance, and billing as appropriate
- Ensure continuity of business processes and systems operations
- Establish process for communicating and managing changes
- Allow for mutual impact assessment and resource planning to manage and schedule changes
- Capability to prioritize requested changes

The minimum requirements for participation in the Change Control Process electronically are:

- Word 6.0 or greater
- Excel 5.0 or greater
- Internet E-mail address
- Web access

The web site address for the Change Control Process is as follows:

<http://www.interconnection.bellsouth.com/>

Select "Local Exchange Carriers"

Select "Change Control Process"

2.0 CHANGE CONTROL ORGANIZATION

The Change Control organizational structure supports the Change Control Process. Each position within the organization has defined roles and responsibilities as outlined in the Change Control Process Flow - Section 4 of this document. Identified positions, along with associated roles and responsibilities are as follows:

Change Review Participants. Representatives from Competitive Local Exchange Carriers (CLECs) and BellSouth. This team meets to review, prioritize, and make recommendations for Candidate Change Requests. The Candidate Change Requests are used as input to the Internal Change Management Processes (refer to process step 7 for Types 2-5 changes).

CLECs and BellSouth will define points of contact in each of their companies for communicating and coordinating change notification. All change requests are made in writing (e-mail is preferred). Notifications will be provided via e-mail and posted to the BellSouth web site.

Each company may bring the number of participants necessary to represent their position. If the number of participants grows to be unmanageable, CLECs and BellSouth will revisit the issue of representation to apply some restrictions.

BellSouth Change Control Manager (BCCM). The BCCM is responsible for managing the Change Control Process and is the main point of contact for Types 2 – 6 changes. This individual maintains the integrity of the Change Requests, prepares for and facilitates the Change Review Meetings, presents the Pending Change Requests to the BST Internal Change Management Process, and ensures that all Notifications are communicated to the appropriate parties.

CLEC Change Control Manager (CCCM). The CCCM is the CLEC point of contact for Change Requests. This individual is responsible for presenting and prioritizing Change Requests at the Change Review Meetings.

Release Management Project Team. A team of CLEC and BellSouth Project Managers who manage the implementation of scheduled changes and releases.

3.0 CHANGE CONTROL DECISION PROCESS

Change requests will be classified by Type. There are six Types:

Type 1 – System Outage

A Type 1 change is a BellSouth System Outage. A System Outage is where the system is totally unusable or there is degradation in an existing feature or functionality within the interface. If the System Outage is not resolved within 20 minutes, a notification will be provided via e-mail and posted to the web within one hour. Either BellSouth or a CLEC may initiate the change request. Type 1 system outages will be processed on an expedited basis. All Type 1 System Outages will be reported to the Electronic Communications Support (ECS) Help Desk. A Type 1 System Outage is a condition where the CLEC Pre-Orders/Orders/Queries/Maintenance Requests cannot be submitted or will not be accepted by BellSouth.

Type 2 – Regulatory Change.

Any non-Type 1 change to the interfaces between the CLEC's and BellSouth's operational support systems mandated by regulatory or legal entities, such as the Federal Communications Commission (FCC), a state commission/authority, or state and federal courts are Type 2 changes. Regulatory changes are not voluntary but are requisite to comply with newly passed legislation, regulatory requirements, or court rulings. While timely compliance is required, the systems requirements and methodology to achieve compliance are usually discretionary and within the scope of change management. Either BellSouth or a CLEC may initiate the change request. Type 2 changes may be managed using the Expedited Feature Process, as discussed in Section 4, Part 3.

Type 3 – Industry Standard Change.

Any non-Type 1 change to the interfaces between the CLEC's and BellSouth's operational support systems required to bring these interfaces in line with newly agreed upon telecommunications industry guidelines are Type 3 changes. Either BellSouth or a CLEC may initiate the change request. Type 3 changes may be managed using the Expedited Feature Process, as discussed in Section 4, Part 3.

Type 4 – BellSouth Initiated Change.

Any non-Type 1 change affecting the interfaces between the CLEC's and BellSouth's operational support systems which BellSouth desires to implement on its own accord. These changes might involve system enhancements, manual and/or business processes. These type changes might also include issues for Pre-Orders, Orders, Queries, and Maintenance Requests that can be submitted and accepted, but may require clarification. This classification does not include changes imposed upon these interfaces by third parties such as regulatory bodies (which are Type 2 Changes) or

standards organizations (which are Type 3 Changes). Type 4 changes may be managed using the Expedited Feature Process, as discussed in Section 4, Part 3.

Type 5 – CLEC Initiated Change.

Any non-Type 1 change affecting interfaces between the CLEC's and BellSouth's operational support systems which the CLEC requests BellSouth to implement is a Type 5 change. These changes might involve system enhancements, manual and/or business processes. These type changes might also include issues for Pre-Orders, Orders, Queries, and Maintenance Requests that can be submitted and accepted, but may require clarification. This classification does not include changes imposed upon these interfaces by third parties such as regulatory bodies (which are Type 2 Changes) or standards organizations (which are Type 3 Changes). Type 5 changes may be managed using the Expedited Feature Process, as discussed in Section 4, Part 3.

Type 6- CLEC Impacting Defects

A Type 6 defect request is any non-type 1 change that corrects problems discovered in production versions of an application interface. These problems are where the interface is not working in accordance to the BellSouth baseline business requirements or the business rules that BellSouth has published or otherwise provided to the CLECs. In addition, if functional requirements agreed upon by BellSouth and the CLECs, results in inoperable functionality, even though software business requirements and business rules match; this will be addressed as a defect.

These problems typically affect the CLEC's ability to exchange transactions with BellSouth and may include documentation that is in error, has missing information or is unclear in nature.

Type 6 validated defects may not be managed using the Expedited Feature Process as discussed in Section 4, Part 3.

Defect Change Requests will have three (3) Impact Levels:

- High Impact – The failure causes impairment of critical system functions and no electronic workaround solution exists.
- Medium Impact – The failure causes impairment of critical system functions, though a workaround solution does exist.
- Low Impact – The failure causes inconvenience or annoyance.

The CLEC and/or BellSouth may initiate these types of changes affecting interfaces between the CLEC's and BellSouth's operational support systems. These type changes might also include issues for Pre-Orders, Orders, Queries, and Maintenance Requests that can be submitted and accepted, but may require workarounds or clarification.

Figure 3-1 shows the top-level process that will be used to evaluate Change Requests. The BellSouth Account Team(s) will handle BFR requests and production support issues. Enhancements and defects/expedites will be handled through the Change Control Process.

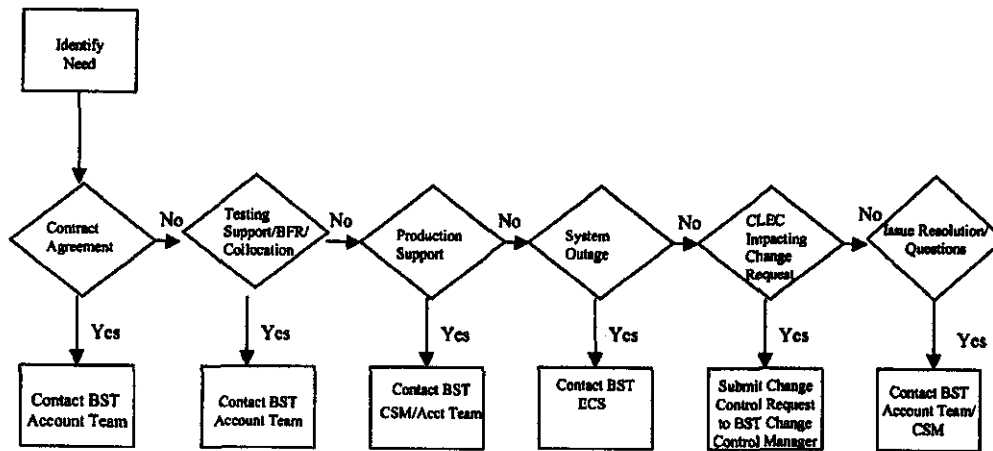


Figure 3-1. Change Control Decision Process

4.0 CHANGE CONTROL PROCESS FLOW

The following three sub-sections describe the process flows for typical Type 1 through Type 5 changes, including expedited features. Each sub-section will describe the cycle times for an activity and document accountability, sub-process activities, inputs and outputs for each step in the process. Section 5 of this document describes the process flow for Type 6 changes. Based on the categorization of the request, the following diagram will help guide a CLEC or BellSouth representative to the appropriate process flow based on Change Control Request Type:

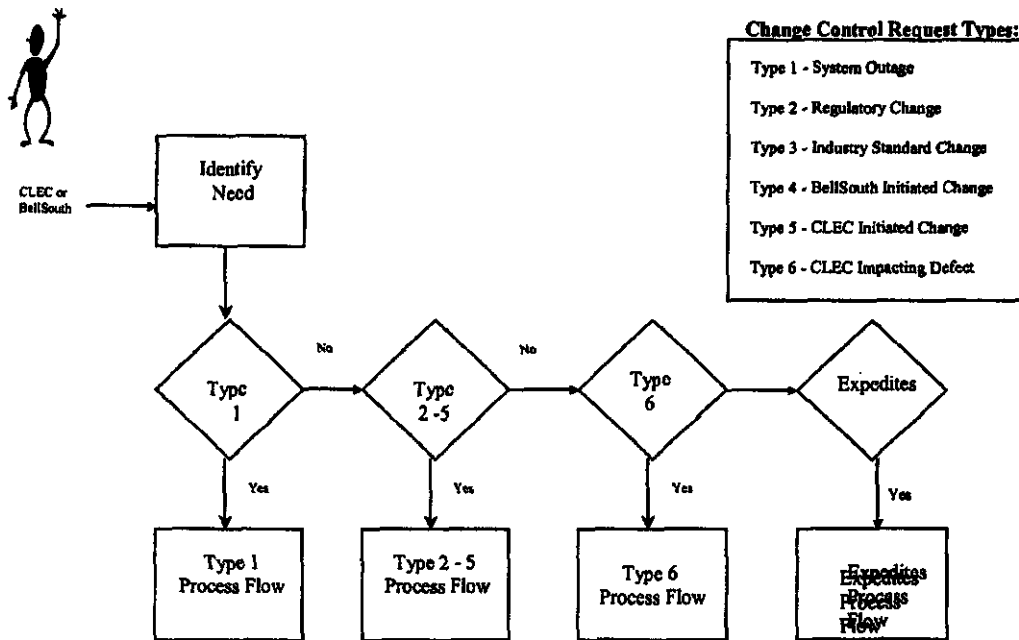


Figure 4-1. Change Control Process Flow

Part 1 - Type 1 Process Flow

Figure 4-2 provides the process flow for resolving a typical Type 1 - System Outage. The Electronic Communications Support (ECS) Group will work with the CLEC community to resolve and communicate information about system outages in a timely manner - actual cycle times are documented in table 4-1 and the sub-process steps. The ECS Helpdesk number is 888-462-8030.

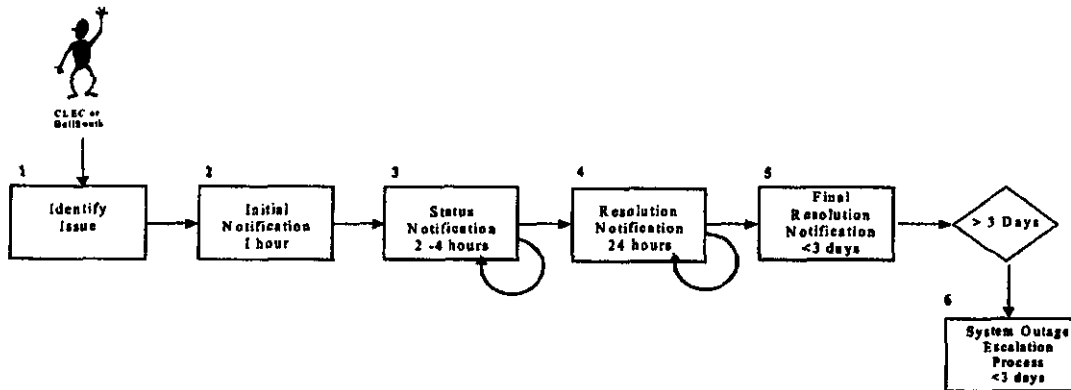


Figure: 4-2. Type 1 Process Flow

Table 4-1 describes the cycle times for each process step that is outlined in the Type 1 - System Outage Process Flow. These cycle times represent typical timeframes for completing the documented step and producing the desired output for the step. In sub-process step 2 "Initial Notification" timeframe for completing this step does not begin until after the outage has been reported. The sub-process steps 3 "Status Notification" and 4 "Resolution Notification" are iterative steps. Iterative steps will be performed one or more times until the exit criteria for that process are met. If resolution is not reached within 20 minutes, BellSouth will provide the initial notification to the CLEC community via e-mail and post outage information on the web.

Table 4-1. Type 1 Cycle Times

Process Description	1 Identify Issue	2 Initial Notification	3 Status Notification	4 Resolution Notification	5 Final Resolution Notification	6 Escalation
Cycle Time	N/A	1 hour E-mail & BST Website will be posted if outage exceeds 20 minutes	2 - 4 hours (Iterative)	24 hours (Iterative)	< 3 days	> 3 days System Outage Escalation Process

Note: The Escalation Process may be used at any time within Steps 3-6 if cycle times are not met and/or responses are not acceptable.

The table below details the steps, accountable individuals, tasks, the inputs/outputs and the cycle time of each sub-process in the Type 1 Process Flow. This process will be used to capture and communicate system outage information, status notification(s), resolution and notification(s), and final resolution to the CLEC community. Steps shown in the table are sequential unless otherwise indicated.

Table 4-2. Type 1 Detail Process Flow

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
1	CCCM ECS	<p><u>IDENTIFY ISSUE:</u></p> <ol style="list-style-type: none"> 1. Internally determine if outage exists with BellSouth Electronic Interface. (The CLEC should perform internal outage resolution activities to determine if the potential problem involves the BellSouth Electronic Interface). 2. Call the BST Electronic Communications Support (ECS) help desk at 888-462-8030. 3. ECS and individual CLEC will determine if the problem is likely to have no impact on the industry. If there is no impact, the outage will be worked on a bilateral basis. 4. ECS will provide the CLEC with a trouble ticket number, if requested, to record and track the outage. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Issue Characteristics • Call to ECS Helpdesk <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Recorded Outage 	N/A
2	ECS	<p><u>INITIAL NOTIFICATION:</u></p> <ol style="list-style-type: none"> 1. ECS will post to the Web an Initial Industry Notification that a BellSouth Electronic Interface outage has been identified. An e-mail to the CLECs participating in Change Control will also be distributed. The system ticket number of the outage will be included in the web posting and the email notification. 2. The CLEC initiating the Type 1 System Outage will need to be available for communications on an as needed basis. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Recorded Outage <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Industry Notification posted on Web • E-mail to CLECs participating in Change Control 	1 Hour If System Outage is not resolved within 20 minutes, a notification will be sent to CLECs via e-mail and posted to the

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<ol style="list-style-type: none"> 3. ECS will continue to work towards the resolution of the problem 4. If outage is resolved, this notice is the first and final notification. The process for the item has ended. Outage Information will be reported in the monthly status meeting by the BCCM. 		web.
3	ECS	<p><u>STATUS NOTIFICATION: (ITERATIVE)</u></p> <ol style="list-style-type: none"> 1. If the outage is not resolved, ECS will continue to work towards the resolution on the problem. 2. ECS may communicate with the industry / affected parties. The following information may be discussed: <ul style="list-style-type: none"> • Clarification of outage • Current status of resolution • Agreement of resolution 3. If a resolution has not been identified continue giving status notifications to the industry and continue repeating Step 3 "Status Notification" via the web. 4. Proceed to Step 4 "Resolution Notification" when a resolution has been identified. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Industry Notification posted on Web <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Status Notification posted on Web • Resolution information 	2-4 hour intervals
4	ECS CCCM	<p><u>RESOLUTION NOTIFICATION: (ITERATIVE)</u></p> <ol style="list-style-type: none"> 1. The resolution notification is posted to the Web. 2. If the item is determined to be a defect, the CLEC that initiated the call will submit a "Change Request Form" checking the Type 6 box. 3. If the resolution is not the final resolution the process will loop back to Step 3 "Status Notification". BellSouth will continue to work towards the final resolution. 4. When the final resolution has been created, proceed to Step 5 "Final Resolution Notification". 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Status Notification posted on Web • Resolution information <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Resolution Information posted on Web • Final Resolution Information 	24 hours after reporting outage

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
5	ECS	<u>FINAL RESOLUTION NOTIFICATION:</u> 1. The final resolution notification is posted on the Web.	<u>INPUTS:</u> <ul style="list-style-type: none"> • Final Resolution Information <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Final Resolution Notification 	< 3 days
6	CCCM ECS	<u>ESCALATION</u> 1. Escalation is appropriate anytime the interval exceeds the recommended guidelines for notification. 2. Refer to the Type 1 - Escalation Process documented in Section 8.	<u>INPUTS:</u> <ul style="list-style-type: none"> • Information or concern relating to a Type 1 - Systems Outage <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Documented Escalation • Escalation Response 	> 3 days (The Escalation Process may be used at any time within Steps 3-6 if cycle times are not met and/or responses are not acceptable.)

Part 2 – Types 2-5 Process Flow

Figure 4-3 provides the process flow for reviewing, scheduling and implementing a typical Type 2-5 Change Request. The process diagram applies to Change Requests submitted via the Change Control Process. Change Requests should be submitted to the BellSouth Change Control Manager using the standard Change Request form template. This template can be acquired on the Change Control web page. Change Requests may be submitted for interfaces that are currently being utilized, in the testing phase, or if a Letter of Intent is on file with the BCCM.

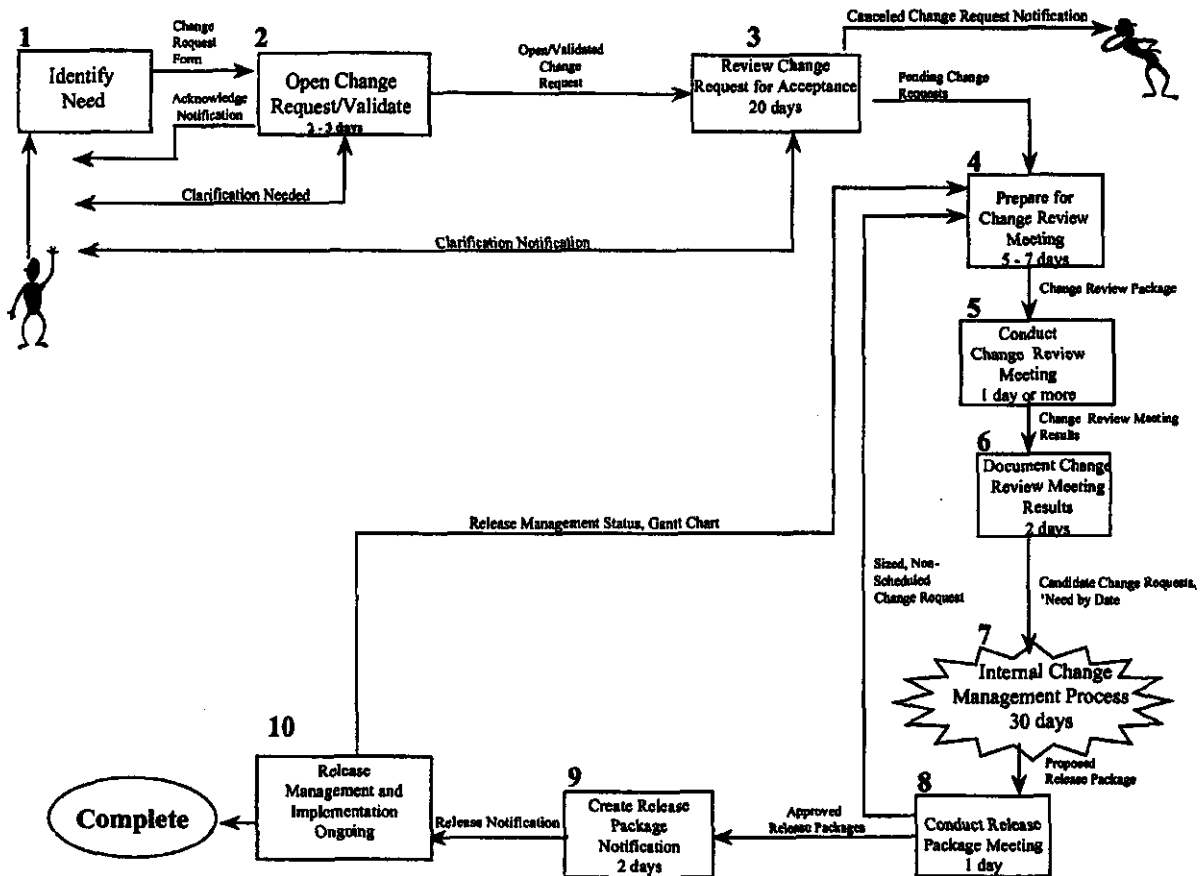


Figure 4-3. Change Control Process Flow

Based on the process flow outlined above:

- Software Release Notifications will be provided 30 days or more in advance of the implementation date.
- Documentation changes for business rules will be provided 30 days or more in advance of implementation date.
- CLEC notification of documentation updates (non-system changes) will be posted 5 (five) business days in advance of documentation posting date.

The table below details the steps, accountable individuals, tasks, inputs/outputs and cycle times of each sub-process in the Change Control process. This process will be used to develop Candidate Change Requests that will be used as input to the Internal Change Management Process. Steps shown in the table are sequential unless otherwise indicated.

Table 4-3. Types 2-5 Detail Process Flow

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
1	CCCM BCCM	<p>IDENTIFY NEED</p> <ol style="list-style-type: none"> 1. Internally determine need for change request. These change requests might involve system enhancements, manual and/or business process changes. 2. Originator and CCCM or BCCM should complete the standardized Change Request Form according to Checklist. 3. Attach related requirements and specification documents. (See Attachment A-1A, Item 22) 4. Appropriate CCCM/BCCM submits Change Request Form and related information via e-mail to BellSouth. 	<p>INPUTS:</p> <ul style="list-style-type: none"> ● Change Request Form (Attachment A-1) ● Change Request Form Checklist (Attachment A-1A) <p>OUTPUTS:</p> <ul style="list-style-type: none"> ● Completed Change Request Form with related documentation 	N/A
2	BCCM	<p>OPEN CHANGE REQUEST/VALIDATE CHANGE REQUEST FOR COMPLETENESS</p> <ol style="list-style-type: none"> 1. Log Request in Change Request Log. 2. Send Acknowledgement Notification (Attachment A-3) via e-mail to originator. 3. Establish request status ('N' for New Request) 	<p>INPUTS:</p> <ul style="list-style-type: none"> ● Completed Change Request Form with related documentation ● Change Request Form Checklist ● Change Request Clarification Response 	2-3 Bus Days Clarification times would be in addition to cycle time.

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p>4. Review change request for mandatory fields using the Change Request Form Checklist.</p> <p>5. Verify Change Request specifications and related information exists.</p> <p>6. Send Clarification Notification via email to the originator (Attachment A-4) if needed.</p> <p>7. Update Change Request Status to "PC" for Pending Clarification if clarification is needed.</p> <p>CLEC or BellSouth Originator If clarification is needed, make necessary corrections per Clarification Notification and submit Change Request Clarification Response (Attachment A-2).</p>	<p>OUTPUTS:</p> <ul style="list-style-type: none"> • New Change Request • Acknowledgment Notification • Validated Change Request • Clarification Notification • Industry Notification via e-mail and web posting 	
3	BCCM	<p>REVIEW CHANGE REQUEST FOR ACCEPTANCE</p> <ol style="list-style-type: none"> 1. Review Change Request and related information for content. 2. Change Request reviewed for impacted areas (i.e., system, manual process, documentation) and adverse impacts. 3. Determine status of request: <ul style="list-style-type: none"> • If change already exists or training issue forward Cancellation Notification (Attachment A-3) to CCCM or BCCM and update status to 'C' for Request Canceled or 'CT' for Training. If Training issue, refer to CSM or Account Team. • If Change Request Clarification Notification not received, validate with CLEC that change request is no longer needed. • If request is accepted, update Change Request status to "P" for Pending in Change Request Log. <p>NOTE: See Section 11.0 Terms and Definitions – Change Request Status for valid status codes and descriptions.</p> <p>BST may reject the change request based on</p>	<p>INPUTS:</p> <ul style="list-style-type: none"> • New Change Request • Validated Change Request • Clarification Notification (if required) <p>OUTPUTS:</p> <ul style="list-style-type: none"> • Pending Change Request • Clarification Notification (if required) • Cancellation Notification (if required) • CR status updated on web 	20 Bus Days

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p>the following reasons: cost, industry direction or technically not feasible to implement and will provide notification to the originating party.</p> <p>Prior to rejecting a request, all options for accommodating the request will be exhausted. The rejection reason will be shared with the CLECs for input.</p> <p>NOTE: If requested, appropriate SME will participate in the Monthly Status Meeting to address the reason for rejection and discuss alternatives with CLEC community. SME must be provided a minimum of two-week advance notice to participate in upcoming Monthly Status Meeting.</p>		
4	BCCM CCCM	<p><u>PREPARE FOR CHANGE REVIEW MEETING</u></p> <p>NOTE: These activities take place to prepare for Change review meetings when prioritizations take place.</p> <p><u>BCCM</u></p> <ol style="list-style-type: none"> 1. Prepare an agenda. 2. Make meeting preparations. 3. Update Change Request Log with current status for new and existing Change Requests. 4. Prepare and post Change Request Log to web. 5. Provide size and scope information on each pending change request to CLECs. <p><u>CCCM</u></p> <ol style="list-style-type: none"> 1. Analyze Pending Change Requests. 2. Determine priorities for change requests and establish "Desired/Want" dates. 3. Create draft Priority List to prepare for Change Review meeting. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Pending Change Request Notifications • Project Release Status (Step 10) • Change Request Log <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Change Request Log • CLEC Draft Priority List • Size and scope on each Pending change request 	5-7 Bus Days
5	BCCM	<p><u>CONDUCT CHANGE REVIEW MEETING</u></p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Change Request Log 	1 Bus Day (or as needed)

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
	CCCM	<p><u>Monthly Status Meetings</u></p> <ol style="list-style-type: none"> 1. Communicate regulatory mandates. 2. Review status of pending/approved Change Requests (including defects/expedites) at monthly status meeting. 3. Review current Release Management statuses. <p><u>Prioritization Meetings (held quarterly in March, June, September and December)</u></p> <ol style="list-style-type: none"> 1. Follow Steps 1-3 from Monthly Status Meetings. 2. Initiators present Change Requests. 3. Discuss Impacts. 4. Prioritize Change Requests. 5. Develop final Candidate Requests list of Pending Change Requests by category, 'Need by Dates' and prioritized Change Requests. 6. Update Change Request Log to 'CRC' for Change Review Complete, 'RC' for Candidate Request List, as appropriate. 7. Review issues and action items and assign owners. 	<ul style="list-style-type: none"> • CLEC Draft Priority List • Desired/Want Dates • Impact analysis <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Meeting minutes • Updated Change Request Log • Candidate Change Request List • Issues and Actions Items (if required) 	<p>(or as needed based on volume)</p> <p>Meeting Day</p>
6	BCCM	<p><u>DOCUMENT CHANGE REVIEW MEETING RESULTS</u></p> <ol style="list-style-type: none"> 1. Prepare and distribute outputs from Step 5. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Change Request Log • Final Candidate Request List <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Updated Change Request Log • Web posting of meeting output 	2 Bus Days
7	BCCM CCCM	<p><u>INTERNAL CHANGE MANAGEMENT PROCESS</u></p> <ol style="list-style-type: none"> 1. Both BellSouth and CLECs will perform analysis, impact, sizing and estimating activities only to the Candidate Change Requests that meet 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Candidate Change Request List with agreed upon 'Need by Dates' • Change Request Log 	30 Bus Days

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		the criteria established by the Internal Change Management Process. This ensures that participating parties are reviewing capacity and impacts to schedules before assigning resources to activities.	OUTPUTS: • BellSouth's Proposed Release Package	
8	BCCM CCCM	CONDUCT RELEASE PACKAGE MEETING 1. Prepare agenda. 2. Make meeting preparations. 3. Evaluate proposed release schedule. 4. Non-scheduled Change Requests returned to Step 4 as Input for the "Prepare for Change Review Meeting" process. 5. Based on BST/CLEC consensus create Approved Release Package. 6. Identify Release Management Project Manager, if possible. 7. Establish date for initial Release Management Project Meeting. 8. All Change Requests that are in the approved scheduled release will be changed to "S" status for "Scheduled".	INPUTS: • BellSouth's Proposed Release Package • BellSouth's Release Schedule • Change Request Log OUTPUTS: • Approved Release Package • Updated Change Request Log • Meeting Minutes • Scheduled Change Requests • Non-Scheduled Change Requests (Return to Step 4) • Date for initial Release Management Project Meeting	1 Bus Day
9	BCCM	CREATE RELEASE PACKAGE NOTIFICATION 1. Develop and distribute Release Notification Package via web.	INPUTS: • Approved Release Package OUTPUTS: • Release Package Notification	2 Bus Days after Release Package Mtg.
10	BCCM (Project Managers from each participating company)	RELEASE MANAGEMENT AND IMPLEMENTATION 1. Provide Project Management and Implementation of Release (See Release Management @ Appendix B). 2. Lead Project Manager communicates Release Management Project status to BCCM for inclusion in Monthly Status Meetings. 3. BellSouth User Requirements will be presented to CLECs. If needed, changes will be incorporated and requirements re-baselined. 4. Once a Change Request is implemented in a release, the status	INPUTS: • Approved Release Package Notification OUTPUTS: • Project Release Status • Implementation Date • Project Plan, Work Breakdown Schedule, Risk Assessment, Executive Summary, etc • Implemented Change Request	Ongoing

Step	Accountability	<u>Sub-processes</u> Activities	Inputs and Outputs	Cycle Time
		will be changed to "T" for Change Implemented.		

Part 3 – Expedited Feature Process

An Expedited Feature is the inability for a CLEC to process certain types of LSR's based on the existing functionality to BellSouth's Operational Support Systems (OSS's) that are in the scope of CCP. The change request for an expedite must provide details of the business impact and will fall into one of two categories:

- A defect that has been re-classified as a feature where the CLEC/BellSouth has determined should be expedited due to impact
- An enhancement to an existing product or service where the CLEC/BellSouth has determined should be expedited due to impact

Re-classified Defects

When a defect is re-classified as a feature, the CLEC/BellSouth will be notified by Change Control in the defect validation. The CLEC will have the ability to ask BellSouth to expedite the reclassified feature by updating the Change request, marking it as an expedite and sending back to Change Control. The change request will then follow through the Types 2-5 Expedited Feature process using agreed upon intervals.

Enhancement to an existing product or service

A CLEC/BellSouth will also have the ability to submit a Type 2-5 change request as an expedited feature request for an enhancement to an existing product or service where the functionality does not currently exist in BellSouth's offered products and services.

For both re-classified defects and enhancements to an existing product or service, the rules surrounding the expedited feature request will be:

- Must be an enhancement to an existing product or service
- Will follow the Expedited Feature Process flow described below which is based on the current Types 2-5 process flow using agreed upon intervals with the exception of Steps 4-6 which are eliminated.
- The CLEC/BellSouth will be required to give impacts and the consequences for not implementing the feature in the current, next, or point release, best effort.

Figure 4.4 provides the process flow for the expedited feature process.

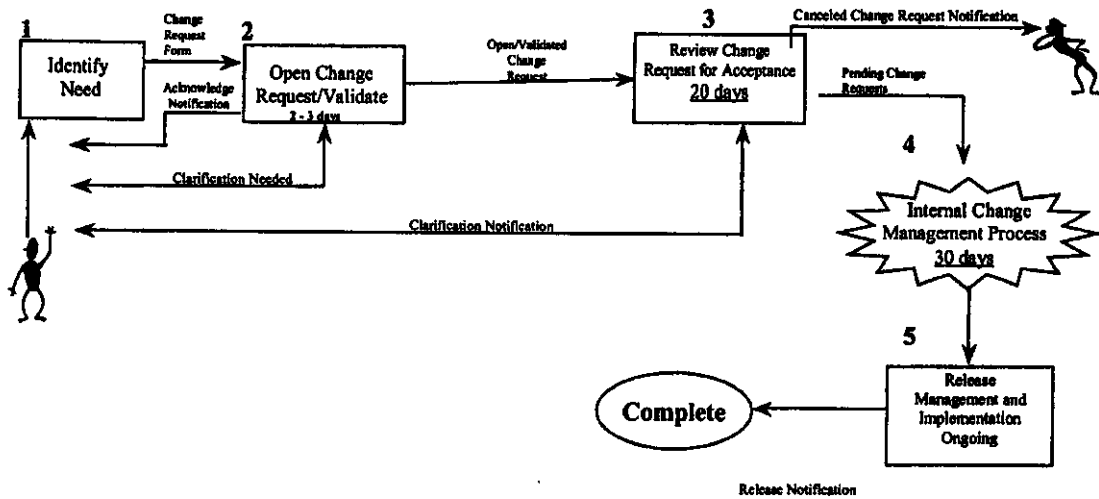


Figure 4.4 – Process Flow for Types 2-5 Expedited Feature Process

The table below details the steps, accountable individuals, tasks, inputs/outputs and cycle times of each sub-process in the Expedited Feature process. Steps shown in the table are sequential unless otherwise indicated.

Table 4-3. Types 2-5 Expedited Feature Detail Process Flow

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
1	CCCM BCCM	<p><u>IDENTIFY NEED</u></p> <ol style="list-style-type: none"> 1. Internally determine need for change request. These change requests might involve system enhancements, manual and/or business process changes. 2. Originator and CCCM or BCCM should complete the standardized Change Request Form according to Checklist. 3. Attach related requirements and Attachment A-1A, Item 22. 4. Appropriate CCCM/BCCM submits Change Request Form and related information via e-mail to BellSouth. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Change Request Form (Attachment A-1) • Change Request Form Checklist (Attachment A-1A) <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Completed Change Request Form with related documentation 	N/A
2	BCCM	<p><u>OPEN CHANGE REQUEST/VALIDATE CHANGE REQUEST FOR COMPLETENESS</u></p> <ol style="list-style-type: none"> 1. Log Request in Change Request Log. 2. Send Acknowledgement Notification (Attachment A-3) via e-mail to originator. 3. Establish request status ('N' for New Request) 4. Review change request for mandatory fields using the Change Request Form Checklist. 5. Verify Change Request specifications and related information exists. 6. Send Clarification Notification via email to the originator (Attachment A-4) if needed. 7. Update Change Request Status to "PC" for Pending Clarification if clarification is needed. <p><u>CLEC or BellSouth Originator</u> If clarification is needed, make necessary corrections per Clarification Notification and submit Change Request Clarification Response (Attachment A-2).</p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Completed Change Request Form with related documentation • Change Request Form Checklist • Change Request Clarification Response <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • New Change Request • Acknowledgment Notification • Validated Change Request • Clarification Notification • Industry Notification via e-mail and web posting 	1 Bus Day Clarification times would be in addition to cycle time.

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
3	BCCM	<p><u>REVIEW CHANGE REQUEST FOR ACCEPTANCE</u></p> <ol style="list-style-type: none"> 1. Review Change Request and related information for content. 2. Change Request reviewed for impacted area (i.e., system, manual process, documentation) and adverse impacts. 3. Determine status of request: <ul style="list-style-type: none"> • If change already exists or CLEC training issue, forward Cancellation Notification (Attachment A-3) to CCCM or BCCM and update status to 'C' for Request Canceled or 'CT' for Training. If Training issue, refer to CSM or Account Team. • If Change Request Clarification Notification not received, validate with CLEC that change request is no longer needed. • If request is accepted, update Change Request status to "P" for Pending in Change Request Log. • If request does not meet the expedited feature criteria, it will exit this process and enter the standard Types 2-5 flow, Step 4. <p>NOTE: See Section 11.0 Terms and Definitions – Change Request Status for valid status codes and descriptions.</p> <p>If BellSouth determines that a CLEC initiated expedited change request should not be accepted because of cost, industry direction or because it is considered not technically feasible to implement, BellSouth will open an agenda item on the next monthly status meeting/call, and will provide a SME on that call to present its case. BellSouth shall consider all possible options for accommodating the request.</p> <p>NOTE: If requested, appropriate SME will participate in the Monthly Status Meeting to address the reason for rejection and discuss alternatives with CLEC community SME</p>	<p>INPUTS:</p> <ul style="list-style-type: none"> • New Change Request • Validated Change Request • Clarification Notification (if required) <p>OUTPUTS:</p> <ul style="list-style-type: none"> • Validated Expedited Change Request • Clarification Notification (if required) • Cancellation Notification (if required) • CR status updated on web 	20 Bus Days

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		must be provided a minimum of two-week advance notice to participate in upcoming Monthly Status Meeting.		
4	BCCM CCCM	<u>INTERNAL CHANGE MANAGEMENT PROCESS</u> 1. Both BellSouth and CLECs will perform analysis, impact, sizing and estimating activities to the Expedited Feature Change Request. This ensures that participating parties are reviewing capacity and impacts to schedules before assigning resources to activities.	<u>INPUTS:</u> <ul style="list-style-type: none"> • Change Request Log <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Release Date for Expedited Feature 	30 days
5	BCCM (Project Managers from each participating company)	<u>RELEASE MANAGEMENT AND IMPLEMENTATION</u> 1. Provide Project Management and Implementation of Release (See Release Management @ Appendix B). 2. Lead Project Manager communicates Release Management Project status to BCCM for inclusion in Monthly Status Meetings. 3. BellSouth User Requirements for software changes will be presented to CLECs, if applicable. If needed, changes will be incorporated and requirements re-baselined. 4. BellSouth Documentation changes, including business rules changes will be provided. 5. Once a Change Request is implemented in a release, the status will be changed to "I" for Change Implemented.	<u>INPUTS:</u> <ul style="list-style-type: none"> • Approved Release Package Notification <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Project Release Status • Implementation Date • Documentation Changes 	Ongoing

5.0 DEFECT PROCESS

A CLEC/BST identified defect will enter this process through the Change Management Team as a Type 6 Change Request. If the defect is validated internally, it will route through this process, and notification provided to the CLEC community via e-mail and web posting.

A Type 6 defect request is any non-type 1 change that corrects problems discovered in production versions of an application interface. These problems are where the interface is not working in accordance to the BellSouth baseline business requirements or the business rules that BellSouth has published or otherwise provided to the CLECs.

In addition, if functional requirements agreed upon by BellSouth and the CLECs, results in inoperable functionality, even though software business requirements and business rules match; this will be addressed as a defect.

These problems typically affect the CLEC's ability to exchange transactions with BellSouth and may include documentation that is in error, has missing information or is unclear in nature. Type 6 validated defects may not be managed using the Expedited Feature Process discussed in Section 4, Part 3.

Defect Change Requests will have three (3) Impact Levels:

- **High Impact**

The failure causes impairment of critical system functions and no electronic workaround solution exists.

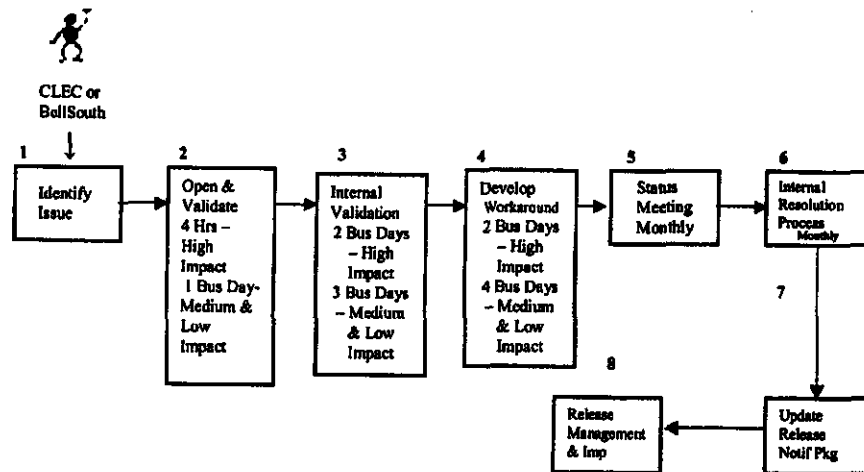
- **Medium Impact**

The failure causes impairment of critical system functions, though a workaround solution does exist.

- **Low Impact**

The failure causes inconvenience or annoyance.

Figure 5-1 provides the process flow for the validation and resolution of a Type 6 Change – CLEC Impacting Defect.



NOTE: The intervals in the boxes above match the intervals in the tables below for High, Medium, and Low Impact defect change requests.

Figure 5-1. Type 6 Process Flow

The table below details the steps, accountable individuals, tasks, inputs/outputs and cycle times of each sub-process in the Type 6 Process Flow. This process will be used to validate defects, provide status notification(s), workarounds and final resolution to the CLEC community. Steps shown in the table are sequential unless otherwise indicated.

Table 5-1. Type 6 Detail Process Flow

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
1	CCCM BCCM	<u>IDENTIFY NEED</u> 1. Identify Defect. 2. Originator and CCCM or BCCM should complete the standardized Change Request Form indicating that it is a Type 6. 3. Include description of business need and details of business impact. 4. Attach related requirements and specification documents. These attachments must include the following, if appropriate: <ul style="list-style-type: none"> • PON • OCN • Specific Scenario • Interface(s) affected • Error message (if applicable) • Release or API version (if applicable) 5. Appropriate CCCM/BCCM submits Change Request Form and related information via e-mail to BellSouth Change Management Team.	<u>INPUTS:</u> <ul style="list-style-type: none"> • Type 6 Change Request <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Completed Change Request Form (with related documentation if necessary) 	N/A
2	BCCM	<u>OPEN & VALIDATE DEFECT FORM FOR COMPLETENESS</u> 1. Log Defect in Change Request Log. 2. Send Acknowledgment Notification via email to initiating CLEC. 3. Establish CR status ('N' for New Defect). 4. BCCM reviews change request for mandatory fields using the Change Request Form Checklist	<u>INPUTS:</u> <ul style="list-style-type: none"> • Completed Change Request Form (with related documentation if necessary) <u>OUTPUTS:</u> <ul style="list-style-type: none"> • New Defect • Acknowledgment Notification • Clarification Notification (if applicable) 	4 Hours – High Impact 1 Bus Day – Medium & Low Impact (Time to be calculated from time of

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p>Request Form Checklist.</p> <p>5. Verify specifications and related information exists.</p> <p>6. Send Clarification Notification via email to the originator if needed.</p> <p>7. Update CR Status to 'PC' for Pending Clarification if clarification is needed.</p> <p>If clarification is needed, CLEC or BST originator makes necessary corrections per Clarification Notification and submits via email Change Request Clarification Response.</p>	<p>required)</p>	<p>receipt with a cutoff time of 4:00 PM Eastern Time)</p>
3	BCCM	<p>INTERNAL VALIDATION</p> <ol style="list-style-type: none"> 1. Validate that it is a defect. 2. Perform internal defect analysis. 3. <u>Determine status of request:</u> <ul style="list-style-type: none"> • If change already exists or CLEC training issue forward Cancellation Notification to CCCM or BCCM and update status to 'C' for Request Cancelled or 'CT' for Training. If Training issue, refer to CSM or Account Team. • Send Clarification Notification via email if needed and update status to 'PC' for Pending Clarification. • If Change Request Clarification Notification not received, validate with CLEC that change request is no longer needed. • If request is valid, update Change Request status to 'V' for Validated Defect and indicate appropriate Impact Level. • If the process is operating as specified in the baselined requirements and published business rules, the BCCM will communicate the results via e-mail to the originator to discuss/determine the next step(s). • If issue is re-classified as a feature change, provide supporting information via email to the originator for review 	<p>INPUTS:</p> <ul style="list-style-type: none"> • New Defect <p>OUTPUTS:</p> <ul style="list-style-type: none"> • Validated Defect • Defect notification to CLEC community via e-mail and web posting • Clarification Notification (if required) • Cancellation Notification (if required) • Status provided for High Impact Defects to originator via email within 24 hours. 	<p>2 Bus Days – High Impact</p> <p>3 Bus Days – Medium & Low Impact</p>

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p>and feedback. The Change Request will exit the defect process flow and enter Types 2-5 process flow (enter at Step 3).</p> <p>NOTE: See Section 11.0 Terms and Definitions – Defect Status for valid status codes and descriptions.</p> <p>Defect notification will be provided to CLEC community via e-mail and web posting.</p>		
4	BCCM	<p><u>DEVELOP AND VALIDATE WORKAROUND (IF APPLICABLE)</u></p> <ol style="list-style-type: none"> Defect workaround identified. Change Request status changed to “W” for workaround identified. Workaround is communicated via e-mail to originating CLEC and to the CLEC community via email and web posting. If appropriate, communication to the CLEC community regarding workaround will be discussed via conference call. <p>If it is determined that additional time is needed to develop workaround due to the complexity of the defect, notification will be provided to CLEC community via e-mail and web posting.</p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> Validated Defect Clarification Notification (if required) <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> Workaround (if applicable) Clarification Notification (if required) Cancellation Notification (if required) E-mail and web posting of workaround 	<p>2 Bus Days – High Impact</p> <p>4 Bus Days – Medium & Low Impact</p>
5	BCCM	<p><u>INTERNAL RESOLUTION PROCESS</u></p> <ol style="list-style-type: none"> Schedule and evaluate Defects based on capacity and business impacts to the CLECs and BellSouth. Provide status updates to the CLEC community via email as the status changes until the defect is implemented. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> CLEC/ BST input <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> Defect Release Schedule 	<p>Validated High Impact Defects will be implemented within a 4-25 business day range, best effort.</p> <p>Medium Impact Defects will be implemented</p>

Step	Accountability	<u>Sub-processes</u> Activities	Inputs and Outputs	Cycle Time
				<p>within 90 bus days, best effort.</p> <p>Low Impact Defects will be implemented best effort.</p>
6	BCCM	<p><u>UPDATE RELEASE PACKAGE NOTIFICATION</u></p> <ol style="list-style-type: none"> Update and distribute release notification package via web. All Change Requests that are in the approved scheduled release will be changed to "S" status for "Scheduled". <p>Note: The release notification will be published in a timely manner, based on the release constraints associated with the defect.</p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> Defect Information <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> Updated Release Package Notification Scheduled Change Request 	<p>Based on release constraints for defects (may be less than 30 days).</p>
7	BCCM	<p><u>MONTHLY STATUS MEETING</u></p> <ol style="list-style-type: none"> Provide status of Defect. Solicit CLEC/ BST input. Update Defect information as needed. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> Defects Received Change Request Log Defect Analysis Workaround (if applicable) <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> Updated status Updated Change Request Log Meeting minutes 	<p>Monthly or when status changes, whichever occurs first.</p>
8	BCCM	<p><u>RELEASE MANAGEMENT AND IMPLEMENTATION</u></p> <p>The following release management activities will pertain to Type 6 changes:</p> <ol style="list-style-type: none"> Lead project manager communicates release management project status to 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> Approved Release Package Notification <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> Project Release Status Implementation Date 	<p>Ongoing</p>

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		BCCM for inclusion in Monthly status meetings. 2. Once a defect is implemented in a release, the status will be changed to "I" for Change Implemented.	<ul style="list-style-type: none"> • Implemented Change Request 	

6.0 CHANGE REVIEW

Part 1 – Change Review Meeting

The Change Review meeting provides the forum for reviewing and prioritizing Pending Change Requests, generating Candidate Change Requests, submitting Candidate Change Requests for sizing, and reviewing the status of all release projects underway. Status update meetings will be held monthly and are open to all CLEC's. Meetings will be structured according to category (pre-order, order, and maintenance, etc.). Prioritization meetings will be held quarterly. For non-system impacting changes, there will be a 5 (five)-business day notice for documentation updates. The prioritization meeting dates will be communicated when the release schedule is published.

During the Change Review Meeting each originator of a Change Request will be allowed 5 (five) minutes to present their Change Request. A question and answer session not to exceed 15 minutes will follow this presentation. After all presentations for a particular category are complete, the prioritization process will begin.

The Change Request Log will be distributed 5 - 7 (five to seven) business days prior to the Change Review meeting. A valid and complete Change Request must be received 30 business days prior to the Change Review Meeting. Change Requests must be accepted and in "Pending" status to be placed on the agenda for the next scheduled meeting.

Note: Status Meetings will occur monthly. Prioritization meetings will be scheduled to occur in March, June, September and December and will include the monthly status meeting agenda items.

Part 2 – Change Review Package

The Change Review Package will be distributed to all participants 5 – 7 (five to seven) business days prior to the Change Review meeting. The package will include the following:

- Meeting Notice
- Agenda
- Change Request Log (List of Change Requests to be reviewed)
- BellSouth's estimate of the size and scope of each Change Request
- Reference to Change Control Process on the BST website (for CLECs not familiar with the process, new CLECs or CLECs that choose to participate after the initial rollout)
- Status Reports from each of the active Release Management Project Teams

Part 3 – Prioritizing Change Requests

Prior to the Change Review Meeting, each participating CLEC should determine priorities for change requests and establish “desired/want” dates. The CLEC should use the Preliminary Priority List form as provided via the web.

Final prioritization will be determined at the Change Review meeting after presentation of the Change Requests for each category.

Prioritization Voting Rules

- CLEC must either be using an interface within a category (i.e. ordering), in the testing phase or have a letter of intent on file with the BellSouth Change Control Management Team to participate in the voting process
- One vote per CLEC, per category
- No proxy voting
- Each company may bring the number of participants necessary to represent their position. If the number of participants grow to be unmanageable, CLECs and BellSouth will revisit the issue of representation to apply some restrictions.
- Forced Ranking (1 to N, with N being the highest) will be used
- Votes will be tallied to determine order of ranking
- Changes will be ranked by category
- Manual processes and documentation will be prioritized separately; however they will need to be synchronized with the electronic interface changes
- In case of a tie, the affected Changes will be re-ranked and prioritized based on the re-ranking

Example: The top 2 Changes from high to low are E5 and E2, with E1 and E4 tied for 3rd. E1 and E4 would be re-ranked and prioritized according to the re-ranking.

Pre-Order LENS	CLEC 1	CLEC 2	CLEC 3	Total
E1	3	6	1	10
E2	4	2	6	12
E3	6	1	2	9
E4	2	4	4	10
E5	5	5	3	13
E6	1	3	5	9

7.0 INTRODUCTION AND RETIREMENT OF INTERFACES

Introduction of New Interfaces

BellSouth will introduce new interfaces to the CLEC Community as part of the Change Control Process. A description of the proposed interface will be submitted to the BCCM. The BCCM will add an agenda item to discuss the new interface at the monthly status meeting. BellSouth will be given 30 – 45 minutes to present information on the proposed interface. If BellSouth requests additional time for the presentation, a separate meeting will be scheduled to review the proposed interface, so that, the information can be presented in its entirety. The objective will be to identify interest in the new interface and obtain input from the CLEC community. BellSouth will provide specifications on the interface being developed to the CLEC Community. As new interfaces are deployed, they will be added to the scope of this document as appropriate, based on the use by the CLEC community and requested changes will be managed by this process.

Retirement of Interfaces

As active interfaces are retired, BellSouth will notify the CLECs through the Change Control Process and post a CLEC Notification Letter to the web six (6) months prior to the retirement of the interface. BellSouth will have the discretion to provide shorter notifications (30-60 days) on interfaces that are not actively used and/or have low volumes. BellSouth will consider a CLEC's ability to transition from an interface before it is scheduled for retirement. BellSouth will ensure that its transition to another interface does not negatively impact a CLEC's business.

BellSouth will only retire interfaces if an interface is not being used, or if BellSouth has a replacement for an interface that provides equal or better functionality for the CLEC than the existing interface.

Retirement of Versions

When software versions are retired, BellSouth will give the CLECs a 120 day notification.

A CLEC may respond to Change Control with its desire to extend a retirement date. The CLEC must explain why the scheduled retirement date is not acceptable by providing the impact to its business.

8.0 ESCALATION PROCESS

Guidelines

- The ability to escalate is left to the discretion of the CLEC based on the severity of the missed or unaccepted response/resolution.
- Escalations can involve issues related to the Change Control process itself.
- For change requests, the expectation is that escalation should occur only after normal Change Control procedures (e.g. communication timelines) have occurred per the Change Control agreement.
- Three levels of escalation will be used.
- For Type 1 issues, the escalation process is agreed to allow BellSouth a one-day turnaround for each cycle of escalation.(Excludes Expedites)
- For Types 2-5 issues, the escalation process is agreed to allow BellSouth a five-day turnaround for each cycle of escalation.
- For Type 6 High Impact Issues, the escalation process is agreed to allow BellSouth a two (2) day turnaround to provide a status for each cycle of escalation.
- For Type 6 Medium and Low Impact issues, the escalation process is agreed to allow BellSouth a five (5) day turnaround to provide a status for each cycle of escalation. For Types 2-5 Expedite Process issues, the escalation process is agreed to allow BellSouth a three (3) day turnaround to provide a status for each cycle of escalation.
- Each level will go through the same Cycle, which is described below.
- All escalation communications may be optionally distributed by the CLEC to the industry and BellSouth Change Control e-mail unless there is a proprietary issue.

Cycle for Type 1 System Outages

Contact List for Escalation - ECS Group - Type I Changes

If the originator does not receive a call back from the EC Support Group according to the times specified in this document, they may escalate according to the following list:

Escalation Level	Name and Title	Office Number	Pager Number	Email Address
1st Level	Don Tighe Manager - EC Support Group Interconnection Operations	404-532-2233	1-800-946-4646 PIN 1436470	<u>Don.Tighe@bridge.bellsouth.com</u>
2nd Level	Bruce Smith Operations Director - EC Support Group Interconnection Operations	205-988-7211	1-800-542-3260	<u>Bruce.Smith@bridge.bellsouth.com</u>
3rd Level	Bill Reid Operations Assistant Vice President Interconnection Operations	205-988-1447	1-800-946-4646 PIN 1179523	<u>Bill.C.Reid@bridge.bellsouth.com</u>

NOTE: If a call is escalated without first attempting to contact the ECS Helpdesk, the caller will be referred back to the ECS Helpdesk.

Escalation Cycle for Types 2-6 Change Requests

- Item must be formally escalated as an e-mail sent to the appropriate escalation level within BellSouth with a copy to the industry and BellSouth Change Control e-mail.
- Subject of e-mail must be CLEC (CLEC Name) ESCALATION-CR#, if applicable, Level of Escalation, unless it is proprietary.
- Content of e-mail must include:
 - Definition and escalation of item.
 - History of item.
 - Reason for escalation.
 - Desired outcome of CLEC.
- Impact to CLEC of not meeting the desired outcome or item remaining on current course of action as previously discussed at the Change Control Meeting for enhancements.
- Contact information for appropriate Level including Name, Title, Phone Number, and E-mail ID.
- For escalation Level 2, forward original e-mail and include any additional information including the reason that the matter could not be resolved at Level 1.
- For escalation Level 3, forward original e-mail and include any additional information including the reason that the matter could not be resolved at Levels 1 and 2.
- BellSouth will reply to escalation request with acknowledgement of receipt within 4 hrs and begin the escalation process through Level of escalation.
- The escalating CLEC should respond to BellSouth within 5 days as to whether escalation will continue or the BellSouth response has been accepted as closure to the item.
- If the BellSouth position suggests a change in the current disposition of the item (i.e., what has already been communicated to the industry), a conference call will be held within 1 business day of the BellSouth decision in order to provide industry notification with the appropriate executives.

- BellSouth will publish the outcome of the conference call to the industry via web.
- If unsatisfied with an outcome, either party can seek appropriate relief.

Contact List for Escalation - Type 2 - 6 Changes

Types 2-5 Changes: Within 5 business days of receipt (4 from acknowledgement), BellSouth Change Control appropriate executives will reply through BellSouth Change Control with BellSouth's position and explanation for that position.

Type 6, High Impact Changes: Within two (2) business days of receipt, BellSouth Change Control appropriate executives will reply through BellSouth Change Control with BellSouth's position and explanation for that position.

Type 6 Medium and Low Impact Changes: Within five (5) business days of receipt, BellSouth Change Control appropriate executives will reply through BellSouth Change Control with BellSouth's position and explanation for that position.

Escalations should be made according to the following list.

Escalation Level	Name and Title	Office Number	Email Address
1st Level	Valerie Cottingham Director Change Control Process	205-321-2168	Valerie.cottingham@bridge.bellsouth.com
2nd Level	Terrie Hudson Director (Test Bed, User Requirements, CCP)	404-927-4535	Terrie.Hudson@bridge.bellsouth.com
	Joy Lofton Director (for Business Rules/Operations Issues)	404-927-7828	Joy.A.Lofton@bridge.bellsouth.com
	Suzie Lavett Director (TAG/LENS)	205-977-2876	Suzie.H.Lavett@bridge.bellsouth.com
	Audrey Thomas Director (EDI)	404-927-7886	Audrey.Thomas@bridge.bellsouth.com

3rd Level	Doug McDougal Senior Director (for Systems Issues)	404-927-7505	<u>Doug.Mcdougal@bridge.bellsouth.com</u>
	Dee Freeman-Butler Senior Director (for Business Rules/Operations Issues)	404-927-3545	<u>Dee.Freeman2@bridge.bellsouth.com</u>

Dispute Resolution Process

In the event that an issue is not resolved through the Escalation Process as described herein, including (1) escalation within each company to the person with ultimate authority for Change Control operations, and (2) the services of a joint investigative team, when appropriate, comprised of representatives from BellSouth and the affected CLECs. Resolution of the dispute shall be accomplished as set forth below:

- Either BellSouth or any CLEC affected by the dispute may request mediation through the State Public Service Commission, if available. If mediation is requested, parties shall participate in good faith. If the mediation results in the resolution of the dispute, that resolution shall apply to all CLECs affected by the dispute.
- Without necessity for prior mediation, either BellSouth or any CLEC affected by the dispute may file a formal complaint with the appropriate state regulatory agency, requesting resolution of the issue.

9.0 CHANGES TO THIS PROCESS

The current, approved version of this process document will be stored under the component name "Ccp.doc" (the date of the latest CCP document will be included in the file name). The BellSouth Change Control Manager BCCM (and alternate) will be the only persons authorized to update the document version.

Requests for changes to the Change Control Process may be submitted to the BellSouth Change Control Manager (BCCM) using the Change Request form located in the Appendix A. Cosmetic changes may be made and published by the BCCM (or alternate) without further review. Other changes will be reviewed at the monthly Change Review status meetings. All changes will be submitted as a change request and reviewed.

10.0 TESTING ENVIRONMENT

BellSouth offers Carrier Testing to CLECs in an open proven test environment for Telecommunications Access Gateway (TAG) and Electronic Data Interchange (EDI) interfaces. The testing opportunities offered are BETA and New Carrier Testing.

BETA testing is offered to those CLECs that express an interest in assisting BellSouth validate a Telecommunications Industry Forum (TCIF) change for the affected interfaces. The opportunity for testing is submitted via the BellSouth Account Team and is negotiated with the Carrier Testing group. BellSouth opens the test environment for BETA testing after "major releases". CLECs are selected on a "first come, first served basis".

New Carrier Testing is offered to those CLECs who are transitioning from a manual to an electronic environment or from one TCIF issue to another. New Carrier Testing is available to all CLECs and is scheduled with the BellSouth Account Team and Carrier Testing group.

For additional details on the testing environment, regulations and guidelines, refer to the following BellSouth public Internet sites:

EDI

www.interconnection.bellsouth.com/markets/lec.html

Select "Customer Guides"

Select "Local Exchange Ordering Guides"

Select "BellSouth EDI Specifications – TCIF 9"

Select "Section 7 – EDI Testing Guidelines for CLECS"

TAG

www.interconnection.bellsouth.com/markets/lec.html

Select "OSS Information Center"

Select "TAG Documentation"

This site is password protected. You should obtain the password from your Account Team representative.

11.0 TERMS AND DEFINITIONS

A

Account Team. The Account Teams represent the CLECs and all CLEC interests within BellSouth, that is, the Account Team is the CLECs' advocate within BellSouth. Some of the Account Team functions are listed below:

- Contract Negotiations
- Enhanced Billing Options Negotiations
- Customer Education
- Technical Assistance
- General Problem Resolution
- Tariff Interpretation
- BonaFide Requests (BFR)
- Production Support
- Collocation
- Testing Support
- Project/Order Coordination
- Rate Quotations

Accountability. Individual(s) having responsibility for completing and producing the outputs of each sub-process as defined in the Detailed Process Flow.

Acknowledgement Notification. Notification returned to originator by BCCM indicating receipt of Change Request.

Approved Release Package. Calendar of Candidate Change Requests with consensus target implementation dates as determined at the Release Package Meeting.

B

BellSouth Change Control Manager (BCCM). BellSouth Point of Contact for processing all Change Requests.

BFR (Bonafide Request). Process used for providing custom products and/or services. Bonafide Requests are outside the scope of the Change Control Process and should be referred to the appropriate BellSouth Account Team.

Business Day. A business day is considered any Monday-Friday workday that does not fall on an official BellSouth holiday.

Business Rules. The logical business requirements associated with the Interfaces referenced in this document. Business rules determine the when and the how to populate data for an Interface. Examples of data defined by Business Rules are:

- The five primary transactions sets: 850, 855, 860, 865, and 997
- Data Element Abbreviation and Definition
- Activity Types at the appropriate level (account, line, feature) and the associated Usage Type (optional, conditional, required, not applicable, prohibited)
- Conditions/rules associated with each Activity and Usage Type
 - ◇ Dependencies relative to other data elements
 - ◇ Conditions which will be edited within BellSouth's OSSs
- Valid Value Set
- Data Characteristics

C

Cancellation Notification. Notification returned to originator by the BCCM indicating a Change Request has been canceled for one of the following reasons: Originator cancellation, duplicate request, training issue, or failure to respond to clarification.

Candidate Request List. List of prioritized Change Requests with associated "Need by Dates" as determined at an Change Review Meeting. These requests will be submitted for sizing and sequencing.

Candidate Change Request. Change Requests that have been prioritized at an Change Review Meeting and are eligible for independent sizing and sequencing by BellSouth and each CLEC.

Change Request. A formal request submitted on a Change Request Form, to add new functions, defects or expedited features or Enhancements to existing Interfaces (as identified in the scope) in a production environment.

- **Type 1 – BellSouth System Outage.** A System Outage is where the system is totally unusable or there is degradation in an existing feature or functionality within the interface.
- **Type 2 – Regulatory Change.** Any non-Type 1 changes to the interfaces between the CLEC's and BellSouth's operational support systems mandated by regulatory or legal entities, such as the Federal Communications Commission (FCC), a state commission/authority or state and federal courts.

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- **Type 2-5 – Expedited Feature Change.** The inability for a CLEC to process certain types of LSR's based on the existing functionality to BellSouth's Operational Support Systems (OSS's) that are in the scope of CCP. The change request for an expedite must provide details of the business impact and will fall into one of two categories: 1) A defect that has been re-classified as a feature where the CLEC/BellSouth has determined should be expedited due to impact and 2) an enhancement to an existing product or service where the CLEC/BellSouth has determined should be expedited due to impact.
 - **Type 3 – Industry Standard Change.** Any non-Type 1 changes to the interfaces between the CLEC's and BellSouth's operational support systems required to bring these interfaces in line with newly agreed upon telecommunications industry guidelines.
 - **Type 4 – BellSouth Initiated Change.** Any non-Type 1 changes affecting the interfaces between the CLEC's and BellSouth's operational support systems which BellSouth desires to implement on its own accord.
 - **Type 5 – CLEC Initiated Change.** Any non-Type 1 changes affecting the interfaces between the CLEC's and BellSouth's operational support systems, which the CLEC requests BellSouth to implement.

Type 6 – CLEC Impacting Defect. Any non-type 1 change that corrects problems discovered in production versions of an application interface. These problems are where the interface is not working in accordance to the BellSouth baseline business requirements or the business rules that BellSouth has published or otherwise provided to the CLECs. In addition, if functional requirements agreed upon by BellSouth and the CLECs, results in inoperable functionality, even though software business requirements and business rules match; this will be addressed as a defect. These problems typically affect the CLEC's ability to exchange transactions with BellSouth and may include documentation that is in error, has missing information or is unclear in nature. Type 6 validated defects may not be managed using the Expedited Feature Process as discussed in Section 4, Part 3. The CLEC and/or BellSouth may initiate these types of changes affecting interfaces between the CLEC's and BellSouth's operational support systems. These type changes might also include issues for Pre-Orders, Orders, Queries, and Maintenance Requests that can be submitted and accepted, but may require workarounds or clarification.

Change Request Status. The status of a Change Request as it flows through the Change Control process as described in the Detailed Process Flow.

- **A = Appeal.** Indicates a cancelled Change Request is being appealed by the originator (Step 3).
- **C = Request Cancelled.** Indicates a Change Request has been canceled due to one of the following reasons (Step 3):
 - **CC = Clarification.** Requested clarification not received in allotted time (7 days).
 - **CD = Duplicate Request.** A request for this change already exists.

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- **CT = Training.** Requested change already exists, additional training may be required.
 - **CRC = Change Review Complete.** Indicates a Change Request has been reviewed at a Change Review Meeting, but did not reach the Candidate Request List (Step 5).
 - **D = Request Purge.** Indicates the cancellation of a Change Request that has been pending for 12 months and has failed to reach the Candidate Request List (Step 3).
 - **I = Change Implemented.** Indicates a Change Request has been implemented in a release (Step 10).
 - **N = New Change Request.** Indicates a Change Request has been received by the BCCM, but has not been validated (Step 2).
 - **P = Pending.** Indicates a Change Request has been accepted by the BCCM and scheduled for Change Review (Step 3 moving to Step 4).
 - **PC = Pending Clarification.** Indicates a Clarification Notification has been sent to the originator, BCCM awaiting response (Step 2 or 3).
 - **PN = Pending N times.** Indicates a Change Request reached the Candidate Request List, was sized but not scheduled for a release and has cycled through the process N number of times. Example: P1 = 2nd time through process, P2 = 3rd time through process, etc (Step 8).
 - **RC = Candidate Request.** Indicates a Change Request has completed the Change Review process and been assigned to the Candidate Request List for sizing and sequencing (Step 5).
 - **S – Request Scheduled.** Indicates a Change Request has been scheduled for a release (Step 8).

Change Review Meeting. Meeting held by the Change Review participants to review and prioritize pending Change Requests, generate Candidate Change Requests, and submit Candidate Change Requests for sizing and sequencing.

Change Review Package. Package distributed by the BCCM 5 – 7 business days prior to the Change Review Meeting. The package includes the Meeting Notice, Agenda, Release Management Status Report, Change Request Log, etc.

Clarification Notification. Notification returned to the originator by the BCCM indicating required information has been omitted from the Change Request and must be provided prior to acceptance of the Change Request. The Change Request will be cancelled if clarification is not received by the date indicated on the Clarification Notification.

CLEC Affecting Change. Any change that requires the CLEC to modify the way they operate or to rewrite system code.

CLEC Change Control Manager (CCCM). CLEC Point of Contact for processing Change Requests.

CSM. Customer Support Manager which supports resale and facility based CLECs.

Cycle Time. The time allotted to complete each step in the Change Control Process prior to moving to the next step in the process.

D

Defect. Any non-type 1 change that corrects problems discovered in production versions of an application interface. These problems are where the interface is not working in accordance to the BellSouth baseline business requirements or the business rules that BellSouth has published or otherwise provided to the CLECs. In addition, if functional requirements agreed upon by BellSouth and the CLECs, results in inoperable functionality, even though software business requirements and business rules match; this will be addressed as a defect.

These problems typically affect the CLEC's ability to exchange transactions with BellSouth and may include documentation that is in error, has missing information or is unclear in nature.

Type 6 validated defects may not be managed using the Expedited Feature Process as discussed in Section 4, Part 3.

The CLEC and/or BellSouth may initiate these types of changes affecting interfaces between the CLEC's and BellSouth's operational support systems. These type changes might also include issues for Pre-Orders, Orders, Queries, and Maintenance Requests that can be submitted and accepted, but may require workarounds or clarification.

Defect Status. The status of a CLEC Impacting Defect Change Request as it flows through the Change Control process as described in the Detailed Process Flow.

- **A = Appeal.** Indicates a cancelled Change Request is being appealed by the originator (Step 3).
- **C = Cancelled.** Indicates a Change Request has been canceled due to one of the following reasons (Step 3):

-
- **CC = Clarification.** Requested clarification not received in allotted time (2 days).
 - **CD = Duplicate Request.** A request for this change already exists.
 - **CT = Training.** Requested change already exists, or CLEC training issue.
 - **I = Implemented.** Indicates a Defect Change Request has been implemented in a release (Step 6).
 - **N = New Defect Change Request.** Indicates a Defect Change Request has been received by the BCCM and the change request form validated for completeness (Step 2).
 - **PC = Pending Clarification.** Indicates a Clarification Notification has been sent to the originator, BCCM awaiting response (Step 2 or 3).
 - **S = Scheduled for Release.** Indicates a Defect Change Request has been scheduled for a release (Step 6).
 - **V = Validated Defect.** Indicates internal analysis has been conducted and it is determined that it is a validated defect/expedite (Step 3).
 - **W = Workaround Identified.** Indicates a workaround has been developed and communicated to impacted CLEC community (Step 4).

E

Electronic Communications Systems (ECS). ECS is the help desk for reporting system outages or degradation in an existing feature/functionality within an interface. The ECS group works with the CLEC community to resolve system outages/degradation in a timely manner. The telephone number for the ECS group is 1-888-462-8030.

Enhancement. Functions which have never been introduced into the system; improving or expanding existing functions; required functional changes to system interfaces (user and other systems), data, or business rules (processing algorithms – how a process must be performed); any change in the User Requirements in a production system.

Expedited Feature. An expedited feature is the inability for a CLEC to process certain types of LSR's based on the existing functionality to BellSouth's operations support systems (OSS's) that are in the scope of Change Control. The change request for an expedite must provide details of the business impact and will fall into one of two categories: 1) a defect that has been re-classified as a feature where the CLEC/BellSouth has determined should be expedited due to impact and 2) an enhancement to an existing product or service where the CLEC/BellSouth has determined

should be expedited due to impact. For both re-classified defects and enhancements to an existing product or service, the rules surrounding the expedited feature request will be:

- Must be an enhancement to an existing product or service
- Will follow the Expedited Feature process flow described below which is based on the current Types 2-5 process flow using agreed upon intervals with the exception of Steps 4-6 that are eliminated.
- The CLEC/BellSouth will be required to give impacts and the consequences for not implementing the feature in the current, next, or point release, best effort.

H

High Impact. The failure causes impairment of critical system functions and no electronic workaround solution exists.

I

Internal Change Management Process. Internal process unique to BellSouth and each participating CLEC for managing and controlling Change Requests.

L

Low Impact. The failure causes inconvenience or annoyance.

M

Medium Impact. The failure causes impairment of critical system functions, though a workaround solution does exist.

N

Need-by-Date. Date used to determine implementation of a Change Request. This date is derived at the Change Review Meeting through team consensus. Example: 1Q99 or Release XX.

P

Points of Contact (POC). An individual that functions as the unique entry point for change requests on this process.

Priority. The level of urgency assigned for resource allocation to implement a change. Priority may be initially entered by the originator of the Change Request, but may be changed by the BCCM with concurrence from the originator or the Review Meeting participants. In addition, level of priority is not an indication of the timeframe in which the Change Request will be worked. It is the originator's label to determine the priority of the request submitted.

One of four priorities may be assigned:

1-Urgent. Should be implemented as soon as possible. Resources may be pulled from scheduled release efforts to expedite this item. A need-by date will be established during the Change Review Meeting. A special release may be required if the next scheduled release does not meet the agreed upon need-by date.

2-High. Implement in the next possible scheduled major release, as determined during the Release Package Meeting.

3-Medium. Implement in a future scheduled major release. A scheduled release will be established during the Release Package Meeting.

4-Low. Implement in a future scheduled major release only after all other priorities. A scheduled release will be established during the Release Package Meeting.

Project Plan. Document which defines the strategy for Release Management and Implementation, including Scope Statement, Communication Plan, Work Breakdown Structure, etc. See Release Management Project Plan template, Attachment B-1.

Proposed Release Package: Proposed set of change requests slated for a release that the BCCM presents to the CLEC community during the Release Package Meeting

R

Release – Major. Implementation of scheduled Change(s) which may or may not impact all CLECs; may or may not require CLECs to make changes to their interface and may or may not prohibit the use of an interface upon implementation of the Change(s). Application-to-Application and Machine-to-Human.

Release – Minor. Implementation of scheduled Change(s) which do not require coordination with the entire CLEC industry, do not require CLECs to make changes to their interface or do not prohibit the use of an interface upon implementation of the Change(s). Machine-to-Human.

Release Package. Package distributed by the BCCM listing the Candidate Change Requests that have been targeted for a scheduled release.

Release Package Notification. Package distributed by the BCCM and used to conduct an initial Release Management and Implementation meeting. The package includes the list of participants, meeting date, time, Approved Release Package, Defect and/or Expedite Notification, etc.

Release Schedule: Schedule that contains the intended dates for implementation of software enhancements. This release schedule is created annually.

S

Specifications. Detailed, exact document(s) describing enhancement and/or defects, business processes and documentation changes requested and included with the Change Request as additional information.

System Outage. A System Outage is where the system is totally unusable or there is degradation in an existing feature or functionality within the interface.

V

Version (Document). Indicates variation of an earlier Change Control process document. Users can identify the latest version by the version control number.

APPENDIX A – CHANGE CONTROL FORMS

See Attached Forms

This section identifies the forms to be used during the initial phases of the Change Control process accompanied by a brief explanation of their use. Attachments A1 – A-4A contains sample Change Control forms and line by line Checklists.

Change Request Form. Used when submitting a request for a change (Attachment A-1).

Change Request Form Checklist. Provides line-by-line instructions for completing the Change Request form (Attachment A-1A).

Change Request Clarification Response. Used when responding to request for clarification or Clarification Notification (Attachment A-2).

Change Request Clarification Checklist. Provides line-by-line instructions for completing the Change Request Clarification Response (Attachment A-2A).

Acknowledgement Notification. Advises originator of receipt of Change Request by BCCM (Attachment A-3).

Acknowledgement Notification Checklist. Provides line-by-lines instructions for completing the Acknowledgement Notification. (Attachment A-3A).

Cancellation Notification. Advises the originator of cancellation of a Change Request (Attachment A-3).

Cancellation Notification Checklist. Provides line-by-line instructions for completing the Cancellation Notification. (Attachment A-3B).

Clarification Notification. Advises originator that a Change Request is being held pending receipt of additional information (Attachment A-4).

Clarification Notification Checklist. Provides line-by-line instructions for completing the Clarification Notification. (Attachment A-4A).

Letter of Intent. CLEC provides notice of intent to implement a TCIF compliant interface within a specified timeframe. (Attachment A-5).

APPENDIX B – RELEASE MANAGEMENT

See Attached Forms

Release Management and Project Implementation is described in Step 10 of the Change Control Process. Project Managers are responsible for confirming the release date, developing project plans and requirements, providing the WBS, Gantt chart and Executive Summary to the BCCM for input to the Change Review Package and ensuring the successful implementation of the release.

The BST Change Control Manager (BCCM) will distribute the Release Notification Information via web. The Notification should contain the following information:

- List of participants (Project Managers from each stakeholder)
- Date(s) for the next Project Manage Release meeting(s)
- Times
- Logistics
- Meeting facilitator and minutes originator (rotated between stakeholders)
- Current Approved Release Package (email attachment)
- Current Maintenance/Defect Notification Information (web posting)
- Draft Release Project Plan - WBS (email attachment created by the Lead Project Manager (s) assigned in step 8 of the Change Control Process)
- Lead Project Manager (s) assigned to the Release with reach numbers (s)

Attachments B1 – B12 contain templates designed to assist the Project Manager(s) in conducting project management responsibilities as needed for Release Management and Implementation.

APPENDIX C –ADDITIONAL DOCUMENTS

See Attached Documents

APPENDIX D –BST VERSIONING POLICY FOR INDUSTRY STANDARD ORDERING INTERFACES

Since August 1998, BellSouth's policy, which is stated in its Statement of Generally Accepted Terms (SGAT) and standard interconnection agreement, has been to support two industry standard versions of the applicable electronic interfaces at all times. Currently, the EDI and TAG electronic interfaces are maintained this way, because they are the interfaces that require the CLEC to "build" its side of the interface to use the new standard. The two industry standard versions of an interface are maintained when BellSouth is implementing an entirely new version of an interface based on new industry standards, not when BellSouth is simply enhancing an existing interface. Periodically, the standards organizations for an interface will issue a new set of standards. After submitting the new standards to the CCP to determine how and when they will be implemented, BellSouth will introduce a new version of that interface based on the new standards. BellSouth will keep the "old" version of the interface based on the old industry standards "up" for those CLECs that have not had enough time to build their side of the interface to the new industry standards. BellSouth gives CLECs six (6) months advance notice of the implementation of electronic interfaces based on new industry standards.

When a new industry standard for the interface is issued, the most recent prior industry standard version of the interface will be frozen - no changes will be made to the old version of the interface. BellSouth will support both the new industry standard version and the old industry standard version until the next set of industry standards is issued. Then, BellSouth will support the two most recent industry standard versions of the interface. If, for example, version A were based on the current industry standards, then following the implementation of version B based on the new industry standards, BellSouth would freeze version A until the implementation of version C. Upon the implementation of the version C of the interface based on the newest industry standards, BellSouth would no longer support version A, would freeze version B, and would support both version C and the frozen version B until the implementation of next set of the industry standards.

For example, in March 1998, BellSouth released a new industry standard version of EDI based on TCIF version 7.0. Between March 1998 and January 2000, BellSouth implemented a series of major releases (4.0 and 5.0) and a series of "point releases" (4.1, 4.2, etc. and 5.1, 5.2, etc.). The final "point release" of EDI was Release 5.8. In January 2000, BellSouth implemented Release 6.0 of EDI based on TCIF 9.0. When this occurred, BellSouth began maintaining Release 5.8 alongside of Release 6.0 of EDI.

NOTE: Because LENS is not an industry standard, machine-to-machine interface, LENS is not covered under the policy described above.

Release Management Project Plan Template

Document Preparation Information

PROJECT NAME - RELEASE NUMBER	PREPARED BY (PRINT)	SIGNATURE	DATE PREPARED
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Scope Statement

The project scope defines the boundaries by which the project will operate. The scope statement will be used to obtain agreement and approval from the customers and stakeholders for the project funding.

See Scope Statement Template

Communication Plan

The project team will determine the type and frequency of communications that must take place during the project life cycle to enable the project's success. The table below outlines the agreed to communication vehicles.

Status Communiqué	Distribution	Frequency	Owner
Project Release Status Report	<ul style="list-style-type: none"> Team Members Enhancement Review Team 	<ul style="list-style-type: none"> Weekly Monthly 	Project Manager
Team Member To Do List	<ul style="list-style-type: none"> Team Member 	<ul style="list-style-type: none"> Weekly 	Project Manager
Executive Summary	<ul style="list-style-type: none"> Project Sponsor 	<ul style="list-style-type: none"> Monthly 	Project Manager
Status Meeting/Minutes	<ul style="list-style-type: none"> Team Members 	<ul style="list-style-type: none"> Weekly 	Project Manager

All escalations will be communicated by the project manager to the project sponsor.

See Project Release Status Report

See CCP To Do List/Resource (part of Microsoft Project file - Custom Report)

See CCP To Do List/Dates (part of Microsoft Project file - Custom Report)

Project Tracking Plan

Project tracking and control is the process whereby the project manager determines the degree to which the project plan is being met. The focus is on the schedule, budget and resource allocations.

The project manager will hold regularly scheduled team meetings for the purpose of updating the Work Breakdown Schedule (WBS) with accurate information. During these meetings, all new issues will be raised and assigned to an owner for resolution. All existing issues will be reviewed for current status and/or closure.

Other documents to be updated during the team meetings are as follows:

- Change Control Plans
- Risk Management Plans
- Communication Plans
- Scope Statements
- Team Roster and Responsibilities

Project status will be created and distributed as defined in the Communications Plan.

Attachment B-1

Jointly Developed by the Change Control Sub-team comprised of BellSouth and CLEC Representatives.

Work Breakdown Structure

The project manager will develop a Work Breakdown Structure (WBS) in the appropriate project management software application, including tasks, durations, start/end dates, dependencies, personnel resources, and related costs. A draft version of the WBS will be created by the project manager and reviewed with the project team in an effort to effectively utilize the team's time. The WBS will be revised and agreed to by the entire team to facilitate activity ownership and commitment.

While creating the WBS, the team should consider all resource, time, budget and performance constraints associated with the project.

See WBS Template (part of Microsoft Project file - Gantt View)

Roles and Responsibilities

Project roles will be defined to clearly identify expectations among project participants. Update the table below with the correct project roles and responsibilities.

<u>ROLES</u>	<u>RESPONSIBILITIES</u>
Project Manager	Identify Preliminary Resources Hold Kick-off Meeting Develop Project Plan Documents Track Project Status Time Cost Manage Change Control Manage Issues Communicate Project Status
Project Sponsor	Understand Current Project Status Single Point of Contact for Escalations Communicate Project Status Define/Approve Milestone Exit Criteria
Stakeholder	Provide Team Members / External Project Support Understand Current Project Status Define Milestone Exit Criteria
External Project Support	Perform Agreed to Activities as Defined Provide Project Manager Status
Team Members	Attend Project Team Meetings Perform Agreed to Activities as Defined Provide Project Manager Status

Project Team Roster

A list of all parties associated with or impacted by the project should be documented and distributed to the team.

See Project Team Roster

Risk Management Plan

In an effort to mitigate possible negative impacts to the project, a high-level risk assessment should be performed during the initial phase of the project. For each high-level risk, the team should develop a mitigation strategy or position. As potential risks are identified during the project life cycle, the team should again develop a mitigation strategy or position.

Attachment B-1

Jointly Developed by the Change Control Sub-team comprised
of BellSouth and CLEC Representatives.

See High-Level Risk Assessment
See Risk Event Assessment and Planning

Change Control Plan

Throughout the project life cycle, changes will be introduced which will impact the project scope statement. These changes could be due to a new customer need/requirement or a miss communication of an existing requirement. Each change must be evaluated to effectively understand the possible impact to resources, time and/or cost.

See Scope Change Request and Evaluation
See Scope Change Request Log

Project Issues

Day to day issues will be entered on a project issues log as an interim solution until further discussion can take place among the team. Each issue could result in the addition of a new activity to the WBS, a risk to be evaluated in the Risk Management Plan, or a change to be managed through the Change Control Plan.

See Project Issue Log

Scope Statement Template

Document Preparation Information

PROJECT NAME - RELEASE NUMBER	PREPARED BY (PRINT)	SIGNATURE	DATE PREPARED
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Project Definitions

PROJECT TITLE	
PROJECT MANAGER	
PROJECT TEAM MEMBERS	
GOALS/OBJECTIVES	
SCOPE STATEMENT	
ASSUMPTIONS	
MAJOR RISKS	
DELIVERABLES	
ACCEPTANCE CRITERIA	
PHASES	
KEY MILESTONES	
KEY RESOURCE REQUIREMENTS	
EXTERNAL CONSTRAINTS	
RELATED PROJECTS	

Project Release Status Report

Document Preparation Information

<small>PROJECT NAME - RELEASE NUMBER</small>	<small>PREPARED BY (PRINT)</small>	<small>SIGNATURE</small>	<small>DATE PREPARED</small>
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General Information

<small>PROJECT MANAGER</small>	<small>CURRENT PROJECT PHASE</small>	<small>SUPPORTING DOCUMENTATION ATTACHED?</small> <input type="checkbox"/> Yes <input type="checkbox"/> No	<small>WEEK ENDING DATE</small>
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Report Information

Status Changes from Last Report		Explain
Assumptions	<input type="checkbox"/>	
Scope	<input type="checkbox"/>	

Schedule Information

High-Level Phase Deliverable	Original Complete Date	New Est. Complete Date	Actual Complete Date	Explanation

Budget Information

Project Tracking Element	YTD Budget	YTD Actual	YTD Diff.	% Diff.	Explanation

Deliverable Information

<small>COMPLETED DELIVERABLES</small>
<small>DELIVERABLES DUE NEXT PERIOD</small>

Attachment B-3

Jointly Developed by the Change Control Sub-team comprised
of BellSouth and CLEC Representatives.

Work Breakdown Structure Template

Project Management WBS Template						
ID	Task Name	Duration	Start	Finish	Pred	Resource
1	Obtain Executive Commitment	1d	1/9/98	1/9/98		All
2	Define Requirements	3d	1/9/98	1/13/98		
3	Gather/Analyze Existing Documentation	1d	1/9/98	1/9/98		All
4	Meet to Baseline Requirements (several meetings)	1d	1/12/98	1/12/98	3	All
5	Produce Baseline Requirements Document	1d	1/13/98	1/13/98	4	All
6	Perform Analysis	4d	1/14/98	1/19/98		
7	Analyze Requirements Document	1d	1/14/98	1/14/98	5	BST
8	Produce/Distribute Updated Requirements Document	1d	1/15/98	1/15/98	7	BST
9	Meet to Understand Updated Requirements Document	1d	1/16/98	1/16/98	8	All
10	Analyze/Finalize Updated Requirements Document	1d	1/19/98	1/19/98	9	All
11	Perform Coding/Construction (design, code, unit test)	1d	1/20/98	1/20/98	10	All
12	Perform Testing	5d	1/20/98	1/26/98		
13	Create Test Plans	1d	1/20/98	1/20/98	10	All
14	Perform Internal Testing (systems, integration)	1d	1/21/98	1/21/98	13, 11	All
15	Perform External Testing	3d	1/22/98	1/26/98		
16	Perform Network Validation Testing (NVT)	1d	1/22/98	1/22/98	14	All
17	Perform End to End Testing	1d	1/23/98	1/23/98	16	All
18	Perform Stress/Volume	1d	1/26/98	1/26/98	17	All
19	Make Go/No Go Decision	1d	1/27/98	1/27/98	18	All
20	Deploy Release/Cut Over	11d	1/15/98	1/29/98		
21	Develop Recovery Plan (Back-Out)	1d	1/15/98	1/15/98	23FS-10d	All
22	Develop Migration Plan Old to New (60-90 days) (Freeze Old Code)	1d	1/28/98	1/28/98	19	All
23	Perform Cut-Over	1d	1/28/98	1/28/98	19	All
24	Develop Post Implementation Audit Report	1d	1/29/98	1/29/98	23	All
25	Perform Training	8d	1/20/98	1/29/98		
26	Develop Training Plan	1d	1/20/98	1/20/98	10	All
27	Develop Training Package	1d	1/21/98	1/21/98	26	All
28	Train Users	1d	1/29/98	1/29/98	23	All

Attachment B-4

Jointly Developed by the Change Control Sub-team comprised
of BellSouth and CLEC Representatives.

To Do List by Resource as of 2/10/98

ID	Task Name	Duration	Start	Finish	Predecessors	Resources
Week of Jan 4						
1	Obtain Executive Commitment	1d	1/9/98	1/9/98		All
3	Gather/Analyze Existing Documentation	1d	1/9/98	1/9/98		All
Week of Jan 11						
4	Meet to Baseline Requirements (several mtgs)	1d	1/12/98	1/12/98	3	All
5	Produce Baseline Requirements Document	1d	1/13/98	1/13/98	4	All
21	Develop Recovery Plan (Back-Out)	1d	1/15/98	1/15/98	23FS-10d	All
9	Meet to Understand Updated Requirements Document	1d	1/16/98	1/16/98	8	All
Week of Jan 18						
10	Analyze/Finalize Updated Requirements Doc	1d	1/19/98	1/19/98	9	All
11	Perform Coding/Construction (design, code)	1d	1/20/98	1/20/98	10	All
13	Create Test Plans	1d	1/20/98	1/20/98	10	All
26	Develop Training Plan	1d	1/20/98	1/20/98	10	All
14	Perform Internal Tests (systems, integration)	1d	1/21/98	1/21/98	13, 11	All
27	Develop Training Package	1d	1/21/98	1/21/98	26	All
16	Perform Network Validation Testing (NVT)	1d	1/22/98	1/22/98	14	All
17	Perform End to End Testing	1d	1/23/98	1/23/98	16	All
Week of Jan 25						
18	Perform Stress/Volume	1d	1/28/98	1/28/98	17	All
19	Make Go/No Go Decision	1d	1/27/98	1/27/98	18	All
22	Develop Migration Plan Old to New	1d	1/28/98	1/28/98	19	All
23	Perform Cut-Over	1d	1/28/98	1/28/98	19	All
24	Develop Post Implementation Audit Report	1d	1/29/98	1/29/98	23	All
28	Train Users	1d	1/29/98	1/29/98	23	All

To Do List by Dates as of 2/10/98

ID	Task Name	Duration	Start	Finish	Predecessors	Resources
1	Obtain Executive Commitment	1d	1/9/98	1/9/98		All
3	Gather/Analyze Existing Documentation	1d	1/9/98	1/9/98		All
4	Meet to Baseline Requirements (several mtgs)	1d	1/12/98	1/12/98	3	All
5	Produce Baseline Requirements Document	1d	1/13/98	1/13/98	4	All
7	Analyze Requirements Document	1d	1/14/98	1/14/98	5	BST
8	Distribute Updated Requirements Document	1d	1/15/98	1/15/98	7	BST
21	Develop Recovery Plan (Back-Out)	1d	1/15/98	1/15/98	23FS-10d	All
9	Meet to Understand Updated Requirements Document	1d	1/16/98	1/16/98	8	All
10	Analyze/Finalize Updated Requirements Doc	1d	1/19/98	1/19/98	9	All
11	Perform Coding/Construction (design, code)	1d	1/20/98	1/20/98	10	All
13	Creates Test Plans	1d	1/20/98	1/20/98	10	All
26	Develop Training Plan	1d	1/20/98	1/20/98	10	All

Project Team Roster

Document Preparation Information

PROJECT NAME - RELEASE NUMBER	PREPARED BY (PRINT)	SIGNATURE	DATE PREPARED
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Guideline: Use this roster format as guidance, expanding or condensing as necessary.

Project Management

PROJECT MANAGER	EMAIL	PHONE	PAGER	FAX
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Sponsor/Stakeholder

PROJECT SPONSOR	EMAIL	PHONE	PAGER	FAX
STAKEHOLDER(S)	EMAIL	PHONE	PAGER	FAX

External Project Support

NAME	EMAIL	PHONE	PAGER	FAX
NAME	EMAIL	PHONE	PAGER	FAX
NAME	EMAIL	PHONE	PAGER	FAX
NAME	EMAIL	PHONE	PAGER	FAX

Project Team

NAME	EMAIL	PHONE	PAGER	FAX
NAME	EMAIL	PHONE	PAGER	FAX
NAME	EMAIL	PHONE	PAGER	FAX
NAME	EMAIL	PHONE	PAGER	FAX
NAME	EMAIL	PHONE	PAGER	FAX
NAME	EMAIL	PHONE	PAGER	FAX
NAME	EMAIL	PHONE	PAGER	FAX
NAME	EMAIL	PHONE	PAGER	FAX
NAME	EMAIL	PHONE	PAGER	FAX

Attachment B-7

Jointly Developed by the Change Control Sub-team comprised of BellSouth and CLEC Representatives.

High-Level Risk Assessment

Document Preparation Information

PROJECT NAME - RELEASE NUMBER	EVALUATOR (PRINT)	SIGNATURE	DATE PREPARED
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Instructions: Put a check in the column that provides the best answer. Use the attached sheets for an explanation of each item. After all items have been evaluated, provide an overall risk assessment based on the individual responses.

High-Level Risk Assessment

Risk Category	Level of Risk			
	Not Applicable	Low Risk	Moderate Risk	High Risk
Strategic importance				
Management support				
Budget availability				
Resource availability				
Project manager availability				
Time frame				
Clarity of and agreement on project objectives				
Participation in project definition				
Customer interest and involvement				
User involvement				
Technical complexity				
Technology maturity				
Relevant experience				
Supplier/contractor involvement				
Major obstacles				
OVERALL RISK				

Guidelines

<p>Strategic Importance</p>	<p>Assess the strategic importance of the project. How essential is it to the planned corporate objectives or to the maintenance of current operations? The less essential the project, the greater the risk that it will not receive sufficient support and attention.</p> <p><i>Low Risk:</i> The project has substantial strategic importance; it has either been mentioned directly as a major initiative or directly supports a major initiative.</p> <p><i>Moderate Risk:</i> Failure to complete the project would jeopardize the achievement of major initiatives. Project sponsors would designate the project as "necessary."</p> <p><i>High Risk:</i> The project does not directly relate to any major strategic initiatives. Project sponsors would designate the project as "nice to have."</p>
<p>Management Support</p>	<p>Determine the extent to which management throughout the company actively supports the project. Management support is essential if the project is to be effectively carried out. Management provides the resources by which the project is accomplished.</p> <p><i>Low Risk:</i> Management in all organizations that will participate in the project actively supports the project initiative and willingly commits resources to the effort.</p> <p><i>Moderate Risk:</i> Project sponsor provides strong support and establishes momentum among other managers who control resources.</p> <p><i>High Risk:</i> Project sponsor is not strongly interested; no significant management attention or interest from any side.</p>
<p>Budget Availability</p>	<p>Evaluate the availability of funding to support the project. Determine whether funding will be available in the time frame necessary to carry out the work. Ensure funding is available for all resources – people, suppliers, material, computer time, and so on.</p> <p><i>Low Risk:</i> Funding has been identified for the project, matching the time frame in which funds are required.</p> <p><i>Moderate Risk:</i> Funding has not been identified specifically for the project; however, funding is available within established budgets and management has approved its use.</p> <p><i>High Risk:</i> Funding has not been identified for the project, and funds are tight or unavailable within existing budgets.</p>
<p>Resource Availability</p>	<p>People are the most critical resource for the project. Evaluate the availability of human resources, assessing not only whether the required number of people are available but whether the right types of skills and experience levels are also available.</p> <p><i>Low Risk:</i> A project team has already been identified with the requisite skills; team members have been committed to the effort.</p> <p><i>Moderate Risk:</i> Project team members have not been identified specifically. Most skills are thought to be readily available within the company.</p> <p><i>High Risk:</i> Project team members have not been identified. Resources are scarce, and obtaining the necessary skills will be difficult in the required time frame.</p>
<p>Project Manager Availability</p>	<p>The availability of a qualified project manager will increase the chances of project success. Assess whether a project manager is available and will be assigned to the project.</p> <p><i>Low Risk:</i> A project manager has already been identified for the project and is available in the required time frame.</p> <p><i>Moderate Risk:</i> A project manager has not been specifically identified, but qualified project managers are available.</p> <p><i>High Risk:</i> No qualified project manager is available to assume responsibility for the project.</p>

<p>Time Frame</p>	<p>Assess the time frame in which the project is required. Tighter time frames increase overall project risk. There should be sufficient time to plan the project thoroughly and to accomplish all project tasks.</p> <p><i>Low Risk:</i> There is sufficient time available for project planning and project execution, including provision for a reasonable amount of slack time to accommodate unforeseen delays.</p> <p><i>Moderate Risk:</i> There is sufficient time for project planning and project execution, assuming an optimized schedule with an aggressive critical path.</p> <p><i>High Risk:</i> Even with the most aggressive scheduling, the project time frame is unrealistic. Deadlines will possibly result in cutting corners to meet the schedule.</p>
<p>Clarity of and Agreement on Project Objectives</p>	<p>Assess the degree to which project objectives have been defined clearly. If the objectives are not clear, it is unlikely that the project will be carried out successfully. Also important is the extent to which the project objectives have been communicated and bought into by the company's organizational elements that will contribute to or support the project.</p> <p><i>Low Risk:</i> Project objectives are clearly defined, have been communicated throughout relevant organizations, and have been agreed to.</p> <p><i>Moderate Risk:</i> Project objectives have been generally defined, and there is general agreement with them. There is no detailed description of the objectives, however.</p> <p><i>High Risk:</i> Project objectives have not been defined, or there is substantial disagreement with them among the organizations.</p>
<p>Participation In Project Definition</p>	<p>Determine whether the project has already been defined or if the project manager and project team will be allowed to participate in the project definition. Projects that are defined and handed to the project team are generally more difficult to complete than projects in which the project team participates in the project definition process.</p> <p><i>Low Risk:</i> There is no current project definition; the project team will be a key player in the project definition process.</p> <p><i>Moderate Risk:</i> There is a current project definition; however, the project team will have an opportunity to review and revise that definition during the planning process.</p> <p><i>High Risk:</i> The project definition is already established; the project team will have no opportunity to revise it.</p>
<p>Customer Interest and Involvement</p>	<p>Evaluate the level of interest in the project on the part of the project's ultimate customer. Will the customer materially participate in the project's implementation? Customer interest and involvement is an important element in ensuring the project is completed as planned.</p> <p><i>Low Risk:</i> The customer is actively interested in the project, has assigned a point of contact, and intends to participate in key project activities.</p> <p><i>Moderate Risk:</i> The customer is interested in the project and intends to participate in some project activities.</p> <p><i>High Risk:</i> The customer expresses little or no interest in the project and has no interest in participating in project activities.</p>

User Involvement	<p>Determine the extent to which users will be involved in the project. User participation can enhance the design and development processes and can streamline the project validation process.</p> <p><i>Low Risk:</i> Users will definitely be involved with the project. A user team has been identified, and provisions have been made to provide adequate user participation.</p> <p><i>Moderate Risk:</i> Users will likely be involved with the project; however, no specific plans have been made for their participation.</p> <p><i>High Risk:</i> Users are unavailable to participate in the project.</p>
Technical Complexity	<p>The level of technical complexity is a direct contributor to overall project risk. Assess the complexity of the project with regard to the project's size, the type of system to be developed, the number of organizations that will participate, and the difficulty of the task.</p> <p><i>Low Risk:</i> The project is technically straightforward. The system is limited to a specific application with little crossover or interface with other systems and applications.</p> <p><i>Moderate Risk:</i> The project presents a technical challenge. The requirement is difficult to solve, or the system will perform multiple functions in concert with other systems.</p> <p><i>High Risk:</i> The project is extremely difficult technically. There are substantial integration requirements with other systems.</p>
Technology Maturity	<p>Mature technology is easier to work with than emerging technology. Assess the level of maturity of the technology to be used in the system. Does the technology currently exist? Has it been proven in other applications? Will the technology be developed during the course of the project?</p> <p><i>Low Risk:</i> Virtually all the technology to be used on the project has been used in other, proven applications.</p> <p><i>Moderate Risk:</i> Most technology has been used in other applications. There will be some technology development during the project but that will be limited to specific functions and areas.</p> <p><i>High Risk:</i> Most project technology will be developed during the project and must be proven during the validation and testing process.</p>
Relevant Experience	<p>Organizations that have experience with similar projects can complete projects with less risk than organizations doing a project for the first time. Determine whether the company has experience with projects that relate to or are similar to the contemplated project.</p> <p><i>Low Risk:</i> The company has substantial experience with related or similar projects and can apply that experience to the current project.</p> <p><i>Moderate Risk:</i> The company has some experience with related projects.</p> <p><i>High Risk:</i> This is the first project of this type that the company has undertaken.</p>
Supplier/ Contractor Involvement	<p>Involving suppliers or contractors in the project can increase the risk, especially if the company has not worked with those organizations before. Determine the extent and anticipated difficulty of supplier involvement.</p> <p><i>Low Risk:</i> Either few or no suppliers will be involved, or all suppliers have worked with BST on previous projects.</p> <p><i>Moderate Risk:</i> Some suppliers will be involved; most will have worked with the company on previous projects.</p> <p><i>High Risk:</i> Many suppliers will be involved. A significant number will not have worked with the company on previous projects.</p>

Major Obstacles	<p>Assess any other major obstacles that may exist. Identify the obstacles and whether it appears that they may be overcome.</p> <p><i>Low Risk:</i> Few major obstacles exist; for those that exist, there are clear solutions.</p> <p><i>Moderate Risk:</i> Some major obstacles exist; there are clear solutions for most of them.</p> <p><i>High Risk:</i> A significant number of major obstacles exist for which there are no clear solutions.</p>
------------------------	--

Risk Event Assessment and Planning

Document Preparation Information

PROJECT NAME - RELEASE NUMBER	PREPARED BY (PRINT)	SIGNATURE	DATE PREPARED
-------------------------------	---------------------	-----------	---------------

General Information

RISK EVALUATOR	WBS REFERENCE	OTHER REFERENCE
----------------	---------------	-----------------

Risk Event Title

ENTER ONE-LINE DESCRIPTION OF RISK EVENT
--

Description

PROVIDE DETAILED DESCRIPTION OF RISK EVENT
--

Probability

DESCRIBE THE PROBABILITY OF THE RISK EVENT OCCURRING. USE QUANTITATIVE METHODS IF APPLICABLE.

Impact

DESCRIBE THE IMPACT OF THE RISK EVENT. USE QUANTITATIVE METHODS IF APPLICABLE.
--

Exposure

PROVIDE AN ASSESSMENT OF THE OVERALL RISK. USE QUANTITATIVE TECHNIQUES IF POSSIBLE; OTHERWISE, USE CATEGORIZATION OF SERIOUS, THREATENING, OR MANAGABLE.
--

Risk Mitigation Strategies

Strategy Description	Strategy Type (Check One)			
	Avoid	Assume	Control	Transfer
ENTER A DESCRIPTION OF THE PREVENTATIVE STRATEGIES AND CONTINGENCY PLANS FOR THE RISK.				

Scope Change Request and Evaluation

Document Preparation Information

PROJECT NAME - RELEASE NUMBER	PREPARED BY (PRINT)	SIGNATURE	DATE PREPARED
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(The following information must be filled in by the project manager)

Scope Change Request Information

CHANGE REQUEST NUMBER	DATE CHANGE REQUEST INITIATED	RESULTING CHANGE ORDER NUMBER	PROJECT LIBRARY FILE NUMBER
PRIORITY <input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low			

General Information

SUPPLIER	CUSTOMER	CHANGE NAME (DESCRIPTION)	
REFERENCES			
SUBMITTED BY	DATE	INVESTIGATED BY	DATE STARTED
			DATE COMPLETED

Impact Analysis

ALL PARTIES AFFECTED	INITIALS/DATE
	/
SCHEDULE IMPACT	INITIALS/DATE
	/
COBT IMPACT	INITIALS/DATE
	/
QUALITY IMPACT	INITIALS/DATE
	/
PROJECT MANAGER'S RECOMMENDATION	INITIALS/DATE
	/

Scope Change Information

CHANGE APPROVED/REJECTED	DEFERRED TO	DATE
<input type="checkbox"/> Approved <input type="checkbox"/> Rejected		

Approved By

CUSTOMER	DATE	BY IT	DATE

Attachment B-10

Jointly Developed by the Change Control Sub-team comprised
of BellSouth and CLEC Representatives.

Scope Change Request Log

Document Preparation Information

PROJECT NAME - RELEASE NUMBER	PREPARED BY (PRINT)	SIGNATURE	DATE PREPARED
-------------------------------	---------------------	-----------	---------------

General Information

CUSTOMER	PROJECT LIBRARY FILE NUMBER
----------	-----------------------------

Log Information

Change Request Number	Priority			Change Name (Description)	Assigned To	Date Opened	Date Approved	Date Closed	Cost Impact	Schedule Impact
	H	M	L							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							

BELLSOUTH DEFECT NOTIFICATION (SAMPLE)

PREPARED BY: _____ DATE PREPARED: _____

CHANGE REQUEST ID:

DATE IDENTIFIED:

DEFECT TYPE: DOCUMENTATION ELECTRONIC INTERFACE MANUAL

INTERFACES IMPACTED:

PRE-ORDERING: LENS TAG CSOTS

ORDERING: EDI LENS TAG LNP

MAINTENANCE: TAFI EC-TA LOCAL

DOCUMENTATION IMPACTED: YES NO

EXPLANATION OF DEFECT:

WORKAROUND:

RESOLUTION:

Preliminary Priority List

Company Name: _____

CCCM: _____

Date Submitted: _____

Change Review Meeting Date: _____

Check Interfaces Used:	<input type="checkbox"/> LENS	<input type="checkbox"/> TAG	<input type="checkbox"/> EC-TA	<input type="checkbox"/> Manual
	<input type="checkbox"/> EDI	<input type="checkbox"/> TAFI	<input type="checkbox"/> CSOTS	
If you do not use an interface, do not rate the request.				

Rate request on a scale of 1 to N, with N being the greatest. Rate by Category for each interface your company uses.

Pending Change Requests to be Prioritized			
Category	Rating	Interface	Change Request Log #
<i>Pre-Ordering</i>			
<i>Ordering</i>			
<i>Maintenance</i>			
<i>Manual</i>			

Monthly Status Meeting Agenda Template

- Opening..... 5 Minutes
Facilitator/BellSouth opens meeting.
- Regulatory Issues..... 10 Minutes
Review any issues that could impact Change Request(s) prioritization. This may include FCC rulings, PSC rulings or Industry Changes.
- Change Request Status: 40 Minutes**
New
Pending
Scheduled
Implemented
Canceled
Defects
Review status of all change requests
- Release Management & Implementation Status..... 15 Minutes
Review status of scheduled Releases.
- Issues/Action Items..... 15 Minutes
Re-cap any issues and action items surfaced during the meeting. Each item is assigned an owner and a follow-up date.
- Adjourn..... 5 Minutes
Facilitator/BellSouth reviews next steps.

Change Review Meeting Agenda Template

Opening.....	10 Minutes
<i>Facilitator/BellSouth opens meeting.</i>	
Change Request Log Status.....	30 Minutes
<i>Change Requests to be reviewed will have a status of "P" for Pending and will follow the process flow as outlined in Part 2 – Detailed Process Flow.</i>	
Regulatory Issues.....	30 Minutes
<i>Review any issues that could impact Change Request(s) prioritization. This may include FCC rulings, PSC rulings or Industry Changes.</i>	
Release Management & Implementation Status.....	30 Minutes
<i>Review status of scheduled Releases.</i>	
Recycled Change Request(s).....	30 Minutes
<i>Determine priority disposition of Change Request(s) that are on the Candidate Request List, but have not been scheduled for a target release.</i>	
Presentation of Change Requests.....	20 Minutes/Request
<i>The presentation of each Change Request is limited to 20 minutes. The initiator of the request is allowed a maximum of five minutes of presentation time followed by a question and answer session not to exceed 15 minutes. Change Requests will be presented and prioritized by Interface.</i>	
Develop Candidate Change Request List.....	60 Minutes
<i>Participating companies will vote on the final prioritization of the Change Requests as indicated in the Change Review Section of the Change Control Process Document. Change Requests to be submitted for sizing and sequencing will be placed on the Candidate Change Request List along with the "Need-by-Date".</i>	
Present Outputs.....	10 Minutes
<i>Re-cap of final prioritization and Change Requests submitted to the Candidate Change Request List.</i>	
Issues/Action Items.....	15 Minutes
<i>Re-cap any issues and action items surfaced during the meeting. Each item is assigned an owner and a follow-up date.</i>	
Adjourn.....	5 Minutes
<i>Facilitator/BellSouth reviews next steps.</i>	



Change Control Process User Registration Form

Date ___/___/___

Company Name _____

CCCM Assigned _____ Phone _____

CCCM Alternate _____ Alt Phone _____

CCM E-mail Address _____ Fax _____

CCM E-mail Alternate _____ Alt Fax _____

Please indicate participation type: CLEC Service Provider *
 * If Service Provider, please attach Letter of Authorization (LOA) from CLEC you will be representing.

To receive Change Control correspondence, as well as system outages and defect notifications, you must subscribe to the BellSouth List Manager. To subscribe to the list manager, the CLEC should send an email to:

List.Manager@bridge.bellsouth.com

With the Subject Line: **SUBSCRIBE CCP**

It is not necessary to include a message with the email being sent, as the system will automatically subscribe the participant by using the sender's email address.

Interfaces Currently Used:	<input type="checkbox"/> Pre-Ordering	<input type="checkbox"/> Ordering	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Manual
	<input type="checkbox"/> LENS	<input type="checkbox"/> EDI	<input type="checkbox"/> TAFI	
	<input type="checkbox"/> TAG	<input type="checkbox"/> LENS	<input type="checkbox"/> EC-TA Local	
	<input type="checkbox"/> CSOTS	<input type="checkbox"/> TAG		

Comments _____

Form Completed By
 (Signature) _____

Minimum requirements to participate in the Change Control Process: Word 6.0 and Excel 5.0 or greater, Internet E-mail address, Web access

Attachment C-6

Jointly Developed by the Change Control Sub-team comprised
 of BellSouth and CLEC Representatives.



Change Control Process User Registration Form

RETURN TO:

BCCM
FAX 205-321-5160

OR

Valerie Cottingham
8th Floor
600 No. 19th Street
Birmingham, AL 35203

Attachment C-6

Jointly Developed by the Change Control Sub-team comprised
of BellSouth and CLEC Representatives.



Change Control Process CR LOG Legend

CR LOG #	Log number assigned to each change request.
Status	Status of change request: N=New (being reviewed for acceptance), P=Pending (accepted-to be prioritized), PC=Pending Clarification, S=Scheduled for a Release, I=Implemented in a Release, C=Canceled Request, V=Validated Defect, W=Workaround Identified, CRC=Change Review Complete, RC=Candidate Request for a Release
Type	Type of CR: Type 2=Regulatory, Type 3=Industry Standard, 4=BST Initiated, 5=CLEC Initiated, 6=CLEC Impacting Defect
Title	Title of Change Request
Step 1 Date Sent/Date Received	Date CR was sent/received by Change Control
Step 2	
Open & Validate CR (Target Date) <ul style="list-style-type: none"> • Types 2-5 (target is 3 bus days) • Type 6 (target is 1 bus day) 	Target date for the Change Control Team to open CR and validate for completeness. Interval is 2-3 business days from date received (for Types 2-5). Interval is 1 business day for Type 6 (defects). During this step, a CR Log # is assigned, acknowledgment notification is sent to originator, CR is reviewed for mandatory fields and completeness.
Clarification Date Sent (if needed)	Date clarification was sent to originator of CR. Clarification times would be in addition to cycle time.
Clarification Response Rec'd Date	Date clarification response was received from originator.
Open & Validate CR (Actual Date)	Actual date CR was opened and validated by Change Control Team.
Step 3	
Review CR for Acceptance (Target Date) <ul style="list-style-type: none"> • Types 2-5 (target is 20 bus days) • Type 6 (target is 3 bus days for internal validation, an additional 4 bus days to develop workaround if applicable) 	For Types 2-5, target date to review CR and determine status (20 bus day interval). CR reviewed for impacted areas. Status codes include: Pending, Pending Clarification or Canceled.
Clarification Sent Date (if needed)	For Type 6- status codes include: Pending, Pending Clarification, Validated Defect, Workaround Identified or Canceled.
Clarification Response Rec'd Date	Date clarification notification was sent to originator of CR. Clarification times would be in addition to cycle time.
	Date clarification response was received from originator.
	Actual date CR was accepted or results provided to originator for review/discussion.
	Date CR was canceled and notification provided to

Attachment C-7

Jointly Developed by the Change Control Sub-team comprised of BellSouth and CLEC Representatives.



Change Control Process CR LOG Legend

Review CR for Acceptance (Actual Date)	originator/CLEC community. NOTE: the originator at any step in the process can cancel a CR.
Cancel CR Notify Date	
Step 4 Prepare for CRM (Target Date) <ul style="list-style-type: none"> 5-7 business days prior to CRM date 	Target date for the Change Control Team to prepare for the Change Review Meeting (prioritization meeting). Target date is to provide CLEC community with updated Change Request Log and meeting details 5-7 business days prior to CRM meeting. Actual date CRM details were provided to CLEC community.
Prepare for CRM (Actual Date)	
Step 5 CR Meeting Date (Actual)	Actual date of Change Review Meeting.
Step 6 Doc Chg Rev Mtg Results (Target) <ul style="list-style-type: none"> 2 business days 	Target date for Change Control Team to provide the meeting minutes from the Change Review Meeting to CLEC community (2 bus day interval).
Doc Chg Rev Mtg Results (Actual)	Actual date meeting minutes were distributed to CLEC community from Change Review Meeting.
Step 7 Internal Change Mgmt Process (Target Date) <ul style="list-style-type: none"> 30 business days 	Target date for CLECs/BST to perform analysis, impact, sizing and estimating activities for the Candidate Change Requests that were prioritized in the Change Review meeting. Target interval is 30 business days.
Internal Change Mgmt Process (Actual Date)	Actual date that CLECs/BST complete the Internal Change Management Process of analysis, impact, sizing and estimating activities for Candidate Change Requests.
Step 8 RPM (Actual Date)	Actual date of Release Package Meeting where Change Control Team presents the proposed scope for the next major release.
Step 9 Rel Pkg Notify (Target Date) <ul style="list-style-type: none"> 2 business days 	Target date for Change Control to develop and distribute Release Package Notification via web (target of 2 bus days).
Rel Pkg Notify (Actual Date)	Actual date release package notification was posted to web.
Step 10 Rel Imp (Actual Date)	Actual date of the Release associated with the CR.
Soft Rel Notif (Target Date) <ul style="list-style-type: none"> 30 calendar days prior to release 	Target Date for BST posting Release Notification (target is 30 calendar days in advance of release implementation).

Attachment C-7

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Change Control Process CR LOG Legend

<p>Soft Rel Notif (Actual Date)</p> <p>Doc Changes Notif (Target Date)</p> <ul style="list-style-type: none"> • 30 calendar days prior to release <p>Doc Changes Notif (Actual Date)</p>	<p>Actual date release notification letter is posted to web.</p> <p>Target Date for BST posting documentation changes (business rules) associated with a release (target is 30 days in advance of release implementation).</p> <p>Actual Date documentation notification is posted to web.</p>
<p>Doc Updates Only Notif (Target Date)</p> <ul style="list-style-type: none"> • 5 business days prior to documentation posting date <p>Doc Updates Only Notif (Actual Date)</p>	<p>Target date for BST posting notification letter for documentation updates (non-system) changes only. Target is 5 business days prior to documentation posting date.</p> <p>Actual date CLEC notification letter is posted to the web announcing the documentation only changes to be posted.</p>
<p>Notes</p>	<p>Area to document additional status information for each CR (i.e., date workaround notification is provided, escalations, etc.).</p>

Transmittal Cover Sheet for Pate Rebuttal Exhibit RMP-2

This sheet transmits the

BellSouth Change Control Process Guide, Version 2.1
(Marked-Up CCP "Working Version")

which consists of 80 pages.



CHANGE CONTROL PROCESS

(Version 2.1 "Working Document")

CCP2_09.DOC

FEBRUARY 9, 2001

VERSION 2.1

Issued: 10/27/00 ~~9/15/00~~ 8/23/00 12/05/00 02/06/01

Jointly Developed by the Change Control Sub-team comprised
of BellSouth and CLEC Representatives.

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Issued: ~~08/23/00~~ ~~9/15/00~~ 10/27/00 12/05/00 02/06/01

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VERSION CHANGE HISTORY

This section list changes made to the baseline Electronic Interface Change Control Process document since the last issue. New versions of this document may be obtained via BellSouth's Web site.

Version	Issue Date	Section Revised	Reason for Revision
1.0	04/14/98		Initial issue.
1.2	2/28/00	All	The EICCP Documentation has been modified to incorporate: <ul style="list-style-type: none"> - Multiple Change Request Types (CLEC Initiated, BST Initiated, Industry Standards, Regulatory and System Outages) - Incorporated manual process - Defined cycle times for process intervals and notifications - Defect Notification process - Escalation Process - Modified Change Control forms to support process changes - Changed EICCP to CCP
1.3	3/14/00	All	The CCP Documentation has been modified to incorporate: <ul style="list-style-type: none"> - Type 6 Change Request, CLEC Impacting Defect - Increased number of participants at Change Review meetings - Changed cycle time for Types 2-5 Step 3 from 20 days to 15 days - Defined Step 4 of the Defect Notification process to include communicating the workaround to the CLEC community - Web Site address for Change Control Process - Notification regarding the Retirement and

			<p>Introduction of new interfaces</p> <ul style="list-style-type: none"> - New status codes for Defect Change Requests - New status codes: 'S' for Scheduled Change Requests and 'I' for Implemented Change Requests (types 2-5 Change Requests) - Removed reference to EDI Helpdesk. Electronic Communications Support (ECS) will be the first point of contact for Type 1 System Outages. - Word changes to provide clarification throughout the document.
1.4	4/12/00	All	<p>The CCP Documentation has been modified to incorporate:</p> <ul style="list-style-type: none"> - Type 1 and 6 Notifications will be communicated to CLECs via e-mail and web posting - Step 3 Cycle Time (Types 2-5) changed from 15 business days to 20 business days - Verbiage to Step 10 (Types 2-5) regarding BellSouth presenting baseline requirements - Introduction and Retirement of New Interfaces Section - Dispute Resolution Process - Testing Environment Section - Word changes to provide clarification throughout the document - Monthly Status Meeting Agenda Template - RF1870 Change Request Form changes
1.5	4/26/00	Section 1 Section 8 Section 11	<ul style="list-style-type: none"> - Updated CCP web site address - Updated Escalation Contacts for Types 2-6 - Added definitions for Account Team and Electronic Communications Support (ECS)
1.6	7/20/00	Section 1	<ul style="list-style-type: none"> - Added "testing" under process changes

		Section 2	- Clarification provided in "Change Review Participants" description.
		Section 4	- Added statement regarding submittal of Change Requests
		Part 2	- Clarification provided for documentation changes for business rules
			- Step 2-Added email notification
			- Step 3-Removed "Cancellation by BellSouth"
			- Step 3-Clarification on reject reasons
		Section 5	- Step 3-Clarification on internal validation activities
			- Step 4-Changed cycle time from 5 to 4 bus days for develop workaround
			- Added defect implementation range
		Section 6	- Changed prioritization from "by interface" to "by category"
			- Changed timeframe for receiving a Change Request prior to a Change Review Meeting from 33 to 30 business days
			- Modified the prioritization voting rules
		Section 7	- Updates to the Introduction and Retirement of Interfaces
			- Added Type 6 escalation turnaround time
		Section 8	- Changed 3 rd Level Escalation contacts for Types 2-6
		Section 11	- Removed "Cancellation by BellSouth" and "Defect Cancelled" definitions
			- Removed "Cancellation by BellSouth" from Change Request Form and Checklist
		Appendix A	- Added Letter of Intent Form
		Appendix C	- Changes to the following forms: Preliminary Priority List, CCP User Registration Form. Added the following forms: Defect Notification Sample, CR Log Legend.

		Appendix D All	Notification Sample, CR Log Legend. - Added BellSouth Versioning Policy Word changes to provide clarification throughout the document.
2.0	08/23/00	Cover Section 3 Section 5 Section 10 Section 11-Terms & Definitions Appendix A All	- Removed "Interim" from cover. - Updated Type 6 definition to incorporate new defect and expedite feature definitions. - Replaced Section 5, Defect Notification Process with a "Draft" Defect/Expedite Notification Process. - Reduced the implementation interval for validated defects (High Impact) from 4 - 30 business days to 4 - 25 business days, best effort. - Added Internet Web sites for EDI and TAG Testing Guidelines - Updated definition for Defect. Added definitions for Expedite Feature, High, Medium and Low Impacts. - Modified Change Request Forms (RF1870 and RF1872) to include email address for Change Control. Also added High, Medium and Low Assessment of Impact Levels. - Referenced the handling of expedites and expedite notification where appropriate.

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1.0 INTRODUCTION

This document establishes the process by which BellSouth Telecommunications (BST) and Competitive Local Exchange Carriers (CLECs) will manage requested changes to the BellSouth Local Interfaces, the introduction of new interfaces, and provide for the identification and resolution of issues related to Change Requests. This process will cover Change Requests that affect external users of BellSouth's Electronic Interface Applications, associated manual process improvements, performance or ability to provide service including defect/expedite notification. This process shall be referred to as the Change Control Process.

All parties should recognize that deviations from this process might be warranted where unanticipated circumstances arise such that strict application of these guidelines may not result in their intended purpose. Furthermore, deviations may be required due to specific regulatory and business requirements. Parties shall provide appropriate web notification to the CLEC/BST Change Control Team participants prior to deviating from the processes established within this document. All parties will comply with all legal and regulatory requirements.

The Change Control Process will cover change requests for the following interfaces and associated manual processes that have the potential to impact the interfaces connected to BellSouth:

- Local Exchange Navigation System (LENS)
- Electronic Data Interchange (EDI)
- Telecommunications Access Gateway (TAG)
- Trouble Administration Facilitation Interface (TAFI)
- Electronic Communications Trouble Administration (EC-TA) Local
- CLEC Service Order Tracking System (CSOTS)

The types of changes that will be handled by this process are as follows:

- Software
- Hardware
- Industry Standards
- Product and Services (i.e., new services available via the in-scope interfaces)
- New or Revised Edits
- Process (i.e., electronic interfaces and manual processes relative to order, pre-order, maintenance and testing)
- Regulatory

- Documentation (i.e., business rules for electronic and manual processes relative to order, pre-order, maintenance, including User Guides that support OSS systems currently within the scope of CCP)
- Defects/Expedites
-

The scope of the Change Control Process does not include the following which are handled through existing BellSouth processes:

- BonaFide Requests (BFR)
- Production Support (i.e. adding new users to existing interfaces, existing users requesting first time use of existing BST functionality)
- Contractual Agreements
- Collocation
- Coordination of test agreements will continue to be supported by the Account Team
- Questions regarding existing documentation should be handled by the Account Team. However, if documentation needs to be changed for clarification purposes, a defect Change Request should be submitted through Change Control Team.

OBJECTIVES OF THE CHANGE CONTROL PROCESS:

- Support the Industry guidelines that impact Electronic Interfaces and manual processes relative to order, pre-order, maintenance, and billing as appropriate
- Ensure continuity of business processes and systems operations
- Establish process for communicating and managing changes
- Allow for mutual impact assessment and resource planning to manage and schedule changes
- Capability to prioritize requested changes

The minimum requirements for participation in the Change Control Process electronically are:

- Word 6.0 or greater
- Excel 5.0 or greater
- Internet E-mail address
- Web access

The web site address for the Change Control Process is as follows:

<http://www.interconnection.bellsouth.com/>

Select "Local Exchange Carriers"
Select "Change Control Process"

Jointly Developed by the Change Control Sub-team comprised
of BellSouth and CLEC Representatives.

2.0 CHANGE CONTROL ORGANIZATION

The Change Control organizational structure supports the Change Control Process. Each position within the organization has defined roles and responsibilities as outlined in the Change Control Process Flow - Section 4 of this document. Identified positions, along with associated roles and responsibilities are as follows:

Change Review Participants. Representatives from Competitive Local Exchange Carriers (CLECs) and BellSouth. This team meets to review, prioritize, and make recommendations for Candidate Change Requests. The Candidate Change Requests are used as input to the Internal Change Management Processes (refer to process step 7 for Types 2-5 changes).

CLECs and BellSouth will define points of contact in each of their companies for communicating and coordinating change notification. All change requests are made in writing (e-mail is preferred). Notifications will be provided via e-mail and posted to the BellSouth web site.

Each company may bring the number of participants necessary to represent their position. If the number of participants grows to be unmanageable, CLECs and BellSouth will revisit the issue of representation to apply some restrictions.

BellSouth Change Control Manager (BCCM). The BCCM is responsible for managing the Change Control Process and is the main point of contact for Types 2 – 6 changes. This individual maintains the integrity of the Change Requests, prepares for and facilitates the Change Review Meetings, presents the Pending Change Requests to the BST Internal Change Management Process, and ensures that all Notifications are communicated to the appropriate parties.

CLEC Change Control Manager (CCCM). The CCCM is the CLEC point of contact for Change Requests. This individual is responsible for presenting and prioritizing Change Requests at the Change Review Meetings.

Release Management Project Team. A team of CLEC and BellSouth Project Managers who manage the implementation of scheduled changes and releases.

3.0 CHANGE CONTROL DECISION PROCESS

Change requests will be classified by Type. There are six Types:

Type 1 – System Outage

A Type 1 change is a BellSouth System Outage. A System Outage is where the system is totally unusable or there is degradation in an existing feature or functionality within the interface. If the System Outage is not resolved within 20 minutes, a notification will be provided via e-mail and posted to the web within one hour. Either BellSouth or a CLEC may initiate the change request. Type 1 system outages will be processed on an expedited basis. All Type 1 System Outages will be reported to the Electronic Communications Support (ECS) Help Desk. A Type 1 System Outage is a condition where the CLEC Pre-Orders/Orders/Queries/Maintenance Requests cannot be submitted or will not be accepted by BellSouth.

Type 2 – Regulatory Change.

Any non-Type 1 change to the interfaces between the CLEC's and BellSouth's operational support systems mandated by regulatory or legal entities, such as the Federal Communications Commission (FCC), a state commission/authority, or state and federal courts are Type 2 changes. Regulatory changes are not voluntary but are requisite to comply with newly passed legislation, regulatory requirements, or court rulings. While timely compliance is required, the systems requirements and methodology to achieve compliance are usually discretionary and within the scope of change management. Either BellSouth or a CLEC may initiate the change request. Type 2 changes may be managed using the Expedited Feature Process, as discussed in Section 4, Part 3.

Type 3 – Industry Standard Change.

Any non-Type 1 change to the interfaces between the CLEC's and BellSouth's operational support systems required to bring these interfaces in line with newly agreed upon telecommunications industry guidelines are Type 3 changes. Either BellSouth or a CLEC may initiate the change request. Type 3 changes may be managed using the Expedited Feature Process, as discussed in Section 4, Part 3.

Type 4 – BellSouth Initiated Change.

Any non-Type 1 change affecting the interfaces between the CLEC's and BellSouth's operational support systems which BellSouth desires to implement on its own accord. These changes might involve system enhancements, manual and/or business processes. These type changes might also include issues for Pre-Orders, Orders, Queries, and Maintenance Requests that can be submitted and accepted, but may require clarification. This classification does not include changes imposed

upon these interfaces by third parties such as regulatory bodies (which are Type 2 Changes) or standards organizations (which are Type 3 Changes). Type 4 changes may be managed using the Expedited Feature Process, as discussed in Section 4, Part 3.

Type 5 – CLEC Initiated Change.

Any non-Type 1 change affecting interfaces between the CLEC's and BellSouth's operational support systems which the CLEC requests BellSouth to implement is a Type 5 change. These changes might involve system enhancements, manual and/or business processes. These type changes might also include issues for Pre-Orders, Orders, Queries, and Maintenance Requests that can be submitted and accepted, but may require clarification. This classification does not include changes imposed upon these interfaces by third parties such as regulatory bodies (which are Type 2 Changes) or standards organizations (which are Type 3 Changes). Type 5 changes may be managed using the Expedited Feature Process, as discussed in Section 4, Part 3.

Type 6- CLEC Impacting Defects

A defect is any non-Type 1 change that corrects problems discovered in production versions of an application interface. These problems are where the interface is not working in accordance to the BellSouth baseline business requirements or the business rules that BellSouth has published or otherwise provided to the CLECs.

In addition, if functional requirements agreed upon by BellSouth and the CLECs, results in inoperable functionality, even though software business requirements and business rules match; this will be addressed as a defect.

These problems typically affect the CLEC's ability to exchange transactions with BellSouth and may include documentation that is in error, has missing information or is unclear in nature.

Type 6 validated defects may not be managed using the Expedited Feature Process as discussed in Section 4, Part 3.

Defect Change Requests will have three (3) Impact Levels:

- High Impact – The failure causes impairment of critical system functions and no electronic workaround solution exists.
- Medium Impact – The failure causes impairment of critical system functions, though a workaround solution does exist.
- Low Impact – The failure causes inconvenience or annoyance.

Jointly Developed by the Change Control Sub-team comprised
of BellSouth and CLEC Representatives.

Figure 3-1 shows the top-level process that will be used to evaluate Change Requests. The BellSouth Account Team(s) will handle BFR requests and production support issues. Enhancements and defects/expedites will be handled through the Change Control Process.

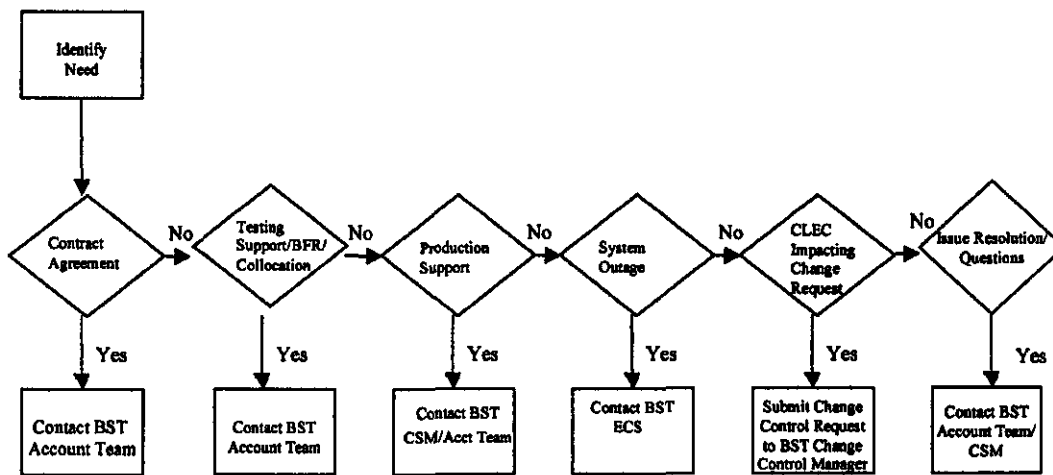


Figure 3-1. Change Control Decision Process

4.0 CHANGE CONTROL PROCESS FLOW

The following two sub-sections describe the process flows for typical Type 1 through Type 5 changes. Each sub-section will describe the cycle times for an activity and document accountability, sub-process activities, inputs and outputs for each step in the process. Section 5 of this document describes the process flow for Type 6 changes. Based on the categorization of the request, the following diagram will help guide a CLEC or BellSouth representative to the appropriate process flow based on Change Control Request Type:

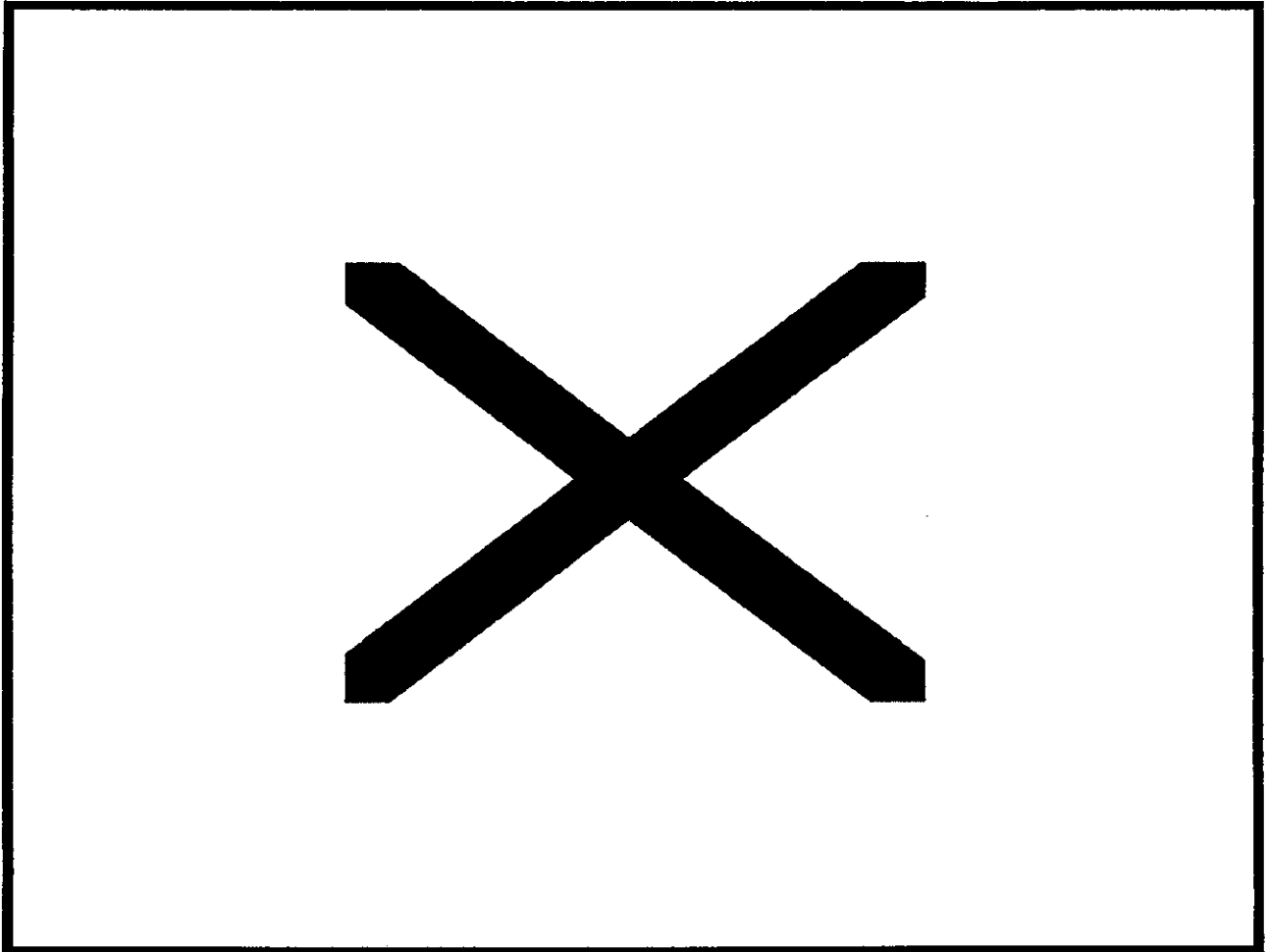


Figure 4-1. Change Control Process Flow

Part 1 - Type 1 Process Flow

Figure 4-2 provides the process flow for resolving a typical Type 1 - System Outage. The Electronic Communications Support (ECS) Group will work with the CLEC community to resolve and communicate information about system outages in a timely manner - actual cycle times are documented in table 4-1 and the sub-process steps. The ECS Helpdesk number is 888-462-8030.

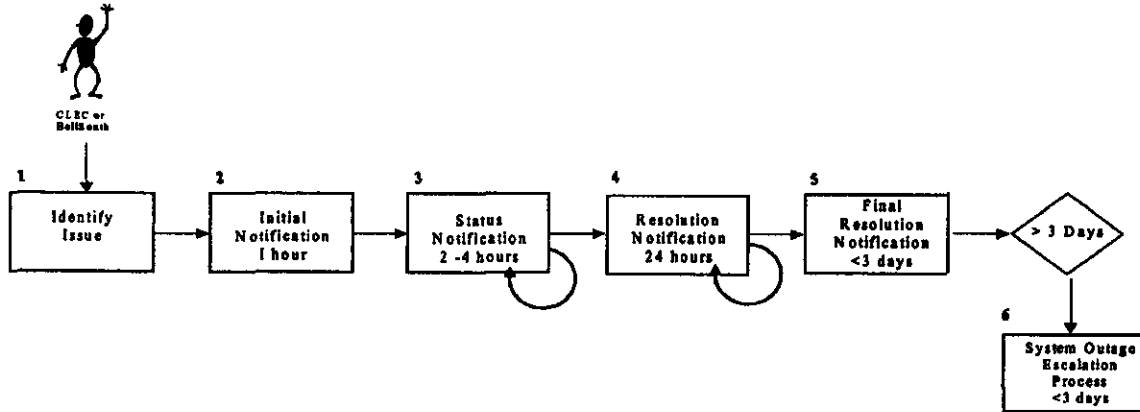


Figure: 4-2. Type 1 Process Flow

Table 4-1 describes the cycle times for each process step that is outlined in the Type 1 - System Outage Process Flow. These cycle times represent typical timeframes for completing the documented step and producing the desired output for the step. In sub-process step 2 "Initial Notification" timeframe for completing this step does not begin until after the outage has been reported. The sub-process steps 3 "Status Notification" and 4 "Resolution Notification" are iterative steps. Iterative steps will be performed one or more times until the exit criteria for that process are met. If resolution is not reached within 20 minutes, BellSouth will provide the initial notification to the CLEC community via e-mail and post outage information on the web.

Table 4-1. Type 1 Cycle Times

	1	2	3	4	5	6
Process Description	Identify Issue	Initial Notification	Status Notification	Resolution Notification	Final Resolution Notification	Escalation
Cycle Time	N/A	1 hour E-mail & BST Website will be posted if outage exceeds 20 minutes	2 - 4 hours (Iterative)	24 hours (Iterative)	< 3 days	> 3 days System Outage Escalation Process

Note: The Escalation Process may be used at any time within Steps 3-6 if cycle times are not met and/or responses are not acceptable.

The table below details the steps, accountable individuals, tasks, the inputs/outputs and the cycle time of each sub-process in the Type 1 Process Flow. This process will be used to capture and communicate system outage information, status notification(s), resolution and notification(s), and final resolution to the CLEC community. Steps shown in the table are sequential unless otherwise indicated.

Table 4-2. Type 1 Detail Process Flow

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
1	CCCM ECS	<u>IDENTIFY ISSUE:</u> <ol style="list-style-type: none"> 1. Internally determine if outage exists with BellSouth Electronic Interface. (The CLEC should perform internal outage resolution activities to determine if the potential problem involves the BellSouth Electronic Interface). 2. Call the BST Electronic Communications Support (ECS) help desk at 888-462-8030. 3. ECS and individual CLEC will determine if the problem is likely to have no impact on the industry. If there is no impact, the outage will be worked on a bilateral basis. 4. ECS will provide the CLEC with a trouble ticket number, if requested, to record and track the change. 	<u>INPUTS:</u> <ul style="list-style-type: none"> • Issue Characteristics • Call to ECS Helpdesk <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Recorded Outage 	N/A
2	ECS	<u>INITIAL NOTIFICATION:</u> <ol style="list-style-type: none"> 1. ECS will post to the Web an Initial Industry Notification that a BellSouth Electronic Interface outage has been identified. An e-mail to the CLECs participating in Change Control will also be distributed. The system ticket number of the outage will be included in the web posting and the email notification. 2. The CLEC initiating the Type 1 System Outage will need to be available for communications on an 	<u>INPUTS:</u> <ul style="list-style-type: none"> • Recorded Outage <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Industry Notification posted on Web • E-mail to CLECs participating in Change Control 	1 Hour If System Outage is not resolved within 20 minutes, a notification will be sent to CLECs via e-mail and

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p>as needed basis.</p> <p>3. ECS will continue to work towards the resolution of the problem</p> <p>4. If outage is resolved, this notice is the first and final notification. The process for the item has ended. Outage Information will be reported in the monthly status meeting by the BCCM.</p>		<p>posted to the web.</p>
3	ECS	<p><u>STATUS NOTIFICATION:</u> (ITERATIVE)</p> <p>1. If the outage is not resolved, ECS will continue to work towards the resolution on the problem.</p> <p>2. ECS may communicate with the industry / affected parties. The following information may be discussed:</p> <ul style="list-style-type: none"> • Clarification of outage • Current status of resolution • Agreement of resolution <p>3. If a resolution has not been identified continue giving status notifications to the industry and continue repeating Step 3 "Status Notification" via the web.</p> <p>4. Proceed to Step 4 "Resolution Notification" when a resolution has been identified.</p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Industry Notification posted on Web <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Status Notification posted on Web • Resolution information 	<p>2-4 hour intervals</p>
4	ECS CCCM	<p><u>RESOLUTION NOTIFICATION:</u> (ITERATIVE)</p> <p>1. The resolution notification is posted to the Web.</p> <p>2. If the item is determined to be a defect, the CLEC that initiated the call will submit a "Change Request Form" checking the Type 6 box.</p> <p>3. If the resolution is not the final resolution the process will loop back to Step 3 "Status Notification". BellSouth will continue to work towards the final resolution.</p> <p>4. When the final resolution has been</p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Status Notification posted on Web • Resolution information <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Resolution Information posted on Web • Final Resolution Information 	<p>24 hours after reporting outage</p>

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		created, proceed to Step 5 "Final Resolution Notification".		
5	ECS	<u>FINAL RESOLUTION NOTIFICATION:</u> 1. The final resolution notification is posted on the Web.	<u>INPUTS:</u> <ul style="list-style-type: none"> • Final Resolution Information <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Final Resolution Notification 	< 3 days
6	CCCM ECS	<u>ESCALATION</u> 1. Escalation is appropriate anytime the interval exceeds the recommended guidelines for notification. 2. Refer to the Type 1 - Escalation Process documented in Section 8.	<u>INPUTS:</u> <ul style="list-style-type: none"> • Information or concern relating to a Type 1 - Systems Outage <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Documented Escalation • Escalation Response 	> 3 days (The Escalation Process may be used at any time within Steps 3-6 if cycle times are not met and/or responses are not acceptable.)

Part 2 – Types 2-5 Process Flow

Figure 4-3 provides the process flow for reviewing, scheduling and implementing a typical Type 2-5 Change Request. The process diagram applies to Change Requests submitted via the Change Control Process. Change Requests should be submitted to the BellSouth Change Control Manager using the standard Change Request form template. This template can be acquired on the Change Control web page. Change Requests may be submitted for interfaces that are currently being utilized, in the testing phase, or if a Letter of Intent is on file with the BCCM.

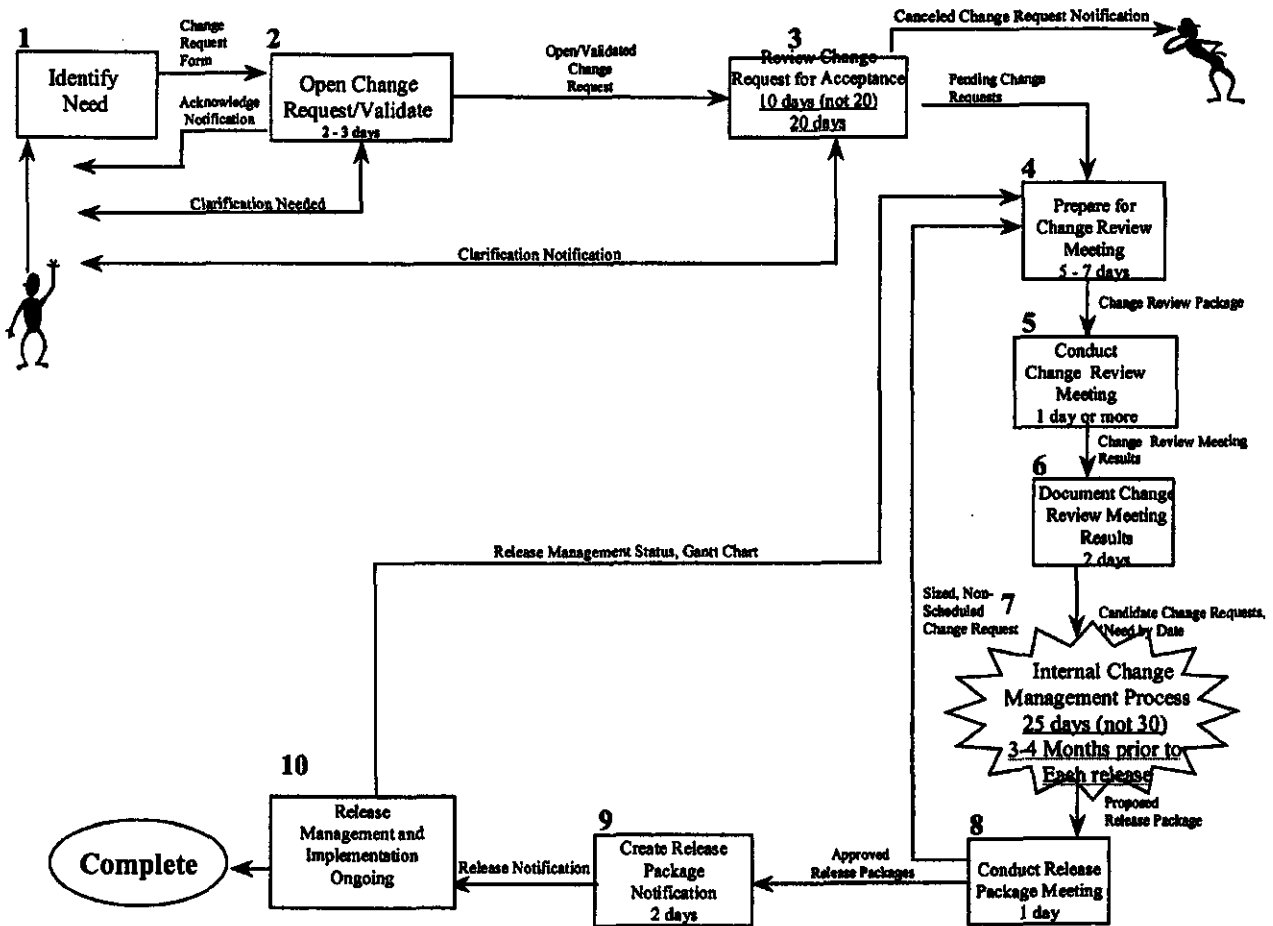


Figure 4-3. Change Control Process Flow

Based on the process flow outlined above:

- For the implementation of new features or modification of current functionality, Final Software Release Notifications requirements and specifications will be provided 30-45 calendar days or more in advance of the implementation date.
- For the implementation of new features or modification of current functionality, Draft requirements and specifications for software releases or systems modifications will be provided to CLECs 90 calendar days or more in advance of the implementation date.
- For the implementation of a new software version, final requirements and specifications will be provided to CLECs 180 calendar days or more in advance of the implementation date.
- All additions and changes to any BellSouth Documentation changes that do not impact CLEC software, for including business rules changes, will be provided to CLECs 30 calendar days or more in advance of implementation date.

-
- Draft user requirements for major software releases will be provided to CLECs at least 90 calendar days in advance of the release implementation date.
 - Final user requirements for major software releases will be provided to CLECs at least 45 calendar days in advance of the release implementation date.

(12-7-00) CLEC community requested that for the above bullets, replace “in advance of the release implementation date” with “in advance of the CLEC test date with BST”.

(1-10-01) CLEC community requested that final specifications (EDI specs and TAG API) for software releases (non-TCIF) be provided at least 45 calendar days in advance of CLEC test date with BST.

- Notification for the implementation of a new TCIF map will be provided at least 180 calendar days in advance of the release implementation date. BellSouth will begin working jointly with the CLECs in the development of the User Requirements for a new TCIF map at least 180 calendar days in advance of the release implementation date.

(12-7-00) CLEC community requested that the notification be provided at least 240 calendar days in advance of the CLEC test date with BST. Also begin working jointly with them in the

development of the User Requirements for a new TCIF map 240 calendar days in advance of CLEC test date with BST.

- Draft user requirements for the implementation of a new TCIF map will be provided to the CLECs at least 120 calendar days in advance of the release implementation date.

(12-7-00) CLEC community requested draft user requirements for a new TCIF map be provided at least 180 calendar days in advance of CLEC test date with BST.

- Final user requirements for the implementation of a new TCIF map will be provided to CLECs at least 60 calendar days in advance of the release implementation date. To accommodate changes that may be necessary as a result of design, construction, and testing efforts, BellSouth will distribute the user requirements at least once a month until one (1) month beyond implementation of the new TCIF map.

(12-7-00) CLEC community requested final user requirements for a new TCIF map be provided at least 120 calendar days in advance of CLEC test date with BST.

(1-10-01) CLEC community requested final specifications (EDI specs and TAG API) for a new TCIF map be provided at least 120 calendar days in advance of CLEC test date with BST.

- All additions and changes to BellSouth business rule documentation, both system and non-system impacting, will be provided to CLECs at least 30 calendar days in advance of the release implementation date.

(1-10-01) CLEC community requested all documentation changes be provided at least 30 calendar days in advance of CLEC test date with BST.

~~CLEC notification of documentation updates (non-system changes) will be posted 5 (five) business days in advance of documentation posting date.~~ (Agree to Remove)

The table below details the steps, accountable individuals, tasks, inputs/outputs and cycle times of each sub-process in the Change Control process. This process will be used to develop Candidate Change Requests that will be used as input to the Internal Change Management Process. Steps shown in the table are sequential unless otherwise indicated.

Table 4-3. Types 2-5 Detail Process Flow

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
1	CCCM BCCM	<p><u>IDENTIFY NEED</u></p> <ol style="list-style-type: none"> 1. Internally determine need for change request. These change requests might involve system enhancements, manual and/or business process changes. 2. Originator and CCCM or BCCM should complete the standardized Change Request Form according to Checklist. 3. Attach related requirements and specification documents. (See Attachment A-1A, Item 22) 4. Appropriate CCCM/BCCM submits Change Request Form and related information via e-mail to BellSouth. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Change Request Form (Attachment A-1) • Change Request Form Checklist (Attachment A-1A) <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Completed Change Request Form with related documentation 	N/A
2	BCCM	<p><u>OPEN CHANGE REQUEST/VALIDATE CHANGE REQUEST FOR COMPLETENESS</u></p> <ol style="list-style-type: none"> 1. Log Request in Change Request Log. 2. Send Acknowledgement Notification (Attachment A-3) via e-mail to originator. 3. Establish request status ('N' for New Request) 4. Review change request for mandatory fields using the Change Request Form Checklist. 5. Verify Change Request specifications and related information exists. 6. Send Clarification Notification via email to the originator (Attachment A-4) if needed. 7. Update Change Request Status to "PC" for Pending Clarification if clarification is needed. <p><u>CLEC or BellSouth Originator</u></p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Completed Change Request Form with related documentation • Change Request Form Checklist • Change Request Clarification Response <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • New Change Request • Acknowledgment Notification • Validated Change Request • Clarification Notification • Industry Notification via e-mail and web posting 	2-3 Bus Days Clarification times would be in addition to cycle time.

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		If clarification is needed, make necessary corrections per Clarification Notification and submit Change Request Clarification Response (Attachment A-2).		
3	BCCM	<p><u>REVIEW CHANGE REQUEST FOR ACCEPTANCE</u></p> <ol style="list-style-type: none"> 1. Review Change Request and related information for content. 2. Change Request reviewed for impacted areas (i.e., system, manual process, documentation) and adverse impacts. 3. Determine status of request: <ul style="list-style-type: none"> • If change already exists or <u>CLEC</u> training issue forward Cancellation Notification (Attachment A-3) to CCCM or BCCM and update status to 'C' for Request Canceled or 'CT' for Training. If Training issue, refer to CSM or Account Team. • If Change Request Clarification Notification not received, validate with CLEC that change request is no longer needed. • If request is accepted, update Change Request status to "P" for Pending in Change Request Log. <p><u>BellSouth Internal Process (Change Review Board):</u></p> <ul style="list-style-type: none"> • A team reviews the CRs twice a week or as necessary. • A lead SME is assigned. • The lead SME researches the CR and makes a recommendation. If the recommendation is to approve the CR, then preliminary business rules are developed and presented to the Change Review Board (CRB). <p>NOTE: The CRB makes the determination to accept or reject a CR. The CRB consists of product SMEs and</p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • New Change Request • Validated Change Request • Clarification Notification (if required) <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Pending Change Request • Clarification Notification (if required) • Cancellation Notification (if required) • CR status updated on web 	<p>20-10 Bus Days</p> <p>20 Bus Days</p>

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p>representatives from the Electronic Interface (EI) staff, LNP staff, Documentation staff, and Change Control.</p> <p>NOTE: See Section 9.0 Terms and Definitions – Change Request Status for valid status codes and descriptions.</p> <p><u>If BellSouth feels that a CLEC initiated change request should not be accepted because of cost, industry direction or because it is believed not technically feasible to implement, BellSouth will open an agenda item on the next monthly status meeting/call and will provide a SME on that call to present its case. With input from other participating CLECs, and subsequent to BellSouth's presentation, BellSouth and the originating CLEC will determine the disposition of the request. BellSouth shall consider all possible options for accommodating the request.</u></p> <p>If BellSouth determines that a CLEC initiated change request should not be accepted because of cost, industry direction or because it is considered not technically feasible to implement, BellSouth will open an agenda item on the next monthly status meeting/call, and will provide a SME on that call to present its case. BellSouth shall consider all possible options for accommodating the request.</p> <p><u>OBF Issues</u> All issues that are being actively discussed at OBF or are on the agenda to be discussed will be deferred. If the issue is not active and will not be considered within the next six (6) months, BellSouth will address the issue.</p> <p>If there is agreement between BellSouth and affected CLECs that an issue should be</p>		

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p>addressed prior to an OBF decision, BellSouth will determine if it can support the request.</p> <p>4. BST may reject the change request based on the following reasons: cost, industry direction or technically not feasible to implement and will provide notification to the originating party. (Agree to Remove)</p> <p>Prior to rejecting a request, all options for accommodating the request will be exhausted. The rejection reason will be shared with the CLECs for input. (Agree to Remove)</p> <p>NOTE: If requested, appropriate SME will participate in the Monthly Status Meeting to address the reason for rejection and discuss alternatives with CLEC community. SME must be provided a minimum of two-week advance notice to participate in upcoming Monthly Status Meeting.</p>		
4	BCCM CCCM	<p><u>PREPARE FOR CHANGE REVIEW MEETING</u></p> <p>NOTE: These activities take place to prepare for Change review meetings when prioritizations take place.</p> <p><u>BCCM</u></p> <ol style="list-style-type: none"> 1. Prepare an agenda. 2. Make meeting preparations. 3. Update Change Request Log with current status for new and existing Change Requests. 4. Prepare and post Change Request to web. 5. Provide preliminary size and scope information on each pending change request to CLECs. <p><u>CCCM</u></p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Pending Change Request Notifications • Project Release Status (Step 10) • Change Request Log <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Change Request Log • CLEC Draft Priority List • Preliminary Size and scope on each Pending change request 	5-7 Bus Days

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<ol style="list-style-type: none"> 1. Analyze Pending Change Requests. 2. Determine priorities for change requests and establish "Desired/Want" dates. 3. Create draft Priority List to prepare for Change Review meeting. <p>The sizing information is a preliminary estimate of the work effort. After prioritization, each interface is assessed in depth to determine the scope of the change request. Based on this assessment, an adjustment in the sizing may be required.</p> <p>SIZING OF WORK EFFORTS:</p> <p><u>LARGE</u></p> <ul style="list-style-type: none"> • Multiple Systems Dependencies • New Functionality <p><u>MEDIUM</u></p> <ul style="list-style-type: none"> • Limited Systems Dependencies • New/Change Existing Functionality <p><u>SMALL</u></p> <ul style="list-style-type: none"> • No system dependencies • Change Existing Functionality 		
5	BCCM CCCM	<p><u>CONDUCT CHANGE REVIEW MEETING</u></p> <p><u>Monthly Status Meetings</u></p> <ol style="list-style-type: none"> 1. Communicate regulatory mandates. 2. Review status of pending/approved Change Requests (including defects/expedites) at monthly status meeting. 3. Review current Release Management statuses. 4. Review issues and action items and assign owners.(Agree to Accept) 5. Present new change requests 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Change Request Log • CLEC Draft Priority List • Desired/Want Dates • Impact analysis • Preliminary Size and scope on each Pending change request <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Meeting minutes • Updated Change Request Log • Candidate Change Request 	<p>1 Bus Day (or as needed based on volume)</p> <p>Meeting Day</p>

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p><u>submitted since previous Monthly Status Meeting. (Agree to Accept)</u></p> <p><u>Prioritization Meetings (held quarterly in March, June, September and December)</u></p> <ol style="list-style-type: none"> 1. Follow Steps 1-3 from Monthly Status Meetings. 2. Initiators present Change Requests. 3. <u>BellSouth presents size and scope of each change request and potential release package combinations.</u> BellSouth presents the preliminary size and scope of each change request. BellSouth presents the number of major releases and dates targeted for the next 12 months. 4. Discuss Impacts. 5. Prioritize Change Requests. 6. Develop final Candidate Requests list of Pending Change Requests by category, 'Need by Dates' and prioritized Change Requests. 7. Update Change Request Log to 'CRC' for Change Review Complete, 'RC' for Candidate Request List, as appropriate. 8. Review issues and action items and assign owners. 	<p>List</p> <ul style="list-style-type: none"> • Issues and Actions Items (if required) 	
6	BCCM	<p><u>DOCUMENT CHANGE REVIEW MEETING RESULTS</u></p> <ol style="list-style-type: none"> 1. Prepare and distribute outputs from Step 5. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Change Request Log • Final Candidate Request List <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Updated Change Request Log • Web posting of meeting output 	2 Bus Days
7	BCCM	<p><u>INTERNAL CHANGE MANAGEMENT PROCESS</u></p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Candidate Change Request 	

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
	CCCM	<p>1. Both BellSouth and CLECs will perform analysis, impact, sizing and estimating activities <u>only</u>(Agree to remove)-to the Candidate Change Requests that <u>meet the criteria established by the Internal Change Management Process</u>.(Agree to Remove) This ensures that participating parties are reviewing capacity and impacts to schedules before assigning resources to activities.</p> <p>2. <u>Sizing and sequencing of prioritized change requests will begin with the top priority items and continue down through the list until the capacity constraints have been reached for each future release.</u></p> <p>Sizing of prioritized change requests will begin with the top priority items and continue down through the list until the capacity constraints have been reached.</p> <p>3. <u>All Candidate Change Requests will be assigned to as many future releases as necessary to complete the assignment process.</u></p> <p>At a minimum, a target release date will be provided for the top five (5) change requests which could include the next and/or future release.</p>	<p>List with agreed upon 'Need by Dates'</p> <ul style="list-style-type: none"> • Change Request Log <p>OUTPUTS:</p> <ul style="list-style-type: none"> • BellSouth's Proposed Release Package • <u>CLEC analysis</u>.(Agree to add) 	<p>30-25 Bus Days</p> <p>TBD</p>
8	BCCM CCCM	<p><u>CONDUCT RELEASE PACKAGE MEETING</u></p> <ol style="list-style-type: none"> 1. Prepare agenda. 2. Make meeting preparations. 3. Evaluate proposed release schedule. 4. <u>Non-scheduled Change Requests returned to Step 4 as Input for the "Prepare for Change Review Meeting" process.</u> 4. Non-scheduled Change Requests will be re-ranked quarterly, along with the new pending requests, to ensure a current list of priorities is always available. This includes any of the top 5 items that may not be 	<p>INPUTS:</p> <ul style="list-style-type: none"> • BellSouth's Proposed Release Package • BellSouth's Release Schedule • Change Request Log • <u>CLEC analysis</u>(Agree to add) <p>OUTPUTS:</p> <ul style="list-style-type: none"> • Approved Release Package • Updated Change Request Log • Meeting Minutes 	<p>1 Bus Day (held ___ months prior to each major release)</p>

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p>of the top 5 items that may not be scheduled for the next release.</p> <p>5. Based on BST/CLEC consensus create Approved Release Package (s) and schedules. <u>During this step if supported by consensus the group may shift scheduled changes among future releases, cancel changes, etc. as necessary to meet changes in business requirements or resource availability.</u> Based on CLEC/BST consensus create the Approved Release Package.</p> <p>6. Identify Release Management Project Manager, if possible.</p> <p>7. Establish date for initial Release Management Project Meeting <u>for newly established releases.</u> (for the next new release)</p> <p>8. All Change Requests that are in the approved scheduled release (s)(Remove) will be changed to "S" status for "Scheduled".</p>	<ul style="list-style-type: none"> • Scheduled Change Requests • Non-Scheduled Change Requests (Return to Step 4 (BellSouth cannot support)) • Date for initial Release Management Project Meeting <u>for newly established releases.</u> (for next new release) 	
9	BCCM	<p><u>CREATE RELEASE PACKAGE NOTIFICATION</u></p> <p>1. Develop and distribute Release Notification Package via web.</p>	<p>INPUTS:</p> <ul style="list-style-type: none"> • Approved Release Package (s)(Remove) <p>OUTPUTS:</p> <ul style="list-style-type: none"> • Release Package Notification 	2 Bus Days after Release Package Mtg.
10	BCCM (Project Managers from each participating company)	<p><u>RELEASE MANAGEMENT AND IMPLEMENTATION</u></p> <p>1. Provide Project Management and Implementation of Release (See Release Management @ Appendix B).</p> <p>2. Lead Project Manager communicates Release Management Project status to BCCM for inclusion in Monthly Status Meetings.</p> <p>3. BellSouth User Requirements for software changes(Agree to accept) will be presented to CLECs. If</p>	<p>INPUTS:</p> <ul style="list-style-type: none"> • Approved Release Package Notification <p>OUTPUTS:</p> <ul style="list-style-type: none"> • Project Release Status • Implementation Date • Project Plan, Work Breakdown Schedule, Risk Assessment, Executive Summary, etc • <u>Draft Specifications and Requirements</u> 	Ongoing

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p>needed, changes will be incorporated and requirements re-baselined.</p> <ul style="list-style-type: none"> • <u>For new features or changes to existing functionality, Draft Specifications and Requirements will be provided NLT 90 days in advance of Implementation. (12-7-00) at least 90 days in advance of CLEC Test Date with BST.</u> • Draft User Requirements for major software release will be provided to the CLECs at least 90 calendar days in advance of the release implementation date. • <u>For new features or changes to existing functionality, Final Specifications and Requirements will be provided NLT 3045 days in advance of Implementation. (12-7-00) At least 45 days in advance of CLEC test date with BST.</u> • Final User Requirements for major software releases will be provided to the CLECs at least 45 days in advance of the release implementation date. <p><u>(12-7-00) Final specifications (EDI Specs and TAG API) for software releases will be provided to the CLECs at least 45 days in advance of CLEC test date with</u></p>	<p><u>Requirements</u></p> <ul style="list-style-type: none"> • <u>Final Specifications and Requirements</u> • <u>Documentation Changes</u> • Implemented Change Request • Draft User Requirements • Final User Requirements • Documentation Changes 	

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p><u>BST.</u></p> <ul style="list-style-type: none"> • Final specifications (EDI Specs and TAG API) for major software releases will be provided to the CLECs at least ___ days in advance of release implementation date. • <u>For the implementation of a new software version, final requirements and specifications will be provided to CLECs 180 days or more in advance of the implementation date.</u> <u>(12-7-00) Notification for the implementation of a new TCIF will be provided at least 240 calendar days in advance of the CLEC Test Date with BST. BellSouth will begin working jointly with the CLECs in the development of the User Requirements for a new TCIF map at least 240 calendar days in advance of the CLEC test date with BST.</u> • <u>Notification for the implementation of a new TCIF map will be provided at least 180 calendar days in advance of the release implementation date. BellSouth will begin working jointly with the CLECs in the development of the User Requirements for a new TCIF map NLT 180 calendar days in advance of the release implementation date.</u> 		

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p><u>(12-7-00) Draft user requirements for the implementation of a new TCIF map will be provided to the CLECs at least 180 calendar days in advance of the CLEC test date with BST.</u></p> <ul style="list-style-type: none"> • Draft user requirements for the implementation of a new TCIF map will be provided to the CLECs at least 120 calendar days in advance of the release implementation date. <p><u>(12-7-00) Final user requirements and specifications (EDI Specs and TAG API) for the implementation of a new TCIF map will be provided to CLECs at least 120 calendar days in advance of the CLEC test date with BST.</u></p> <ul style="list-style-type: none"> • Final User Requirements for the implementation of a new TCIF map will be provided to CLECs at least 60 calendar days in advance of the release implementation date. To accommodate changes that may be necessary as a result of design, construction, and testing efforts, BellSouth will distribute the user requirements at least once a month until one (1) month beyond the implementation of the new TCIF map. <p><u>4. BellSouth Documentation changes, including business rule changes will be provided.(Agree to add)</u></p> <ul style="list-style-type: none"> • <u>All such changes will be provided NLT 30 days in advance of Implementation.</u> <p><u>(12-7-00) provide at least 30 calendar days in advance of CLEC test date with BST.</u></p>		

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<ul style="list-style-type: none"> • All additions and changes to BellSouth business rule documentation, both non-system and system impacting, will be provided to CLECs at least 30 calendar days in advance of the release implementation date. <p>5. Once a Change Request is implemented in a release, the status will be changed to "I" for Change Implemented.</p>		

PART 3 – EXPEDITED FEATURE PROCESS

An Expedited Feature is the inability for a CLEC to process certain types of LSR's based on the existing functionality to BellSouth's Operational Support Systems (OSS's) that are in the scope of CCP. The change request for an expedite must provide details of the business impact and will fall into one of two categories:

- A defect that has been re-classified as a feature where the CLEC/BellSouth has determined should be expedited due to impact
- An enhancement to an existing product or service where the CLEC/BellSouth has determined should be expedited due to impact

Re-classified Defects

When a defect is re-classified as a feature, the CLEC/BellSouth will be notified by Change Control in the defect validation. The CLEC will have the ability to ask BellSouth to expedite the reclassified feature by updating the Change request, marking it as an expedite and sending back to Change Control. The change request will then follow through the Types 2-5 Expedited feature process using agreed upon intervals.

Enhancement to an existing product or service

A CLEC/BellSouth will also have the ability to submit a Type 2-5 change request as an expedited feature request for an enhancement to an existing product or service where the functionality does not currently exist in BellSouth's offered products and services.

For both re-classified defects and enhancements to an existing product or service, the rules surrounding the expedited feature request will be:

- Must be an enhancement to an existing product or service
- Will follow the Expedited Feature process flow described below which is based on the current Types 2-5 process flow using agreed upon intervals with the exception of Steps 4-6 that are eliminated.
- CLEC/BellSouth will be required to give impacts and the consequences for not implementing the feature in the current, next, or point release, best effort.

Figure 4.4 provides the process flow for the expedited feature process.

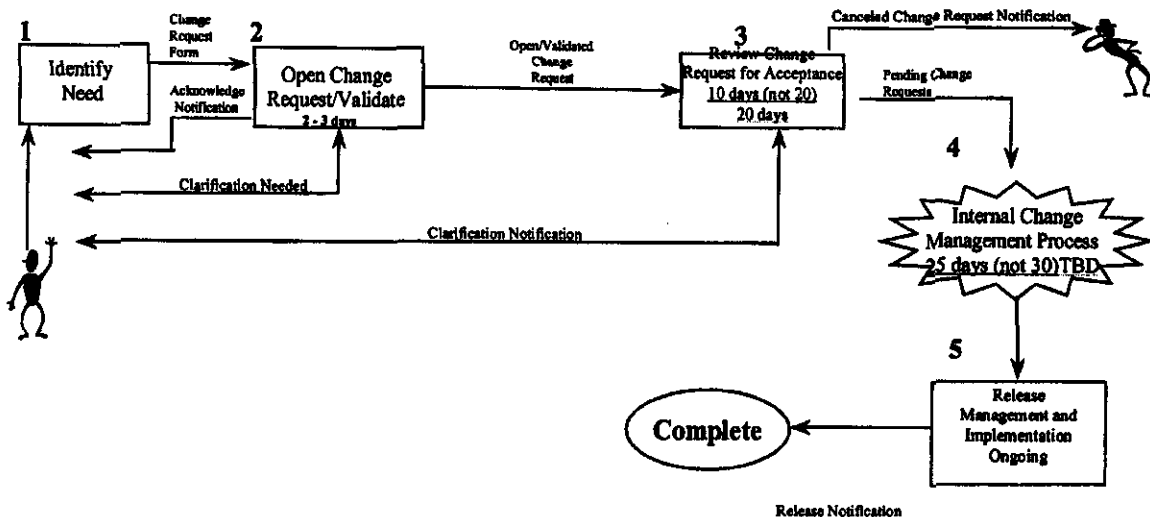


Figure 4.4 – Process Flow for Types 2-5 Expedited Feature Process

The table below details the steps, accountable individuals, tasks, inputs/outputs and cycle times of each sub-process in the expedited feature process. Steps shown in the table are sequential unless otherwise indicated.

Table 4-3. Types 2-5 Expedited Feature Detail Process Flow

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
1	CCCM BCCM	<p><u>IDENTIFY NEED</u></p> <ol style="list-style-type: none"> 1. Internally determine need for change request. These change requests might involve system enhancements, manual and/or business process changes. 2. Originator and CCCM or BCCM should complete the standardized Change Request Form according to Checklist. 3. Attach related requirements and Attachment A-1A, Item 22. 4. Appropriate CCCM/BCCM submits Change Request Form and related information via e-mail to BellSouth. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Change Request Form (Attachment A-1) • Change Request Form Checklist (Attachment A-1A) <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Completed Change Request Form with related documentation 	N/A
2	BCCM	<p><u>OPEN CHANGE REQUEST/VALIDATE CHANGE REQUEST FOR COMPLETENESS</u></p> <ol style="list-style-type: none"> 1. Log Request in Change Request Log. 2. Send Acknowledgement Notification (Attachment A-3) via e-mail to originator. 3. Establish request status ('N' for New Request) 4. Review change request for mandatory fields using the Change Request Form Checklist. 5. Verify Change Request specifications and related information exists. 6. Send Clarification Notification via email to the originator (Attachment A-4) if needed. 7. Update Change Request Status to "PC" for Pending Clarification if clarification is needed. <p><u>CLEC or BellSouth Originator</u> If clarification is needed, make necessary corrections per Clarification Notification and submit Change Request Clarification Response (Attachment A-2).</p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Completed Change Request Form with related documentation • Change Request Form Checklist • Change Request Clarification Response <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • New Change Request • Acknowledgment Notification • Validated Change Request • Clarification Notification • Industry Notification via e-mail and web posting 	1 Bus Day Clarification times would be in addition to cycle time.
3	BCCM	<p><u>REVIEW CHANGE REQUEST FOR ACCEPTANCE</u></p> <ol style="list-style-type: none"> 1. Review Change Request and related information for comment. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • New Change Request • Validated Change Request • Clarification Notification (if 	20 Bus Days

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p>information for content.</p> <ol style="list-style-type: none"> 2. Change Request reviewed for impacted area (i.e., system, manual process, documentation) and adverse impacts. 3. Determine status of request: <ul style="list-style-type: none"> • If change already exists or CLEC training issue, forward Cancellation Notification (Attachment A-3) to CCCM or BCCM and update status to 'C' for Request Canceled or 'CT' for Training. If Training issue, refer to CSM or Account Team. • If Change Request Clarification Notification not received, validate with CLEC that change request is no longer needed. • If request is accepted, update Change Request status to "P" for Pending in Change Request Log. • If request does not meet the expedited feature criteria, it will exit this process and enter the standard Types 2-5 flow, Step 4. <p>NOTE: See Section 11.0 Terms and Definitions – Change Request Status for valid status codes and descriptions.</p> <p>If BellSouth determines that a CLEC initiated expedited change request should not be accepted because of cost, industry direction or because it is considered not technically feasible to implement, BellSouth will open an agenda item on the next monthly status meeting/call, and will provide a SME on that call to present its case. BellSouth shall consider all possible options for accommodating the request.</p> <p>NOTE: If requested, appropriate SME will participate in the Monthly Status Meeting to address the reason for rejection and discuss alternatives with CLEC community. SME must be provided a minimum of two-week</p>	<p>required)</p> <p>OUTPUTS:</p> <ul style="list-style-type: none"> • Validated Expedited Change Request • Clarification Notification (if required) • Cancellation Notification (if required) • CR status updated on web 	

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		advance notice to participate in upcoming Monthly Status Meeting.		
4	BCCM CCCM	<u>INTERNAL CHANGE MANAGEMENT PROCESS</u> 1. Both BellSouth and CLECs will perform analysis, impact, sizing and estimating activities to the Expedited Feature Change Request. This ensures that participating parties are reviewing capacity and impacts to schedules before assigning resources to activities.	<u>INPUTS:</u> <ul style="list-style-type: none"> • Change Request Log <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Release Date for Expedited Feature 	30-25 Still under discussion)
5	BCCM (Project Managers from each participating company)	<u>RELEASE MANAGEMENT AND IMPLEMENTATION</u> 1. Provide Project Management and Implementation of Release (See Release Management @ Appendix B). 2. Lead Project Manager communicates Release Management Project status to BCCM for inclusion in Monthly Status Meetings. 3. BellSouth User Requirements for software changes will be presented to CLECs, if applicable. If needed, changes will be incorporated and requirements re-baselined. 4. BellSouth Documentation changes, including business rules changes will be provided. 5. Once a Change Request is implemented in a release, the status will be changed to "I" for Change Implemented.	<u>INPUTS:</u> <ul style="list-style-type: none"> • Approved Release Package Notification <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Project Release Status • Implementation Date • Documentation Changes 	Ongoing

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5.0 DEFECT PROCESS

A CLEC/BST identified defect will enter this process through the Change Management Team as a Type 6 Change Request. If the defect is validated internally, it will route through this process, and notification provided to the CLEC community via e-mail and web posting.

A Type 6 defect request is any non-type 1 change that corrects problems discovered in production versions of an application interface. These problems are where the interface is not working in accordance to the BellSouth baseline business requirements or the business rules that BellSouth has published or otherwise provided to the CLECs.

In addition, if functional requirements agreed upon by BellSouth and the CLECs, results in inoperable functionality, even though software business requirements and business rules match; this will be addressed as a defect.

These problems typically affect the CLEC's ability to exchange transactions with BellSouth and may include documentation that is in error, has missing information or is unclear in nature.

Type 6 validated defects may not be managed using the Expedited Feature Process as discussed in Section 4, Part 3.

Defect Change Requests will have three Impact Levels:

- **High Impact**

The failure causes impairment of critical system functions and no electronic workaround solution exists.

- **Medium Impact**

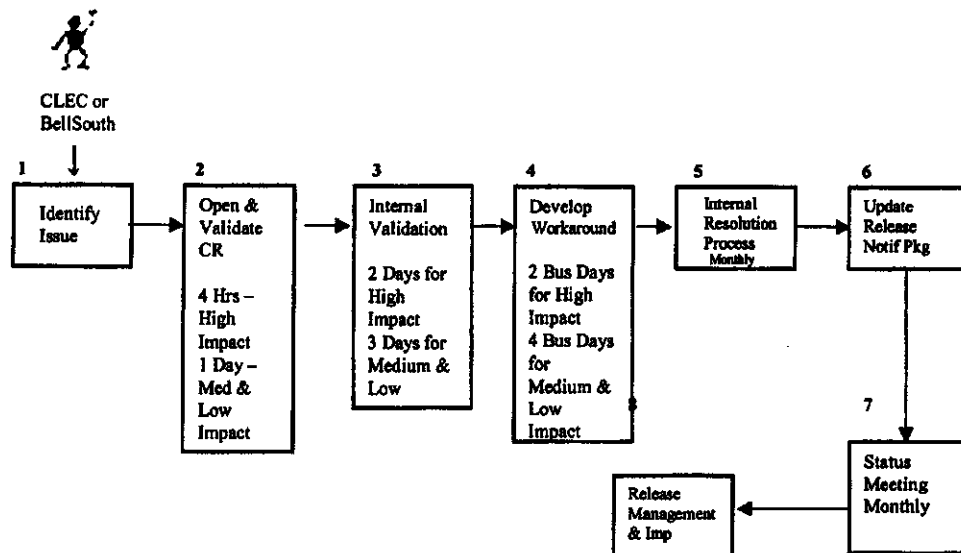
The failure causes impairment of critical system functions, though a workaround solution does exist.

- **Low Impact**

The failure causes inconvenience or annoyance.

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Figure 5-1 provides the process flow for the validation and resolution of a Type 6 Change – CLEC Impacting Defects.



NOTE: The intervals in the boxes above match the intervals in the tables below for High, Medium, and Low Impact defect change requests.

Figure 5-1. Type 6 Process Flow

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The table below details the steps, accountable individuals, tasks, inputs/outputs and cycle times of each sub-process in the Type 6 Process Flow. This process will be used to validate defects, provide status notification(s), workarounds and final resolution to the CLEC community. Steps shown in the table are sequential unless otherwise indicated.

Table 5-1. Type 6 Detail Process Flow

Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
1	CCCM BCCM	<p><u>IDENTIFY NEED</u></p> <ol style="list-style-type: none"> 1. Identify Defect. 2. Originator and CCCM or BCCM should complete the standardized Change Request Form indicating that it is a Type 6. 3. Include description of business need and details of business impact. 4. Attach related requirements and specification documents. These attachments must include the following, if appropriate: <ul style="list-style-type: none"> • PON • OCN • Specific Scenario • Interface(s) affected • Error message (if applicable) • Release or API version (if applicable) 5. Appropriate CCCM/BCCM submits Change Request Form and related information via e-mail to BellSouth Change Management Team. 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Type 6 Change Request <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • Completed Change Request Form (with related documentation if necessary) 	N/A
2	BCCM	<p><u>OPEN & VALIDATE DEFECT/EXPEDITE FORM FOR COMPLETENESS</u></p> <ol style="list-style-type: none"> 1. Log Defect in Change Request Log. 2. Send Acknowledgment Notification via email to initiating CLEC. 3. Establish CR status ('N' for New Defect) 4. BCCM reviews change request for mandatory fields using the Change Request Form Checklist. 5. Verify specifications and related 	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> • Completed Change Request Form (with related documentation if necessary) <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> • New Defect/Expedite • Acknowledgment Notification • Clarification Notification (if required) 	<p>4 Hours for High Impact 1 Bus Day for Medium and Low Impact</p> <p>(Time to be calculated from time of receipt with a cutoff time of 4:00 PM)</p>

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Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		information exists. 6. Send Clarification Notification via email to the originator if needed. 7. Update CR status to "PC" for Pending Clarification if clarification is needed. If clarification is needed, CLEC or BST originator makes necessary corrections per Clarification Notification and submits via email Change Request Clarification Response.		4:00 PM Eastern Time)
3	BCCM	<u>INTERNAL VALIDATION</u> 1. Validate that it is a defect/expedite. 2. Perform internal defect/expedite analysis. 3. <u>Determine status of request:</u> <ul style="list-style-type: none"> • If change already exists or CLEC training issue. • If change already exists or CLEC training issue, forward Cancellation Notification to CCM or BCCM and update status to 'C'. • Send Clarification Notification via email if needed and update status to 'PC' for Pending Clarification. • If Change Request Clarification Notification not received, validate with CLEC that change request is no longer needed. • If request is valid, update Change Request status to 'V' for Validated Defect/Expedite and indicate appropriate Impact Level. • If CLEC does not agree with the validation, the CLEC may appeal the issue or escalate. • Based on detail analysis, BellSouth will reaffirm the impact level that is stated on the request. • If the process is operating as specified in the baselined requirements and published business rules, the BCCM will communicate the results via e-mail 	<u>INPUTS:</u> <ul style="list-style-type: none"> • New Defect/Expedite <u>OUTPUTS:</u> <ul style="list-style-type: none"> • Validated Defect/Expedite • Defect/Expedite notification to CLEC community via e-mail and web posting • Clarification Notification (if required) • Cancellation Notification (if required) • Status provided for High Impact Defects to originator via email within 24 hours. 	1 Bus Day for <u>High and Medium Impact</u> 2 Bus Days for High Impact 3 Bus Days <u>Medium and Low Impact</u>

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Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		<p>to the originator to discuss/determine the next step(s).</p> <ul style="list-style-type: none"> If issue is re-classified as a standard feature change, provide supporting information via email to the originator for review and feedback. The Change Request will exit the defect process flow and enter Types 2-5 process flow (enter at Step 3). <p>NOTE: See Section 9.0 Terms and Definitions – Defect Status for valid status codes and descriptions.</p> <p>Defect notification will be provided to CLEC community via e-mail and web posting.</p>		
4	BCCM	<p>DEVELOP AND VALIDATE WORKAROUND (IF APPLICABLE)</p> <ol style="list-style-type: none"> Defect workaround identified. Change Request status changed to “W” for workaround identified. Workaround is communicated via e-mail to originating CLEC and to the CLEC community via email and web posting. If appropriate, communication to the CLEC community regarding workaround will be discussed via conference call. <p>If it is determined that additional time is needed to develop workaround due to the complexity of the defect, notification will be provided to CLEC community via e-mail and web posting.</p>	<p>INPUTS:</p> <ul style="list-style-type: none"> Validated Defect Clarification Notification (if required) <p>OUTPUTS:</p> <ul style="list-style-type: none"> Workaround (if applicable) Clarification Notification (if required) Cancellation Notification (if required) E-mail and web posting of workaround 	<p><u>4 Bus Days-1 Bus Day for High and Medium Impact</u></p> <p>2 Bus Days for High Impact</p> <p><u>4 Bus Days for Low Impact</u></p> <p>4 Bus Days for Medium and Low Impact</p>
5	BCCM	<p>INTERNAL RESOLUTION PROCESS</p> <ol style="list-style-type: none"> Schedule and evaluate Defects based on capacity and business impacts to the CLECs and BellSouth. Provide status updates to the CLEC community via email as the status changes until the defect is implemented. 	<p>INPUTS:</p> <ul style="list-style-type: none"> CLEC/ BST input <p>OUTPUTS:</p> <ul style="list-style-type: none"> Defect Release Schedule 	<p><u>Monthly or when status changes, whichever occurs first.</u></p> <p><u>Validated High and</u></p>

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Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		implemented.		<p><u>Medium Impact defects will be implemented within a 4 – 10 business day range, best effort.</u></p> <p>Validated High Impact Defects will be implemented within a 4-25 business day range, best effort. Medium Impact Defects will be implemented within 90 days. Low Impact defects will be implemented best effort. <u>Low Impact defects will be implemented within a 4 – 20 business day range, best effort.</u></p> <p>(REMOVE)</p>
6	BCCM	<p><u>UPDATE RELEASE PACKAGE NOTIFICATION</u></p> <p>1. Update and distribute release notification package via web.</p>	<p><u>INPUTS:</u></p> <ul style="list-style-type: none"> Defect Information <p><u>OUTPUTS:</u></p> <ul style="list-style-type: none"> Updated Release Package 	Based on release constraints for defects (may be less than 30)

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Step	Accountability	Sub-processes Activities	Inputs and Outputs	Cycle Time
		2. All Change Requests that are in the approved scheduled release will be changed to "S" status for "Scheduled". Note: The release notification will be published in a timely manner, based on the release constraints associated with the defect/expedite.	Notification • Scheduled Change Request	days).
7	BCCM	<u>MONTHLY STATUS MEETING</u> 1. Provide status of Defect 2. Solicit CLEC/BellSouth input 3. Update Defect information as needed.	<u>INPUTS:</u> • Defects Received • Change Request Log • Defect Analysis • Workaround (if applicable) <u>OUTPUTS:</u> • Updated status • Updated Change Request Log • Meeting minutes	Monthly or when status changes, whichever occurs first.
8	BCCM	<u>RELEASE MANAGEMENT AND IMPLEMENTATION</u> The following release management activities will pertain to Type 6 changes: 1. Lead project manager communicates release management project status to BCCM for inclusion in Monthly status meetings. 2. Once a defect is implemented in a release, the status will be changed to "I" for Change Implemented.	<u>INPUTS:</u> • Approved Release Package Notification <u>OUTPUTS:</u> • Project Release Status • Implementation Date • Implemented Change Request	Ongoing

6.0 CHANGE REVIEW – PRIORITIZATION – RELEASE PACKAGE DEVELOPMENT AND APPROVAL

Part 1 – Change Review Meeting

The Change Review meeting provides the forum for reviewing and prioritizing Pending Change Requests, generating Candidate Change Requests, submitting Candidate Change Requests for sizing, and reviewing the status of all release projects underway. Status update meetings will be held monthly and are open to all CLEC's. Meetings will be structured according to category (pre-order/order, maintenance, manual and documentation, etc.). Prioritization meetings will be held quarterly. ~~scheduled to coincide with the published release schedules. [For non-system impacting changes, there will be a 5 (five) business day notice for documentation updates.] All additions and changes to BellSouth business rule documentation will be provided to CLECs NLT 30 calendar days in advance of the release implementation date. The prioritization meeting dates will be communicated when the release schedule is published.~~

During the Change Review Meeting each originator of a Change Request will be allowed 5 (five) minutes to present their Change Request. A question and answer session not to exceed 15 minutes will follow this presentation. After all presentations for a particular category are complete, the prioritization process will begin.

The Change Request Log will be distributed 5 - 7 (five to seven) business days prior to the Change Review meeting. A valid and complete Change Request must be received 30 business days prior to the Change Review Meeting. Change Requests must be accepted and in "Pending" status to be placed on the agenda for the next scheduled meeting.

Note: Status Meetings will occur monthly. Prioritization meetings will be scheduled to occur in March, June, September and December and will include the monthly status meeting agenda items.

Part 2 – Change Review Package

The Change Review Package will be distributed to all participants 5 – 7 (five to seven) business days prior to the Change Review meeting. The package will include the following:

- Meeting Notice
- Agenda
- Change Request Log (List of Change Requests to be reviewed)

-
- BellSouth's estimate of the size and scope of each Change Request.
 - Schedule of releases and capacity in each (BellSouth cannot support providing capacity information)
 - Reference to Change Control Process on the BST website (for CLECs not familiar with the process, new CLECs or CLECs that choose to participate after the initial rollout)
 - Status Reports from each of the active Release Management Project Teams

Part 3 – Prioritizing Change Requests

Prior to the Change Review Meeting, each participating CLEC should determine priorities for change requests and establish “desired/want” dates. The CLEC should use the Preliminary Priority List form as provided via the web.

Final prioritization will be determined at the Change Review meeting after presentation of the Change Requests for each category.

Prioritization Voting Rules

- CLEC must either be using an interface within a category (i.e. ordering), in the testing phase or have a letter of intent on file with the BellSouth Change Control Management Team to participate in the voting process
- One vote per CLEC, per category
- No proxy voting
- Each company may bring the number of participants necessary to represent their position. If the number of participants grow to be unmanageable, CLECs and BellSouth will revisit the issue of representation to apply some restrictions.
- Forced Ranking (1 to N, with N being the highest) will be used
- CLECs may choose to vote “no” on change requests that may potentially negatively impact its business. If a majority of CLECs vote “no” on any certain change request, that request will not be implemented. BellSouth accepts the above with the addition of the following language: “Deviations may be required due to business requirements”.
- Votes will be tallied to determine order of ranking
- Changes will be ranked by category
- Manual processes and documentation changes will be prioritized separately; however they will need to be synchronized with the electronic interface changes.
- In case of a tie, the affected Changes will be re-ranked and prioritized based on the re-ranking

Example: The top 2 Changes from high to low are E5 and E2, with E1 and E4 tied for 3rd. E1 and E4 would be re-ranked and prioritized according to the re-ranking.

Pre-Order LENS	CLEC 1	CLEC 2	CLEC 3	Total
E1	3	6	1	10
E2	4	2	6	12
E3	6	1	2	9
E4	2	4	4	10
E5	5	5	3	13
E6	1	3	5	9

Part 4 – Developing and Approving Release Packages

Subsequent to the Change Review Meeting BellSouth and the CLECs will each evaluate and analyze the Candidate Change Requests in preparation for the Release Package Meeting that will be held 25 business days later.

Subsequent to the Change Review Meeting, BellSouth and the CLECs will each evaluate and analyze the Candidate Change Requests in preparation for the Release Package Meeting that will be held ____ (TBD).

- Sizing and sequencing of change requests will be accomplished at the Prioritization Meeting. CLECs may take into account the size and scope when prioritizing items.
- BellSouth will develop several variations of release packages to include all of the prioritized requests.
- All Candidate Change Requests will be assigned to as many future releases as necessary to complete the assignment process.

At a minimum, a target release date will be provided for the top five (5) change requests, which could include the next and/or future releases.

During the Release Package Meeting BST will present its proposed release packages. BST and CLECs will then vote on the release package or combination of release packages to be implemented. BST/CLEC consensus will be used to create Approved Release Package (s) and schedules. During this step if supported by consensus the group may shift scheduled changes among future releases, cancel changes, etc. as necessary to meet changes in business requirements or resource availability.

During the Release Package Meeting, BellSouth will present its proposed release package for the next release, along with target dates for the top five (5) change requests. CLEC/BST consensus will be used to create the Approved Release Package.

Change Requests may not be implemented in priority order due to the complexity of the Change Request, the relationship between the implementation of one change and changes specified in other Change Requests, and other factors. Implementation decisions will remain with BellSouth's discretion, consistent with applicable law and regulatory authority and resource constraints. BellSouth will consider the prioritization in exercising this discretion.

7.08.0 INTRODUCTION AND RETIREMENT OF INTERFACES

Introduction of New Interfaces

BellSouth will introduce new interfaces to the CLEC Community as part of the Change Control Process. BellSouth will seek to conform to the notification process for Type 4 (BellSouth Originated) changes as described in this document. In the event that BellSouth is forced to deviate from the Type 4 (BellSouth Originated) process for new non-impacting interface functionality, BellSouth will notify all CLECs of the deviation as promptly as possible. When a new interface request is submitted, BellSouth will present information on the new interface and hold an open discussion at the next monthly status meeting. A description of the proposed interface will be submitted to the BCCM. The BCCM will add an agenda item to discuss the new interface at the monthly status meeting. BellSouth will be given 30-45 minutes to present information on the proposed interface. If BellSouth requests additional time for the presentation, a separate meeting will be scheduled to review the proposed interface, so that the information can be presented in its entirety. The objective will be to identify interest in the new interface and obtain input from the CLEC community. BellSouth will provide specifications on the interface being developed to the CLEC Community using the timeframes established in Part 4, Section 2. As new interfaces are deployed, they will be added to the scope of this document document as appropriate, based on the use by the CLEC community and requested changes will be managed by this process.

BellSouth will introduce new interfaces to the CLEC Community as part of the Change Control Process. A description of the proposed interface will be submitted to the BCCM. The BCCM will add an agenda item to discuss the new interface at the monthly status meeting. BellSouth will be given 30-45 minutes to present information on the proposed interface. If BellSouth requests additional time for the presentation, a separate meeting will be scheduled to review the proposed interface, so that the information can be presented in its entirety. The objective will be to identify interest in the new interface and obtain input from the CLEC community. BellSouth will provide specifications on the interface being developed to the CLEC community. As new interfaces are deployed, they will be added to the scope of this document, as appropriate, based on the use by the CLEC and requested changes will be managed by this process.

Retirement of Interfaces

As active interfaces are retired, BellSouth will notify the CLECs by submitting a Type 4 change request (Remove) through the Change Control Process and post a CLEC Notification Letter to the web six (6) months prior to the retirement of the interface. BellSouth will have the

discretion to provide shorter notifications (30-60 days) on interfaces that are not actively used and/or have low volumes. BellSouth will consider a CLEC's ability to transition from an interface before it is scheduled for retirement. BellSouth will ensure that its transition to another interface does not negatively impact a CLEC's business.

BellSouth will only retire interfaces if an interface is not being used, or if BellSouth has a replacement for an interface that provides equal or better functionality for the CLEC than the existing interface.

Retirement of Versions

When software versions are retired, BellSouth will give the CLECs a 120 day notification.

A CLEC may respond to Change Control with its desire to extend a retirement date. The CLEC must explain why the scheduled retirement date is not acceptable by providing the impact to its business.

8.0 ESCALATION PROCESS

Guidelines

- The ability to escalate is left to the discretion of the CLEC based on the severity of the missed or unaccepted response/resolution.
- Escalations can involve issues related to the Change Control process itself.
- For change requests, the expectation is that escalation should occur only after normal Change Control procedures (e.g. communication timelines) have occurred per the Change Control agreement.
- Three levels of escalation will be used.
- For Type 1 issues, the escalation process is agreed to allow BellSouth a one-day turnaround for each cycle of escalation.
- For Types 2-5 issues, the escalation process is agreed to allow BellSouth a five-day turnaround for each cycle of escalation.(Excludes Expedites)
- For Type 6 High and Medium Impact(See next bullet) issues, the escalation process is agreed to allow BellSouth a ~~three~~one-day turnaround to provide a status for each cycle of escalation.
- For Type 6 High Impact issues, the escalation process is agreed to allow BellSouth a two (2) day turnaround to provide a status for each cycle of escalation. For Type 6 Medium and Low Impact issues, the escalation process is agreed to allow BellSouth a five (5) day turnaround to provide a status for each cycle of escalation.
- For Type 6 Low Impact and Type 2-5 Expedite Process issues, the escalation process is agreed to allow BellSouth a three-day turnaround to provide a status for each cycle of escalation.(See next bullet)
- For Types 2-5 Expedite Process issues, the escalation process is agreed to allow BellSouth a three (3) day turnaround to provide a status for each cycle of escalation.
- Each level will go through the same Cycle, which is described below.

-
- All escalation communications may be optionally distributed by the CLEC to the industry and BellSouth Change Control e-mail unless there is a proprietary issue.

Cycle for Type 1 System Outages

Contact List for Escalation - ECS Group - Type I Changes

If the originator does not receive a call back from the EC Support Group according to the times specified in this document, they may escalate according to the following list:

Escalation Level	Name and Title	Office Number	Pager Number	Email Address
1st Level	Don Tighe Manager - EC Support Group Interconnection Operations	404-532-2233	1-800-946-4646 PIN 1440050	<u>Don.Tighe@bridge.bellsouth.com</u>
2nd Level	Bruce Smith Operations Director - EC Support Group Interconnection Operations	205-988-7211	1-800-542-3260	<u>Bruce.Smith@bridge.bellsouth.com</u>
3rd Level	Bill Reid Operations Assistant Vice President Interconnection Operations	205-988-1447	1-800-946-4646 PIN 1179523	<u>Bill.C.Reid@bridge.bellsouth.com</u>

NOTE: If a call is escalated without first attempting to contact the ECS Helpdesk, the caller will be referred back to the ECS Helpdesk.

Escalation Cycle for Types 2-6 Change Requests

- Item must be formally escalated as an e-mail sent to the appropriate escalation level within BellSouth with a copy to the industry and BellSouth Change Control e-mail.
- Subject of e-mail must be CLEC (CLEC Name) ESCALATION-CR#, if applicable, Level of Escalation, unless it is proprietary.
- Content of e-mail must include:
 - Definition and escalation of item.
 - History of item.
 - Reason for escalation.
 - Desired outcome of CLEC.
- Impact to CLEC of not meeting the desired outcome or item remaining on current course of action as previously discussed at the Change Control Meeting for enhancements.
- Contact information for appropriate Level including Name, Title, Phone Number, and E-mail ID.
- For escalation Level 2, forward original e-mail and include any additional information including the reason that the matter could not be resolved at Level 1.
- For escalation Level 3, forward original e-mail and include any additional information including the reason that the matter could not be resolved at Levels 1 and 2.
- BellSouth will reply to escalation request with acknowledgement of receipt within 4 hrs and begin the escalation process through Level of escalation.
- The escalating CLEC should respond to BellSouth within 5 days as to whether escalation will continue or the BellSouth response has been accepted as closure to the item.
- If the BellSouth position suggests a change in the current disposition of the item (i.e., what has already been communicated to the industry), a conference call will be held

within 1 business day of the BellSouth decision in order to provide industry notification with the appropriate executives.

- BellSouth will publish the outcome of the conference call to the industry via web.
- If unsatisfied with an outcome, either party can seek appropriate relief.

Contact List for Escalation - Type 2 - 6 Changes

Types 2-5 Changes: Within 5 business days of receipt (4 from acknowledgement), BellSouth Change Control appropriate executives will reply through BellSouth Change Control with BellSouth's position and explanation for that position.

Type 6, High and Medium Impact Changes: Within 1 business day of receipt, BellSouth Change Control appropriate executives will reply through BellSouth Change Control with BellSouth's position and explanation for that position.

Type 6 High Impact Changes: Within 2 business days of receipt, BellSouth Change Control appropriate executives will reply through BellSouth Change Control with BellSouth's position and explanation for that position. Type 6 Medium and Low Impact Changes: Within five (5) business days of receipt, BellSouth Change Control appropriate executives will reply through BellSouth Change Control with BellSouth's position and explanation for that position.

Type 6 Low Impact and Type 2-5 Expedite Changes: Within 3 business days of receipt (2 from acknowledgement), BellSouth Change Control appropriate executives will reply through BellSouth Change Control with BellSouth's position and explanation for that position.

Type 4-5 Expedite Changes: Within three (3) business days of receipt (2 from acknowledgment), BellSouth Change Control appropriate executives will reply through BellSouth Change Control with BellSouth's position and explanation for that position.

Escalations should be made according to the following list.

Escalation Level	Name and Title	Office Number	Email Address
1st Level	Valerie Cottingham Sales Director Change Control Process	205-321-2168	Valerie.cottingham@bridge.bellsouth.com
2nd Level	Terrie Hudson Director (for Systems Issues)	770-936-3740	Terrie.Hudson@bridge.bellsouth.com
	Joy Lofton Director (for Business Rules/Operations Issues)	404-927-7828	Joy.A.Lofton@bridge.bellsouth.com
3rd Level	Doug McDougal Senior Director (for Systems Issues)	404-927-7505	Doug.McDougal@bridge.bellsouth.com
	Dee Freeman-Butler Senior Director (for Business Rules/Operations Issues)	404-927-3545	Dee.Freeman2@bridge.bellsouth.com

Dispute Resolution Process

In the event that an issue is not resolved through the Escalation Process as described herein, including escalation within each company to the person with ultimate authority for Change Control operations, and the services of a Joint Investigative Team when appropriate, BellSouth and the impacted CLEC(s) agree as follows:

~~to follow this Dispute Resolution Process. BellSouth and the CLEC shall assemble a Joint Investigative Team, within one week, comprised of subject matter experts. The party prompting the dispute should initiate the formation of the team. The team should be co-chaired by representatives of BellSouth and the CLEC respectively. The investigative team will conduct a root-cause analysis to determine the source of the problem, if one exists, and then develop a plan for remedying it. The parties to the dispute must escalate the issue within each company to the person who has ultimate authority for State operations in an effort to achieve a resolution.~~

~~If the dispute cannot be resolved between the companies after these steps are taken, then either party to the dispute may file a formal complaint with the State PSC through the Director of the Telecommunications section for binding mediation. The Director of the Telecommunications section, or his appointee, shall rule upon the complaint within 30 days of its filing. If either party is then aggrieved, it may file a formal complaint with the State PSC.~~

- Either party to the dispute may request mediation through the State Public Service Commission, if available. If mediation is requested, both parties shall participate in good faith.
- Either party may file a formal complaint with the State PSC, requesting resolution of the issue, without necessity for prior mediation.

In the event that an issue is not resolved through the Escalation Process as described herein, including (1) escalation within each company to the person with ultimate authority for Change Control operations, and (2) the services of a joint investigative team, when appropriate, comprised of representatives from BellSouth and the affected CLECs. Resolution of the dispute shall be accomplished as set forth below:

- Either BellSouth or any CLEC affected by the dispute may request mediation through the State Public Service Commission, if available. If mediation is requested, parties shall participate in good faith. If the mediation results in the resolution of the dispute, that resolution shall apply to all CLECs affected by the dispute.

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- Without necessity for prior mediation, either BellSouth or any CLEC affected by the dispute may file a formal complaint with the appropriate state regulatory agency, requesting resolution of the issue.

9.0 CHANGES TO THIS PROCESS

The current, approved version of this process document will be stored under the component name "Ccp.doc" (the date of the latest CCP document will be included in the file name). The BellSouth Change Control Manager BCCM (and alternate) will be the only persons authorized to update the document version.

Requests for changes to the Change Control Process may be submitted to the BellSouth Change Control Manager (BCCM) using the Change Request form located in the Appendix A. Cosmetic changes may be made and published by the BCCM (or alternate) without further review. Other changes will be reviewed at the monthly Change Review status meetings following receipt of the request, if included in the published meeting agenda. Following this initial review the BCCM and a CLEC representative appointed by the CLECs participating in the review shall prepare an official E-mail ballot for distribution. The official ballot will detail the change being requested, and the significant arguments presented for and against the change during the review. The ballot will be distributed one week following the Status Meeting. CLEC's and BellSouth will have one week in which to cast their vote. Only ballots transmitted before midnight of the due date will be counted. Implementation of such changes will require a two-thirds affirmative ——— vote for approval. All changes will be submitted as a change request and reviewed.

To be discussed at the February 21, 2001 meeting.

10.0 TESTING ENVIRONMENT

Requests related to the processes of testing an interfaces will be included in the Change Control Process. Changes to BellSouth's testing environments and supporting processes will be submitted through the Change Control Process as a Type 4 or Type 5 request. The requests will follow the guidelines and intervals set forth in the Type 2-5 process flow.

BellSouth offers Carrier Testing to CLECs in an open proven test environment for Telecommunications Access Gateway (TAG) and Electronic Data Interchange (EDI) interfaces. The testing opportunities offered are BETA and New Carrier Testing.

BellSouth will also provide a pre-release testing environment for TAG and EDI that will be available to CLEC's 30 days prior to the implementation of any new releases. This environment will be a wholly separate, non-production environment for all preordering and ordering interfaces and will mirror the production environment.

NOTE: CLECs/BST agreed to re-evaluate this section after the CLEC Test Environment is implemented in 1st Qtr. 2001.

BETA testing is offered to those CLECs that express an interest in assisting BellSouth validate a Telecommunications Industry Forum (TCIF) change for the affected interfaces. The opportunity for testing is submitted via the BellSouth Account Team and is negotiated with the Carrier Testing group. BellSouth opens the test environment for BETA testing after "major releases". CLECs are selected on a "first come, first served basis".

New Carrier Testing is offered to those CLECs who are transitioning from a manual to an electronic environment or from one TCIF issue to another. New Carrier Testing is available to all CLECs and is scheduled with the BellSouth Account Team and Carrier Testing group.

For additional details on the testing environment, regulations and guidelines, refer to the following BellSouth public Internet sites:

EDI

www.interconnection.bellsouth.com/markets/lec.html

Select "Customer Guides"

Select "Local Exchange Ordering Guides"

Select "BellSouth EDI Specifications – TCIF 9"

Select "Section 7 – EDI Testing Guidelines for CLECS"

TAG

www.interconnection.bellsouth.com/markets/lec.html

Select "OSS Information Center"

Select "TAG Documentation"

This site is password protected. You should obtain the password from your Account Team representative.

11.0 TERMS AND DEFINITIONS

A

Account Team. The Account Teams represent the CLECs and all CLEC interests within BellSouth, that is, the Account Team is the CLECs' advocate within BellSouth. Some of the Account Team functions are listed below:

- Contract Negotiations
- Enhanced Billing Options Negotiations
- Customer Education
- Technical Assistance
- General Problem Resolution
- Tariff Interpretation
- BonaFide Requests (BFR)
- Production Support
- Collocation
- Testing Support
- Project/Order Coordination
- Rate Quotations

Accountability. Individual(s) having responsibility for completing and producing the outputs of each sub-process as defined in the Detailed Process Flow.

Acknowledgement Notification. Notification returned to originator by BCCM indicating receipt of Change Request.

Approved Release Package. Calendar of Candidate Change Requests with consensus target implementation dates as determined at the Release Package Meeting.

B

BellSouth Change Control Manager (BCCM). BellSouth Point of Contact for processing Change Requests and defects/expedites.

BFR (Bonafide Request). Process used for providing custom products and/or services. Bonafide Requests are outside the scope of the Change Control Process and should be referred to the appropriate BellSouth Account Team.

Business Day. A business day is considered any Monday-Friday workday that does not fall on an official BellSouth holiday.

Business Rules. The logical business requirements associated with the Interfaces referenced in this document. Business rules determine the when and the how to populate data for an Interface. Examples of data defined by Business Rules are:

- The five primary transactions sets: 850, 855, 860, 865, and 997
- Data Element Abbreviation and Definition
- Activity Types at the appropriate level (account, line, feature) and the associated Usage Type (optional, conditional, required, not applicable, prohibited)
- Conditions/rules associated with each Activity and Usage Type
 - ◇ Dependencies relative to other data elements
 - ◇ Conditions which will be edited within BellSouth's OSSs
- Valid Value Set
- Data Characteristics

C

Cancellation Notification. Notification returned to originator by the BCCM indicating a Change Request has been canceled for one of the following reasons: BST cancellation, duplicate request, training issue, or failure to respond to clarification.

Candidate Request List. List of prioritized Change Requests with associated "Need by Dates" as determined at an Change Review Meeting. These requests will be submitted for sizing and sequencing.

Candidate Change Request. Change Requests that have been prioritized at an Change Review Meeting and are eligible for independent sizing and sequencing by BellSouth and each CLEC.

Change Request. A formal request submitted on a Change Request Form, to add new functions, defects/expedites or Enhancements to existing Interfaces (as identified in the scope) in a production environment.

- Type 1 – BellSouth System Outage. A System Outage is where the system is totally unusable or there is degradation in an existing feature or functionality within the interface.
- Type 2 – Regulatory Change. Any non-Type 1 changes to the interfaces between the CLEC's and BellSouth's operational support systems mandated by regulatory or legal

- entities, such as the Federal Communications Commission (FCC), a state commission/authority or state and federal courts.
- Type 3 – Industry Standard Change. Any non-Type 1 changes to the interfaces between the CLEC's and BellSouth's operational support systems required to bring these interfaces in line with newly agreed upon telecommunications industry guidelines.
 - Type 4 – BellSouth Initiated Change. Any non-Type 1 changes affecting the interfaces between the CLEC's and BellSouth's operational support systems which BellSouth desires to implement on its own accord.
 - Type 5 – CLEC Initiated Change. Any non-Type 1 changes affecting the interfaces between the CLEC's and BellSouth's operational support systems, which the CLEC requests BellSouth to implement.
 - Type 2-5 – Expedited Feature Change. The inability for a CLEC to process certain types of LSR's based on the existing functionality to BellSouth's Operational Support Systems (OSS's) that are in the scope of CCP. The change request for an expedite must provide details of the business impact and will fall into one of two categories: 1) A defect that has been re-classified as a feature where the CLEC/BellSouth has determined should be expedited due to impact and 2) An enhancement to an existing product or service where the CLEC/BellSouth has determined should be expedited due to impact.
 - Type 6 – CLEC Impacting Defect. A defect is any non-Type 1 change that corrects problems discovered in production versions of an application interface. These problems are where the interface is not working in accordance to the BellSouth baseline business requirements or the business rules that BellSouth has published or otherwise provided to the CLECs. In addition, if functional requirements agreed upon by BellSouth and the CLECs, results in inoperable functionality, even though software business requirements and business rules match; this will be addressed as a defect. These problems typically affect the CLEC's ability to exchange transactions with BellSouth and may include documentation that is in error, has missing information or is unclear in nature. The CLEC and/or BellSouth may initiate defect changes affecting interfaces between the CLEC's and BellSouth's operational support systems. These type changes might also include issues for Pre-Orders, Orders, Queries, and Maintenance Requests that can be submitted and accepted, but may require workarounds or clarification.

Change Request Status. The status of a Change Request as it flows through the Change Control process as described in the Detailed Process Flow.

- **A = Appeal.** Indicates a cancelled Change Request is being appealed by the originator (Step 3).

- **C = Request Cancelled.** Indicates a Change Request has been canceled due to one of the following reasons (Step 3):
 - **CC = Clarification.** Requested clarification not received in allotted time (7 days).
 - **CD = Duplicate Request.** A request for this change already exists.
- **CRC = Change Review Complete.** Indicates a Change Request has been reviewed at a Change Review Meeting, but did not reach the Candidate Request List (Step 5).
- **D = Request Purge.** Indicates the cancellation of a Change Request that has been pending for 12 months and has failed to reach the Candidate Request List (Step 3).
- **I = Change Implemented.** Indicates a Change Request has been implemented in a release (Step 10).
- **N = New Change Request.** Indicates a Change Request has been received by the BCCM, but has not been validated (Step 2).
- **P = Pending.** Indicates a Change Request has been accepted by the BCCM and scheduled for Change Review (Step 3 moving to Step 4).
- **PC = Pending Clarification.** Indicates a Clarification Notification has been sent to the originator, BCCM awaiting response (Step 2 or 3).
- **PN = Pending N times.** Indicates a Change Request reached the Candidate Request List, was sized but not scheduled for a release and has cycled through the process N number of times. Example: P1 = 2nd time through process, P2 = 3rd time through process, etc (Step 5).
- **RC = Candidate Request.** Indicates a Change Request has completed the Change Review process and been assigned to the Candidate Request List for sizing and sequencing (Step 5).
- **S – Request Scheduled.** Indicates a Change Request has been scheduled for a release (Step 8).

Change Review Meeting. Meeting held by the Change Review participants to review and prioritize pending Change Requests, generate Candidate Change Requests, and submit Candidate Change Requests for sizing and sequencing.

Change Review Package. Package distributed by the BCCM 5 – 7 business days prior to the Change Review Meeting. The package includes the Meeting Notice, Agenda, Release Management Status Report, Change Request Log, etc.

Clarification Notification. Notification returned to the originator by the BCCM indicating required information has been omitted from the Change Request and must be provided prior to acceptance of the Change Request. The Change Request will be cancelled if clarification is not received by the date indicated on the Clarification Notification.

CLEC Affecting Change. Any change that requires the CLEC to modify the way they operate or to rewrite system code.

CLEC Change Control Manager (CCCM). CLEC Point of Contact for processing Change Requests.

CSM. Customer Support Manager which supports resale and facility based CLECs.

Cycle Time. The time allotted to complete each step in the Change Control Process prior to moving to the next step in the process.

D

Defect. Any non-type 1 change that corrects problems discovered in production versions of an application interface. These problems are where the interface is not working in accordance to the BellSouth baseline business requirements or the business rules that BellSouth has published or otherwise provided to the CLECs. In addition, if functional requirements agreed upon by BellSouth and the CLECs, results in inoperable functionality, even though software business requirements and business rules match; this will be addressed as a defect. These problems typically affect the CLEC's ability to exchange transactions with BellSouth and may include documentation that is in error, has missing information or is unclear in nature. Type 6 validated defects may not be managed using the Expedited Feature Process as discussed in Section 4, Part 3.

Defect Status. The status of a CLEC Impacting Defect Change Request as it flows through the Change Control process as described in the Detailed Process Flow.

- **A = Appeal.** Indicates a cancelled Change Request is being appealed by the originator (Step 3).
- **C = Cancelled.** Indicates a Change Request has been canceled due to one of the following reasons (Step 3):
 - **CC = Clarification.** Requested clarification not received in allotted time (2 days).

-
- **CD = Duplicate Request.** A request for this change already exists.
 - **CT = Training.** Requested change already exists, or CLEC training issue.

 - **I = Implemented.** Indicates a Defect Change Request has been implemented in a release (Step 6).
 - **N = New Defect Change Request.** Indicates a Defect Change Request has been received by the BCCM and the change request form validated for completeness (Step 2).
 - **PC = Pending Clarification.** Indicates a Clarification Notification has been sent to the originator, BCCM awaiting response (Step 2 or 3).
 - **S = Scheduled for Release.** Indicates a Defect Change Request has been scheduled for a release (Step 6).
 - **V = Validated Defect/Expedite.** Indicates internal analysis has been conducted and it is determined that it is a validated defect (Step 3).
 - **W = Workaround Identified.** Indicates a workaround has been developed and communicated to impacted CLEC community (Step 4).

E

Electronic Communications Systems (ECS). ECS is the help desk for reporting system outages or degradation in an existing feature/functionality within an interface. The ECS group works with the CLEC community to resolve system outages/degradation in a timely manner. The telephone number for the ECS group is 1-888-462-8030.

Enhancement. Functions which have never been introduced into the system; improving or expanding existing functions; required functional changes to system interfaces (user and other systems), data, or business rules (processing algorithms – how a process must be performed); any change in the User Requirements in a production system.

Expedited Feature. An expedited feature is the inability for CLEC to process certain types of LSR's based on the existing functionality to BellSouth's operations support systems (OSS's) that are in the scope of Change Control. The change request for an expedite must provide details of the business impact and will fall into one of two categories: 1) a defect that has been re-classified as a feature where the CLEC has determined should be expedited due to impact and 2) an enhancement to an existing product or service where the CLEC has determined should be expedited due to impact.

H

High Impact. The failure causes impairment of critical system functions and no electronic workaround solution exists.

I

Internal Change Management Process. Internal process unique to BellSouth and each participating CLEC for managing and controlling Change Requests.

L

Low Impact. The failure causes inconvenience or annoyance.

M

Medium Impact. The failure causes impairment of critical system functions, though a workaround solution does exist.

N

Need-by-Date. Date used to determine implementation of a Change Request. This date is derived at the Change Review Meeting through team consensus. Example: 1Q99 or Release XX.

P

Points of Contact (POC). An individual that functions as the unique entry point for change requests on this process.

Priority. The level of urgency assigned for resource allocation to implement a change. Priority may be initially entered by the originator of the Change Request, but may be changed by the BCCM with concurrence from the originator or the Review Meeting participants. In addition, level of priority is not an indication of the timeframe in which the Change Request will be worked. It is the originator's label to determine the priority of the request submitted.

One of four priorities may be assigned:

1-Urgent. Should be implemented as soon as possible. Resources may be pulled from scheduled release efforts to expedite this item. A need-by date will be established during the Change Review Meeting. A special release may be required if the next scheduled release does not meet the agreed upon need-by date.

2-High. Implement in the next possible scheduled major release, as determined during the Release Package Meeting.

3-Medium. Implement in a future scheduled major release. A scheduled release will be established during the Release Package Meeting.

4-Low. Implement in a future scheduled major release only after all other priorities. A scheduled release will be established during the Release Package Meeting.

Project Plan. Document which defines the strategy for Release Management and Implementation, including Scope Statement, Communication Plan, Work Breakdown Structure, etc. See Release Management Project Plan template, Attachment B-1.

Proposed Release Package: Proposed set of change requests slated for a release that the BCCM presents to the CLEC community during the Release Package Meeting

R

Release – Major. Implementation of scheduled Change(s) which may or may not impact all CLECs; may or may not require CLECs to make changes to their interface and may or may not prohibit the use of an interface upon implementation of the Change(s). Application-to-Application and Machine-to-Human.

Release – Minor. Implementation of scheduled Change(s) which do not require coordination with the entire CLEC industry, do not require CLECs to make changes to their interface or do not prohibit the use of an interface upon implementation of the Change(s). Machine-to-Human.

Release Package. Package distributed by the BCCM listing the Candidate Change Requests that have been targeted for a scheduled release.

Release Package Notification. Package distributed by the BCCM and used to conduct an initial Release Management and Implementation meeting. The package includes the list of participants, meeting date, time, Approved Release Package, Defect and/or Expedite Notification, etc.

Release Schedule: Schedule that contains the intended dates for implementation of software enhancements. This release schedule is created annually.

S

Specifications. Detailed, exact document(s) describing enhancement and/or defects, business processes and documentation changes requested and included with the Change Request as additional information.

System Outage. A System Outage is where the system is totally unusable or there is degradation in an existing feature or functionality within the interface.

V

Version (Document). Indicates variation of an earlier Change Control process document. Users can identify the latest version by the version control number.

APPENDIX A – CHANGE CONTROL FORMS

See Attached Forms

This section identifies the forms to be used during the initial phases of the Change Control process accompanied by a brief explanation of their use. Attachments A1 – A-4A contains sample Change Control forms and line by line Checklists.

Change Request Form. Used when submitting a request for a change (Attachment A-1).

Change Request Form Checklist. Provides line-by-line instructions for completing the Change Request form (Attachment A-1A).

Change Request Clarification Response. Used when responding to request for clarification or Clarification Notification (Attachment A-2).

Change Request Clarification Checklist. Provides line-by-line instructions for completing the Change Request Clarification Response (Attachment A-2A).

Acknowledgement Notification. Advises originator of receipt of Change Request by BCCM (Attachment A-3).

Acknowledgement Notification Checklist. Provides line-by-lines instructions for completing the Acknowledgement Notification. (Attachment A-3A).

Cancellation Notification. Advises the originator of cancellation of a Change Request (Attachment A-3).

Cancellation Notification Checklist. Provides line-by-line instructions for completing the Cancellation Notification. (Attachment A-3B).

Clarification Notification. Advises originator that a Change Request is being held pending receipt of additional information (Attachment A-4).

Clarification Notification Checklist. Provides line-by-line instructions for completing the Clarification Notification. (Attachment A-4A).

Letter of Intent. CLEC provides notice of intent to implement a TCIF compliant interface within a specified timeframe. (Attachment A-5).

APPENDIX B – RELEASE MANAGEMENT

See Attached Forms

Release Management and Project Implementation is described in Step 10 of the Change Control Process. Project Managers are responsible for confirming the release date, developing project plans and requirements, providing the WBS, Gantt chart and Executive Summary to the BCCM for input to the Change Review Package and ensuring the successful implementation of the release.

The BST Change Control Manager (BCCM) will distribute the Release Notification Information via web. The Notification should contain the following information:

- List of participants (Project Managers from each stakeholder)
- Date(s) for the next Project Manage Release meeting(s)
- Times
- Logistics
- Meeting facilitator and minutes originator (rotated between stakeholders)
- Current Approved Release Package (email attachment)
- Current Maintenance/Defect Notification Information (web posting)
- Draft Release Project Plan - WBS (email attachment created by the Lead Project Manager (s) assigned in step 8 of the Change Control Process)
- Lead Project Manager (s) assigned to the Release with reach numbers (s)

Attachments B1 – B12 contain templates designed to assist the Project Manager(s) in conducting project management responsibilities as needed for Release Management and Implementation.

APPENDIX C – ADDITIONAL DOCUMENTS

See Attached Documents

APPENDIX D –BST VERSIONING POLICY FOR INDUSTRY STANDARD ORDERING INTERFACES

Since August 1998, BellSouth's policy, which is stated in its Statement of Generally Accepted Terms (SGAT) and standard interconnection agreement, has been to support two industry standard versions of the applicable electronic interfaces at all times. Currently, the EDI and TAG electronic interfaces are maintained this way, because they are the interfaces that require the CLEC to "build" its side of the interface to use the new standard. The two industry standard versions of an interface are maintained when BellSouth is implementing an entirely new version of an interface based on new industry standards, not when BellSouth is simply enhancing an existing interface. Periodically, the standards organizations for an interface will issue a new set of standards. After submitting the new standards to the CCP to determine how and when they will be implemented, BellSouth will introduce a new version of that interface based on the new standards. BellSouth will keep the "old" version of the interface based on the old industry standards "up" for those CLECs that have not had enough time to build their side of the interface to the new industry standards. BellSouth gives CLECs six (6) months advance notice of the implementation of electronic interfaces based on new industry standards.

When a new industry standard for the interface is issued, the most recent prior industry standard version of the interface will be frozen - no changes will be made to the old version of the interface. BellSouth will support both the new industry standard version and the old industry standard version until the next set of industry standards is issued. Then, BellSouth will support the two most recent industry standard versions of the interface. If, for example, version A were based on the current industry standards, then following the implementation of version B based on the new industry standards, BellSouth would freeze version A until the implementation of version C. Upon the implementation of the version C of the interface based on the newest industry standards, BellSouth would no longer support version A, would freeze version B, and would support both version C and the frozen version B until the implementation of next set of the industry standards.

For example, in March 1998, BellSouth released a new industry standard version of EDI based on TCIF version 7.0. Between March 1998 and January 2000, BellSouth implemented a series of major releases (4.0 and 5.0) and a series of "point releases" (4.1, 4.2, etc. and 5.1, 5.2, etc.). The final "point release" of EDI was Release 5.8. In January 2000, BellSouth implemented Release 6.0 of EDI based on TCIF 9.0. When this occurred, BellSouth began maintaining Release 5.8 alongside of Release 6.0 of EDI.

NOTE: Because LENS is not an industry standard, machine-to-machine interface, LENS is not covered under the policy described above.

Transmittal Cover Sheet for Pate Rebuttal Exhibit RMP-3

This sheet transmits the

February 1999 Letter from the FCC's Common Carrier Bureau Chief

which consists of 5 pages.

UNITED STATES GOVERNMENT
memorandum

RECEIVED

FEB 10 1999

DATE: February 10, 1999

REPLY TO

ATTN OF: Jake E. Jennings *JEJ*
Policy & Program Planning Division
Common Carrier Bureau
1919 M Street., NW
Washington, DC 20554

FILE COPY DUPLICATE

SUBJECT: CC Docket No. 97-121, 97-137, 97-208, and 98-121

TO: Ms. Magalie Roman Salas
445 12 St., SW, Room TWB-204
Washington, DC 20554

Please place the attached letter into the record of CC Docket 97-121, 97-137, 97-208, 97-231, and 98-121. If you require further information, please feel free to contact me at 202 418-1580. Thank you for your assistance.



Federal Communications Commission
Washington, D.C. 20554

February 10, 1999

Mr. Sid Boren
Executive Staff Officer
BellSouth Corporation
1155 Peachtree St., N.E., Room 2004
Atlanta, GA 30309

Dear Mr. Boren:

On December 15, 1998, members of the Common Carrier Bureau Staff ("Bureau Staff") met with representatives of BellSouth to discuss interpretations of the Commission's October 13, 1998, BellSouth Louisiana II Order as it might be applied in other states in which section 271 applications might be filed.¹ A summary of the discussion is described below. The Bureau Staff indicated that additional information from BellSouth and interested parties would be useful in order for the Bureau Staff to engage in further discussion. The Bureau Staff also indicated that its views were based on information developed since the issuance of the BellSouth Louisiana II order. The Bureau Staff stated that its views on any of these issues were in no way binding on the Commission, and that no conclusive determination could be made outside the context of an actual Section 271 application and record.

1. Flow-Through.

Issue. Whether BellSouth can exclude complex orders from its flow-through calculations and what level of disaggregation of flow-through is necessary to demonstrate nondiscriminatory access.

Bureau Staff Response The Bureau Staff stated its view that, in principle, complex orders that are manually processed for BellSouth's retail customers could be excluded from flow-through calculations. The Bureau Staff also stated its view that, to the extent BellSouth excludes complex orders from its flow-through calculations, the following information should accompany a future Section 271 application: (1) a clear definition of complex orders for CLECs and BellSouth; (2) a demonstration of how BellSouth handles complex orders for its retail customers and CLECs; (3) evidence that complex orders are processed in a nondiscriminatory manner (i.e., performance results and analysis).

¹ *Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-region, InterLATA Services in Louisiana, CC Docket No. 98-121, Memorandum Opinion and Order, FCC 98-271 (BellSouth Louisiana II 271 Order).*

Mr. Boren

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The Bureau Staff also stated its view that BellSouth could exclude from its flow-through calculation orders submitted by CLECs that contained CLEC-caused errors. The Bureau Staff stated its view that the flow-through calculation could be adjusted to exclude CLEC errors, if, in a future Section 271 application, BellSouth (1) defines more clearly what constitutes a CLEC error; and (2) verifies the cause of the errors as being CLEC errors (e.g., through an independent audit).

In response to questions about the appropriate level of disaggregation the Bureau Staff indicated its view that the proposed levels of disaggregation listed in the *OSS Model Rules NPRM*² were appropriate.

2. TAFI Integration

Issue. (1) Whether BellSouth must provide a machine-to-machine repair and maintenance interface in order to meet the nondiscrimination requirement. (2) Absent a machine-to-machine repair and maintenance interface, what evidence is necessary to demonstrate nondiscriminatory access.

Bureau Staff Response The Bureau Staff stated its view that it did not believe that machine-to-machine repair and maintenance interface is *per se* required. The Bureau Staff noted that the Louisiana II Order found that a lack of machine-to-machine interface for repair and maintenance was not *per se* discriminatory. The Bureau Staff stated its view that, absent a machine-to-machine repair and maintenance interface, BellSouth must demonstrate that the interfaces offered to CLECs provide nondiscriminatory access. The Bureau Staff also stated that additional information was needed to assess the competitive impact that results from a lack of a machine-to-machine interface for repair and maintenance. In order to obtain such information, the Bureau Staff indicated that it would schedule additional meetings with interested parties.

The Bureau Staff stated its view that the following information would assist in evaluating in a future application whether BellSouth's repair and maintenance interface provide nondiscriminatory access: (1) a detailed description of the systems and functionality BellSouth utilizes itself for both designed and nondesigned services; (2) a detailed description of the systems and functionality BellSouth offers to competing carriers; (3) a discussion of what interface functionality competing carriers have requested through the change control process and the status of such request, if any; and (4) performance results for resold services and UNEs by interface type.

² See *Performance Measurements and Reporting Requirements for Operations Support Systems, Interconnection, and Operator Services and Directory Assistance*, CC Docket No. 98-56, Notice of Proposed Rulemaking, 13 FCC Rcd 12817 (1998).

Mr. Boren

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3. Retail Analogues/Performance Standards/Statistical Measurements.

Issue. Methods of evaluating whether BellSouth's OSS performance meets the nondiscrimination requirement.

Bureau Staff Response The Bureau Staff asked BellSouth to propose a framework for evaluating whether it is providing nondiscriminatory access to OSS functions and suggested that BellSouth include the following criteria:

- Relevant performance measurements;
- Identification of retail analogues, including level of disaggregation;
- Identification of a benchmark or performance standard where no retail analogue exists (e.g., based on state approved intervals, engineering studies, or other standards);
- A statistical methodology which is used to compare actual performance results to retail analogues or benchmarks;
- A threshold for determining whether differences in performance are competitively significant and whether analysis of the underlying cause for the difference is needed;
- An open process for analyzing the underlying cause for differences of performance;
- Meaningful penalty amounts to prevent "backsliding."

The Bureau Staff also indicated that it would seek industry comment of any framework for evaluating OSS performance proposed by BellSouth.

4. Complex Ordering/Partial Migration Orders.

Issue. Whether partial migration and directory listing need to be ordered electronically.

Bureau Staff Response The Bureau Staff stated its view that there is no retail analog for partial migration orders, and that electronic ordering capability is not required at this time. The Bureau Staff stated its view that BellSouth must demonstrate that the ordering process for complex/partial migration orders meets the nondiscrimination requirement (e.g., provides an efficient competitor a meaningful opportunity to compete). The Bureau Staff also stated its

Mr. Boren

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view that BellSouth should continue upgrading its OSS ordering interface through the change control process.


5. **Third-Party Testing – Demonstration of Operational Readiness.**

Issue. In cases where there is little or no commercial usage of an interface, whether BellSouth must engage in third-party testing at the level implemented by Bell Atlantic in New York .

Bureau Staff Response The Bureau Staff noted that, in its view, internal testing cannot overcome evidence from commercial usage demonstrating inferior service to CLECs. The Bureau Staff stated its view that, where there is no commercial usage or inconclusive commercial usage exists, some form of testing is necessary to demonstrate that the BOC's OSS is operationally ready. The Bureau Staff indicated its view that, while it could not conclude, in the absence of a factual record, whether some forms of internal testing or carrier to carrier testing could demonstrate operational readiness, a third party test would serve as a reasonable "safe harbor." The Bureau Staff noted as two examples of such tests underway in New York and Texas. The Bureau Staff stressed the importance, in its view, of a test plan that included input from interested parties and includes meaningful independent review (e.g., State Commission oversight).

For information purposes, a copy of this letter will be placed in all open section 271 dockets.

Sincerely,



Lawrence E. Strickling, Chief
Common Carrier Bureau
Federal Communications Commission

cc: Ms. Magalie Roman Salas
Secretary
Federal Communications Commission

Transmittal Cover Sheet for Pate Rebuttal Exhibit RMP-4

**This sheet transmits the
Flow-Through Matrix Excerpt from Florida Interim Performance Metrics
which consists of 4 pages.**

**BellSouth OSS Testing
Florida Interim Performance Metrics
LSR Flow-Through Matrix**

PRODUCT	F/T	COM PLEX SERVICE	COM PLEX ORDER	PLANNED FALLOUT FOR MANUAL HANDLING	ED	TAG	LENS	COMMENTS
2 wire analog DID trunk port	No	UNE	Yes	NA	N	N	N	
2 wire analog port	Yes	UNE	No	No	Y	Y	N	
2 wire ISDN digital line side port	No	UNE	Yes	NA	N	N	N	
2 wire ISDN digital loop	Yes	UNE	Yes	No	Y	Y	N	
3 Way Calling	Yes	No	No	No	Y	Y	Y	
4 wire analog voice grade loop	Yes	UNE	Yes	No	Y	Y	N	
4 wire DS0 & PRI digital loop	No	UNE	Yes	NA	N	N	N	
4 wire DS1 & PRI digital loop	No	UNE	Yes	NA	N	N	N	
4 wire ISDN DSI digital trunk ports	No	UNE	Yes	NA	N	N	N	
Accupulse	No	Yes	Yes	NA	N	N	N	
ADSL	Yes	UNE	No	No	Y	Y	N	
Area Plus	Yes	No	No	No	Y	Y	Y	
Basic Rate ISDN	No	Yes	Yes	Yes	Y	Y	N	
Call Block	Yes	No	No	No	Y	Y	Y	
Call Forwarding-Variable	Yes	No	No	No	Y	Y	Y	
Call Return	Yes	No	No	No	Y	Y	Y	
Call Selector	Yes	No	No	No	Y	Y	Y	
Call Tracing	Yes	No	No	No	Y	Y	Y	
Call Waiting	Yes	No	No	No	Y	Y	Y	
Call Waiting Deluxe	Yes	No	No	No	Y	Y	Y	
Caller ID	Yes	No	No	No	Y	Y	Y	
CENTREX	No	Yes	Yes	NA	N	N	N	
DID WITH PBX ACT W	No	Yes	Yes	Yes	Y	N	Y	
DID ACT W	No	Yes	Yes	Yes	Y	N	Y	
Digital Data Transport	No	UNE	Yes	NA	N	N	N	
Directory Listing Indentions	No	No	No	Yes	Y	Y	Y	
Directory Listings Captions	No	No	Yes	Yes	Y	Y	Y	
Directory Listings (simple)	Yes	No	No	No	Y	Y	Y	
DS3	No	UNE	Yes	NA	N	N	N	
DS1 Loop	Yes	UNE	Yes	No	Y	Y	N	
DS0 Loop	Yes	UNE	Yes	No	Y	Y	N	
Enhanced Caller ID	Yes	No	No	No	Y	Y	Y	

**BellSouth OSS Testing
Florida Interim Performance Metrics**

PRODUCT	F/ T ³	COM PLEX SERVICE	COM PLEX ORDER	PLANNED FALLOUT FOR MANUAL HANDLING ¹	ED ¹	TAG ²	LENS ⁴	COMMENTS
ESSX	No	Yes	Yes	NA	N	N	N	
Flat Rate/Business	Yes	No	No	No	Y	Y	Y	
Flat Rate/Residence	Yes	No	No	No	Y	Y	Y	
FLEXSERV	No	Yes	Yes	NA	N	N	N	
Frame Relay	No	Yes	Yes	NA	N	N	N	
FX	No	Yes	Yes	NA	N	N	N	
Ga. Community Calling	Yes	No	No	No	Y	Y	Y	
HDSL	Yes	UNE	No	No	Y	Y	N	
Hunting MLH	No	C/S ⁴	C/S	Yes	Y	Y	N	
Hunting Series Completion	Yes	C/S	C/S	No	Y	Y	Y	
INP to LNP Conversions	No	UNE	Yes	Yes	Y	Y	N	
LightGate	No	Yes	Yes	NA	N	N	N	
Local Number Portability	Yes	UNE	Yes	No	Y	Y	N	
LNP with Complex Listing	No	UNE	Yes	Yes	Y	Y	N	
LNP with Partial Migration	No	UNE	Yes	Yes	Y	Y	N	
LNP with Complex Services	No	UNE	Yes	Yes	Y	Y	N	
Loop+INP	Yes	UNE	No	No	Y	Y	N	
Loop+LNP	Yes	UNE	No	No	Y	Y	N	
Measured Rate/Bus.	Yes	No	No	No	Y	Y	Y	
Measured Rate/Res.	Yes	No	No	No	Y	Y	Y	
Megalink	No	Yes	Yes	NA	N	N	N	
Megalink-T1	No	Yes	Yes	NA	N	N	N	
Memory Call	Yes	No	No	No	Y	Y	Y	
Memory Call Ans. Svc.	Yes	No	No	No	Y	Y	Y	
Multiserv	No	Yes	Yes	NA	N	N	N	
Native Mode LAN Interconnection (NMLI)	No	Yes	Yes	NA	N	N	N	
Off-Prem Stations	No	Yes	Yes	NA	N	N	N	
Optional Calling Plan	Yes	No	No	No	Y	Y	Y	
Package/Complete Choice and area plus	Yes	No	No	No	Y	Y	Y	
Pathlink Primary Rate ISDN	No	Yes	Yes	NA	N	N	N	
Pay Phone Provider	No	No	No	NA	N	N	N	

**Performance Incentive Plan
Version 2.0**

Introduction

It is well recognized that a meaningful system of self-enforcing consequences for discriminatory ILEC performance is critically important to the protection of the public's interest and the rapid and sustainable development of a competitive local telecommunications market. Incumbent ILECs have strong business incentives and means to maintain their current monopolies through the delivery of inadequate and unlawful levels of operations support for CLECs. Thus, an appropriate system of self-enforcing consequences is absolutely necessary to assure that the competitive local telecommunications markets envisioned by the 1996 Act will be able to develop and survive.

In order to be effective, prompt enforcement of appropriate consequences must be assured. Because of the extensive delays inherent in the adjudication and appeals process, CLECs cannot rely solely upon the legal/regulatory process to obtain appropriate remedies for discriminatory ILEC performance. Furthermore, the consequences must provide ILECs with incentives that exceed the benefits it may derive by inhibiting competition, and such consequences must be immediately imposed upon a demonstration of poor ILEC performance. The objective is to set the incentives in amounts that encourage ILECs to take proactive steps to prevent its performance from becoming non-compliant and, when it does reach that level, to correct its performance failures promptly.

1
FLORIDA PUBLIC SERVICE COMMISSION
DOCKET
NO. 000121-TP EXHIBIT NO. 25
COMPANY/
WITNESS: Bush
DATE: 4-25-27-01

It is beyond dispute that any system of self-enforcing consequences must be based upon an underlying set of performance measurements that cover the full panoply of ILEC activities upon which CLECs must rely to deliver their own retail service offerings. The Act requires that these activities, which touch upon every aspect of the business relationship between incumbents and CLECs, must be provided in a non-discriminatory manner. Thus, the interconnection agreements between incumbents and CLECs should ideally serve as a source for performance measurements. However, experience in Florida and elsewhere has proven that CLECs have generally been unable to individually negotiate, or even arbitrate, a sufficiently robust set of performance measurements.¹ For that reason, the first step in constructing a system of self-enforcing consequences must include careful consideration of the adequacy of the underlying measurement set. At a minimum, the performance measurements must supply each CLEC with reliable data on the incumbent's performance for that CLEC. Such data must be sufficiently discrete (as to the processes monitored) and detailed (to isolate and compare only comparable conditions) so as to permit a CLEC to enforce the terms of its interconnection agreement with the incumbent. In addition, the underlying performance measurement system should demonstrate quality implementation of the following characteristics:

- A comprehensive set of comparative measurements that monitors all areas of support (i.e., pre-ordering, ordering, provisioning, maintenance & repair and billing) without preference to any particular mode of market entry
- Measurements and methodologies that are documented in detail so that clarity exists regarding what will be measured, how it will

¹ As a starting point, the CLEC industry generally supports the measurement areas specified in Attachment B.

be measured and in what situations a particular event may be excluded from monitoring (such exclusions must also be tracked and reported)

- Sufficient disaggregation of results, so that only the results for similar operational conditions are compared and, particularly, so that the averaging of results will not mask discrimination²
- Pre-specified and pro-competitive performance standards exist. This includes identifying reasonably analogous performance delivered by the incumbent to its own operations³ or, when such comparative standards are not readily identifiable, then absolute minimum standards for performance (benchmarks) are established⁴
- Sound quantitative methodology is used to compare CLEC experiences to analogous incumbent support⁵
- The overall performance measurement system is subject to initial and periodic validation, in order to assure that the performance results which form the foundation for all decisions regarding the

² The importance of sufficient disaggregation is more fully discussed in Attachment A

³ Analogous performance must be broadly interpreted and consider not only retail operations of the incumbent but also operations of affiliates. Often the incumbent's asserted lack of analogous performance relies upon very narrow (and inappropriate) interpretation of the term "analogous" to mean "precisely identical" rather than "similar in key aspects." Furthermore, if the incumbent delivers different levels of performance to an affiliate and its the retail operations, the CLEC experience should be compared to the better of the two.

⁴ In all cases, benchmarks must provide an efficient competitor with a meaningful opportunity to compete.

⁵ As a general rule, when benchmarks are employed, statistical comparisons of the measured result for the CLEC to the benchmark are not appropriate. Typically, the standards state a minimum performance level that is required to support effective competition and the minimum success level that must be demonstrated to attain the benchmark. Thus, the typical form of the standard is, for example, "95% installed within 3 days." Note that in the preceding example a 5% deviation from the benchmark is permitted and, as a result, the potential for random variation of the performance is fully

quality of the performance delivered by the ILEC are correct representations of the CLECs' marketplace experience.

It is critical that a performance measurement system incorporating all of the above characteristics exist before applying an incentive plan, because a robust and independently audited performance measurement system is a prerequisite to any effective system of self-enforcing consequences.⁶

Objectives of the Plan

A system of self-enforcing consequences must fully implement the following objectives:

- Consequences must be based upon the quality of support delivered on individual measures to individual CLECs
- Total consequences, in the aggregate, must have sufficient impact to motivate compliant performance without the need to apply a remedy repeatedly
- The imposition of financial consequences must be prompt and certain, and consequences should be self-executing so that opportunities for delay through litigation and regulatory review are minimized

addressed. Any further accommodation of variation, as would occur if statistical procedures were employed, would effectively "double count" forgiveness of variability.

⁶ For example, business rules for individual performance measurements may provide for automatic exclusions of data points from the calculation. If such provisions are made, however, the exclusions must be according to clearly defined rules and the number of data points excluded for each submeasurement and for each CLEC should be reported on a monthly basis.

- Consequences must escalate as the basis for concluding that a performance failure exists becomes more substantial and/or the performance repeatedly fails to meet the applicable standard
- Additional consequences must apply when non-compliant performance is provided to CLECs on an industry-wide basis
- Exclusions from consequences must be minimized and the exclusions that are provided for must be monitored and limited to assure they do not mask discrimination
- Incumbents must have minimal opportunities to avoid consequences through such means as liability caps, offsetting credits, or a requirement that CLECs must demonstrate an ILEC's intent to harm
- Potential "entanglement" costs must be minimized so that, for example, access to mitigation measures for the incumbent does not become a means to revert to the legal/regulatory process and delay the application of consequences that should be self-enforcing

Structure of Consequences for Discriminatory ILEC Performance

Consequences operating on two tiers are proposed. The first tier addresses the consequences for non-compliant performance delivered to an individual CLEC. The second addresses the consequences for non-compliant performance delivered to the CLEC industry as a whole. In general terms, Tier I provides a form of non-exclusive liquidated damages payable to individual CLECs. Tier II, by contrast, incorporates what can be characterized as regulatory fines that are necessary when the ILEC's performance affects the competitive market – and consumers -- as a whole.

The total amount of Tier I payments (which are only an estimate of the CLECs' actual damages) is unlikely to provide the ILEC with sufficient incentives to take the actions necessary to eliminate its monopoly. Rather, an ILEC may decide to treat such payments as the price for retaining its monopoly and voluntarily incur them as a cost of doing business. Moreover, the harm that results when the ILEC provides discriminatory support for the CLEC industry in the aggregate has a major impact not only on CLECs but also on the operation of the competitive marketplace in general, which directly affects all Florida consumers of telecommunications services. Thus, it is appropriate to establish incentives to prevent this type of harm from occurring (or continuing), and both Tier I and Tier II are necessary and complementary elements of an effective system of consequences. Together, they work in tandem to achieve the goals of the Act.

Tier I

A Tier I consequence should be payable to an affected CLEC whenever any performance result indicates support delivered by the ILEC to an individual CLEC fails to meet or exceed the applicable performance standard.⁷

The first step in establishing Tier I consequences is to define the rule for determining if performance for a particular period "passes" or "fails" and, if it fails, whether additional consequences are warranted. Defining "pass/fail" rules requires that the underlying measurements be mapped into one of two classes:

⁷ In the course of establishing Tier I consequences, the rights of an individual CLEC to pursue actual damages must be retained. However, if a CLEC sought to pursue a claim for actual damages, it would be reasonable to offset the damage award by any Tier I payments it received from the ILEC for the same time period and performance areas. In addition, a CLEC must retain the right to waive Tier I claims and pursue its individually negotiated contract remedies (if and only if the claims and remedies are not mutually payable.).

(1) those for which the performance standard is parity with analogous incumbent LEC performance results, and

(2) those for which the performance standard is an absolute level of required performance (otherwise known as a benchmark)

The differentiation is important because when parity is the standard, statistical procedures are usually necessary to draw conclusions regarding compliance. In such situations (which should apply to the vast majority of cases), two separate data sets are compared – one for the CLEC and one for the ILEC. Each data set is characterized by a mean and standard deviation. Statistical tests are used to draw a conclusion regarding the likelihood that the data sets with the observed means and standard deviations were drawn from the same population (in this case a support process for CLECs with the same quality and/or timeliness as that employed for the ILEC). The proper test further allows determination that parity does not exist, but it does not quantify “how far out of parity” the process is when parity is not indicated.⁸

In contrast, when a benchmark serves as the performance standard, measurement establishes a performance failure directly and assesses the degree to which performance departs from the standard. As explained below, the detailed mechanism for determining a performance failure differs for each of these types of measurement standards, but the principle governing the application of the Tier I consequence is consistent: the consequence escalates with increasing evidence and level of non-compliant performance.

⁸ Clearly, however, when all other factor are held constant, increased statistical confidence is directly correlated (monotonic) with larger differences in the two sample

Tier I Business Rules for Parity Measurements

1. Use the Modified z-Statistic to Determine Compliance

The determination of whether performance is compliant (i.e., equal to or better than the appropriate standard) is based on the calculation of the modified z-statistic (z).⁹ The calculated modified z-statistic is then compared to the cumulative normal distribution table to determine if parity exists.¹⁰ For any such decision rule, the probability of an erroneous decision is known. For example, if the critical value is -3.00 and parity actually exists, the probability of saying it is not is 0.13%.

2. Use Permutation Analysis for Small Samples

Permutation analysis is employed for small data sets (those with 30 or fewer observations in one of the data sets to be compared) to create a probability distribution as an alternative to the cumulative normal distribution.¹¹ By

means being compared and therefore is a reasonable indication of how different ILEC performance was for itself versus that of the CLEC in the period of observation.

⁹ See: Local Competition Users Group - Statistical Tests for Local Service Parity, February 6, 1998, Version 1.0 for documentation of the calculation and use of the modified z-statistic.

¹⁰ The modified z-statistic computation provides for the CLEC mean to be subtracted from the ILEC mean. Thus, a negative z-statistic critical value presumes that worse performance exists when the CLEC mean becomes larger than the ILEC mean. For example, worse performance exists when the order completion interval for the CLEC exceeds that for the ILEC. Thus a negative z-statistic critical value is appropriate. On the other hand, for a metric like “% completed within x days”, worse performance for the CLEC occurs when the metric result is smaller for the CLEC vis-à-vis the ILEC. In this case a positive z-statistic critical value is appropriate.

¹¹ See Attachment C for a description of the procedural steps for performing permutation analysis. Again, BST and the CLECs generally concur that permutation analysis is appropriate for data sets of this size.

mutual agreement, permutation analysis can also be employed for larger data sets.

3. Use the Balancing Critical Value

The threshold level to determine whether or not a performance failure exists is established by balancing Type I and Type II error.¹² This balance point is a function of the size of the CLEC data set (assuming the ILEC data set is very large) and the extent to which the means for the two data sets differ (assuming that both data sets are normally distributed). Simulation comparing relatively small data sets (as would be likely for a CLEC) to a much larger data set (as would likely exist for an ILEC) demonstrates that the balancing of Type I and Type II error can reasonably be expected to occur in the range of 25% for "samples" with fewer than 100 data points but is about 5% for samples with 1000 data points.¹³ The statistical methodology developed by AT&T and Ernst & Young in Louisiana is an appropriate method for calculating the critical values which depend on the sample size and balances Type I and Type II error probabilities for each given submeasure. Furthermore, the definition of the alternative hypothesis required to perform the balancing is fundamental to the applicability of the method. THE ALECS

¹²The key consideration is balancing the probability of drawing erroneous conclusions -- either that performance is "bad" when it is actually "good" (Type I error) or that performance is "good" when it is actually "bad" (Type II error). The former error adversely impacts ILECs and the latter adversely impacts CLECs. Unfortunately, reducing the likelihood of one type of error increases the likelihood of the other type of error occurring. Thus the best means to create an equitable outcome for all parties is to balance the Type I and Type II error.

¹³ See Response to Question 3 contained in AT&T Ex Parte filed in CC Docket 98-56 dated July 13, 1999.

proposes a value of 0.25 for the parameter δ and appropriately corresponding values for ε and ψ .¹⁴¹⁵

4. Increase Consequences as the Confidence in a “Non-Parity” Conclusion Increases

An appropriate means to take increased confidence into consideration is to provide for higher amounts of monetary consequences as the confidence in the “non-parity” conclusion increases. This is justified because (all other factors held constant) as the difference in the mean performance for the CLEC compared to the ILEC becomes larger, the absolute value of the modified z-statistic also becomes larger for the sample in the time period of interest. Thus, it is appropriate that the performance consequence should escalate based upon the calculated value of the modified z-statistic.

5. After a Failed Parity Test the Consequences Should Escalate and Vary Continuously with Severity of Failure

A parity failure is established for a submeasure by comparing the measured value of the modified z-statistic (z) to the balancing critical value (z^*) appropriate for the submeasure’s sample size during the given monthly period. Once a submeasure failure is obtained, the calculated remedy should be a continuous function of severity of the failure as measured by the magnitude of the modified z-statistic. In this way small changes in severity lead to small changes in consequences thus assuring that mathematically chaotic behavior is avoided at step thresholds. However, to incent the ILEC appropriately, the change in consequences should increase with each unit of

¹⁴ Statistical Techniques For The Analysis And Comparison Of Performance Measurement Data. Submitted to Louisiana Public Service Commission (LPSC) Docket U-22252 Subdocket C

severity. This form of consequences as a function of severity is most simply accomplished by the use of a quadratic function of the ratio of the measured modified z score to the balancing critical value (z/z^*). Fixing the value of the quadratic or its slope at three points completely determines the function.

Table 1

Range of modified z-statistic value (z)	Performance Designation	Applicable Consequence (\$)
greater than or equal z^*	Compliant	0
less than z^* to $5z^*/3$	Basic Failure	$a(z/z^*)^2 + b(z/z^*) + c$
less than $5z^*/3$ to $3z^*$	Intermediate Failure	
less than $3z^*$	Severe Failure	25,000

Table 1 shows the applicable consequences for each Tier I parity submeasure failure for each CLEC. In this table z^* is the (negative) balancing critical value for the submeasure, and the coefficients of the smooth consequence function are:

$$a = 5625$$

$$b = -11250$$

$$c = 8125.$$

Note that the smooth consequences formula is an explicit function of the ratio of the modified z-statistic and the balancing critical value (z/z^*). This means that the dollar amount does not depend on the number of observations but only on the degree of violation. If we had 100 times as

¹⁵ See Attachment D for a further discussion of this position.

many observations, with means and standard deviations staying the same, both z and z^* will increase by a factor of 10 and the consequences will be unchanged. Note also that both basic and intermediate failures are defined and may occur in the smooth region of the formula. The plan retains these designations to allow for classification of performance for more general performance monitoring such as compliance testing, if needed.

A graph of the applicable consequences as a function of the measured modified z -statistic is given in Attachment G in Figure G-1. The attachment also contains a small step tabulation of the function that approximately represents it in Table G-1.

Examples

Three hypothetical examples of consequence calculations are given in the matrix below.

Example	z^*	z	Performance	Consequence
1	-2.00	-1.80	Compliant	\$0
2	-2.50	-3.33	Basic Failure	\$3,125
3	-3.00	-6.00	Intermediate Failure	\$8,125
4	-3.50	-12.00	Severe Failure	\$25,000

In example 1 the hypothetical balancing critical value for the submeasure is calculated to be -2.00 on the basis of sample size and equal type I and type II error probabilities. The observed value of the modified z -statistic, based on ILEC and CLEC performance for that submeasure, is -1.80 . The ILEC is compliant for this submeasure and no consequences are due to this CLEC.

Example 2 shows a balancing critical value calculated to be -2.50 . Furthermore in this example, the measured value of the modified z -statistic is -3.33 . This is a Basic Failure and the consequence is calculated to be \$3,125 by the formula in Table 1.

In example 3, although the hypothetical balancing critical value is -3.00 , the measured value of the modified z-statistic is well below this at -6.00 . According to the range of modified z-statistics in Table 1 this is an Intermediate Failure. The same smooth formula is used to calculate the remedy amount as \$8,125.

The final example 4 shows a balancing critical value of -3.50 , but a very poor measured value of the modified z-statistic of -12.00 . According to Table 1 this is classified as a Severe Failure and generates a consequence of \$25,000. This is the largest consequence for which the ILEC would be liable for this submeasure this month to this CLEC.

Tier I Business Rules for Benchmark Measurements

1. Use a "Bright Line" Test for Benchmark Measurements

A benchmark is set to define the level of performance that is judged essential to permit competition to develop on a going-forward basis. As such, the benchmark level is at the lower range of what a viable competitive support process should be capable of delivering on a routine basis. Indeed, to assume otherwise would imply that the benchmark would not be achieved on a routine basis. In all events, because even the most tightly controlled process will produce performance outside the expected range, some margin of error is typically provided for the incumbent. Thus, the limiting performance is expressed as "B% meet or exceed the benchmark" where "B%" is a proportion figure set less than 100% in order to account for random variation considerations. Accordingly, a performance failure should be declared if the calculated performance is not equal to the "B%" level. For example, if the calculated result for a month was 94.5% of all orders completed within 3 days but the benchmark was 95% within 3 days, then a

performance failure occurred. No subsequent application of a statistical test is appropriate.

2. Apply an Adjustment for Small Data Sets When Necessary

Because some measurement results may be calculated using small data sets, some adjustment is warranted. This need arises because the benchmark proportion for a particular measure with few underlying data points may be practically impossible to attain unless the ILEC always performs perfectly. The metric discussed in the prior paragraph can be used to illustrate the point: if only ten orders were completed in the month, then compliance would occur only if all 10 orders were (correctly) completed within three days. One order taking longer than 3 days would mean that, at best, the performance result would be 90% within 3 days, i.e., a failing performance level.

This situation is addressed through application of the following table¹⁶:

Table 2

CLEC Data Set Size	Benchmark Percentage Adjustments for Small Data Sets (Applicable to Data Sets < 30)		
	85.0%	90.0%	95.0%
5	80.0%	80.0%	80.0%
6	83.3%	83.3%	83.3%
7	85.0%	85.7%	85.7%
8	75.0%	87.5%	87.5%
9	77.8%	88.9%	88.9%
10	80.0%	90.0%	90.0%
20	85.0%	90.0%	95.0%
30	83.3%	90.0%	93.3%

3. Increase Consequences for Increasingly Poor Performance

As with measurements that are judged against a parity standard, those compared to a benchmark standard should be subject to additional consequences as the performance becomes increasingly worse compared to the benchmark. The escalation is as follows (Note that "B" in Table 3, is the Benchmark Percentage as determined from Table 2):

Table 3

Range of Benchmark Result (x)	Performance Designation	Applicable Consequence (\$)
Meets or exceeds B%	Compliant	0
Meets or exceeds (1.5B-50)% but worse than B%	Basic Failure	$d[x/(100-B)]^2 + eB[x/(100-B)^2] + f[B/(100-B)]^2 + g$
Meets or exceeds (2B-100)% but worse than (1.5B-50)%	Intermediate Failure	
Worse than (2B-100)%	Severe Failure	25,000

In Table 3 the quantity x is the actually measured proportion and the coefficients are given by:

$$d = 22500$$

$$e = -45000$$

$$f = 22500$$

$$g = 2500$$

¹⁶ The table can be expanded to include all possible data set sizes from 1 upward.

A graph of the applicable consequences as a function of the measured benchmark result, x , for $B = 95\%$ is given in Attachment G in Figure G-2. The attachment also contains a small step tabulation of the function that approximately represents it in Table G-2.

Example:

As an example of this consequence calculation, consider a benchmark with a proportion $B = 95\%$. Now if the measured performance is 93%, the first and second columns show that this is a Basic Failure. Plugging this 2% failure of the 95% benchmark proportion into the quadratic equation of the third column in the table gives a calculated consequence of \$6,100 for this submeasure and CLEC.

Table 3 is applicable for any benchmark expressed as $B\%$ proportion better than L level, and all benchmarks may be easily expressed in this form.

Additional Tier I Business Rules Applicable to All Measurements

1. Increase Consequences for Chronic Performance Failures

Regardless of the type of measurement (parity or benchmark), if performance fails to achieve the Compliant level in consecutive reporting periods, then additional consequences should apply. The recommended treatment for chronic failures is to assess a chronic failure over-ride in the third consecutive month of non-compliant performance. When the chronic failure override applies, a consequence equal to a "Severe Failure" (\$25,000 per chronic failure per month) should apply until such time as performance for the specific measurement result is again classified as Compliant.¹⁷

¹⁷ Alternatively, it is possible to institute consequences for repeated failures as early as the second consecutive month of failure. The amount of the consequence under such a

2. No Additional Protection of the ILEC is needed through Forgiveness Mechanisms or Mitigation Methods

Properly calibrated performance measures and balancing the probabilities of statistical errors eliminate any need for additional forms of protection for incumbents with respect to considerations of random variation.¹⁸ Moreover, a procedural cap such as the one described below should allay any fears that additional protections are necessary for the ILEC.¹⁹

Tier II

Tier II consequences are intended to enhance the the ILEC's incentives to provide performance that complies with its statutory obligations. Tier I consequences only compensate individual CLECs who actually receive discriminatory treatment from the ILEC. Tier II consequences are designed to counterbalance the ILEC's incentive to damage not just individual firms but the competitive marketplace itself. Thus, the two types of consequences are complementary, and both are necessary to achieve the intended results.

The applicability of Tier II consequences should be determined using the aggregate data for all CLECs within a particular submeasurement result and

structure would escalate more gradually. See Attachment A, Table A of MCI Worldcom and AT&T Joint Remedies Proposal Ex Parte filed in CC Docket 98-56, filed June 2, 1999.

¹⁸ See Attachment E for further discussion of random variation and the inappropriateness of providing further mitigation if Type I and Type II error is balanced as recommended in this proposal.

¹⁹ Because the rationale for providing consequence offsets is the possibility of random variation, there is no justification for applying offsets to measurements that are monitored through the use of benchmarks. As explained above, random variability impacts are fully cared for in the structure of the benchmark standard, by permitting in advance a percentage of performance "misses."

disaggregation.²⁰ Except as noted below, identical business rules and measurements should be utilized as for Tier I. Thus, virtually the same data and computational processes can be utilized for both tiers. The differences are highlighted below and are due largely to a reduction of the consequence threshold below the balancing critical value. The smaller threshold is recommended because higher consequences are proposed, so the confidence in the decision to apply a consequence should be greater.

Because Tier II consequences reflect harm to the public interest in a competitive marketplace, consequences under Tier II, unlike Tier I payments, should be paid to a public fund identified by the Commission and may be used for competitively neutral public purposes.²¹

Tier II Business Rules for Parity Measurements.

The same business rules apply under Tier II to the aggregate (or pooled) data of the individual CLECs as are employed for the individual CLEC data under Tier I, except a smaller consequence threshold is used.²² As a result, the applicable consequence table (Table 1 above) is modified as follows:

²⁰ Each occurrence counts equally in this calculation. Thus, the individual results for individual CLECs are not averaged together; rather the performance for all CLECs is pooled for each submeasurement result. Thus the pooled data analysis effectively creates a "super CLEC" for the purposes of determining Tier II consequences.

²¹ Thus, under Tier II, individual CLECs are not compensated.

²² Alternative methodology exists for determining Tier II consequences. See, for example, the June 2, 1999 Joint AT&T and MCI ex parte filing made with the FCC in CC Docket 98-56.

Table 4

Range of modified z-statistic value (z)	Performance Designation	Applicable Consequence (\$)
greater than or equal $5z^*/3$	Indeterminate	0
less than $5z^*/3$ to $3z^*$	Market Impacting	$n [a(z/z^*)^2 + b(z/z^*) + c]$
less than $3z^*$	Market Constraining	$n25,000$

Here z^* is the balancing critical value for the given submeasure aggregated over all the CLECs, and the coefficients of the smooth consequence function are again:

$$a = 5625$$

$$b = -11250$$

$$c = 8125.$$

The quantity n is the market penetration factor explained below.

A graph of the applicable consequences as a function of the measured modified z-score (z) is given in Attachment G in Figure G-3. The attachment also contains a small step tabulation of the function that approximately represents it in Table G-3.

Tier II Business Rules for Benchmark Measurements

The same business rules apply under Tier II to the aggregate (or pooled) data of the individual CLECs as are employed for the individual CLEC data under Tier I, except that consequences do not apply until the pooled CLEC performance results degrades to a point that is equivalent to an intermediate

failure designation at the Tier I level. As with parity measures, the applicable consequences are adjusted to reflect the broader consequences of poor performance for the entire CLEC industry and the concomitant effects on the market and consumers.

Table 5

Range of Benchmark Result (x)	Failure Designation	Applicable Consequence (\$)
Meets or exceeds (1.5B-50)%	Indeterminate	0
Meets or exceeds (2B-100)% but worse than (1.5B-50)%	Market Impacting	$n \{d[x/(100-B)]^2 + eB[x/(100-B)]^2 + f[B/(100-B)]^2 + g\}$
Worse than (2B-100)%	Market Constraining	n25,000

For Table 5, x is the actually measured proportion and the coefficients are again given by:

$$d = 22500$$

$$e = -45000$$

$$f = 22500$$

$$g = 2500$$

The quantity n is the market penetration factor explained below.

A graph of the applicable consequences as a function of the measured benchmark result, x , for $B = 95\%$ and $n = 10$ is given in Attachment G in Figure G-4. The attachment also contains a small step tabulation of the function that approximately represents it in Table G-4.

Establishing the Value of “n” for Tier II

For both Tier II tables (Tables 4 and 5), the value for “n” should be determined based upon the most recent data for the state and company under consideration (in this case Florida) relating to resold lines (Table 3.1) and UNE loops (Table 3.3) as reported in the most recent Report of Local Competition published by the FCC.²³ In effect, “n” is a multiplier for the Tier II consequence amount that takes into account, in general terms, the extent of competitive penetration within the state.²⁴

Table 6

Lines provided to CLECs/Total ILEC and CLEC Lines	Value of “n”
more than 50%	0
more than 40% to less than or equal 50%	1
more than 30% to less than or equal 40%	2
more than 20% to less than or equal 30%	4
more than 10% to less than or equal 20%	6
more than 5% to less than or equal 10%	8
0% to less than or equal 5%	10

²³ If a company is not explicitly identified, then the aggregate result for the state would be utilized

²⁴ The calculation for a particular ILEC and state would be based on the most current data reported to the FCC and be as follows: (resold lines + UNE loops)/(total switched lines).

Thus, as competition becomes established, the size of the applicable Tier II consequence is reduced to zero if the ILEC no longer provides a majority of the local lines to the CLECs in its serving area.

Other Considerations

1. Procedural Caps May Be Useful If Properly Implemented

In the course of early state consideration of consequence plans, regulators and incumbents expressed concern regarding the possible size of payments that an incumbent might be required to pay. In response, proposals were made to cap incumbents' potential liability. As a threshold matter, it should be noted that this concern reflects a tacit acknowledgement that the performance delivered by the incumbents has to date been largely non-complaint. Moreover, to the extent that any cap is considered at all, the very important difference between absolute and procedural caps must be recognized. As shown below, if the Commission establishes any caps at all, they should be purely procedural and not place an absolute limit on the potential consequence payments due from the ILEC.²⁵

The difference between procedural and absolute caps is significant. Absolute caps should be avoided entirely. First, such caps provide an ILEC with the means to evaluate the cost of market share retention through delivery of non-compliant performance. Second, absolute caps send the signal that once the ILEC's performance deteriorates to a particular level (i.e., reaching the absolute cap) then further deterioration is irrelevant.²⁶

²⁵ In this regard, it should be noted that the main purpose of any system of incentives is to have an ILEC accept its legal responsibility to perform at appropriate levels and not pay any consequences at all.

²⁶ Similarly, the use of weightings for individual performance measurements to determine the amount of consequences should also be avoided. Any weighting process is inherently subjective and thus arbitrary. Moreover, use of weightings may inappropriately influence the market entry mode selected by a particular CLEC. It is far superior to permit the

Procedural caps, on the other hand, establish a preset level at which the ILEC could seek regulatory review of the consequences that are due; however, the cap would not automatically absolve an ILEC of liability for a consequence. Procedural caps, therefore, avoid both of the problems of absolute caps. They do not provide ILECs with the opportunity to evaluate the "cost" of retaining share through non-compliance. Likewise, they do not absolve an ILEC from consequences for unchecked performance deterioration.

To the extent a procedural cap is employed, it should be tailored to achieve the following:

- (1) A meaningful level of consequences must be available before the procedural cap applies;
- (2) The procedural cap should apply on a rolling twelve-month period and not to individual months;
- (3) The procedural cap should not apply to Tier I consequences for the CLECs but only Tier II consequences.²⁷ No other caps should be applicable.
- (4) To the extent that a procedural cap is exceeded, the ILEC must pay out consequences up to the procedural cap and put the amount in excess of the cap in an escrow account that earns a minimum interest rate as approved by the Commission;
- (5) The Commission shall decide whether and to what extent the amount in excess of the procedural cap should be paid out. The ILEC

market to determine which measures are most important by seeing what functions customers need from CLECs, and that CLECs in turn need from the ILEC.

²⁷ As noted above, Tier I consequences principally act as a form of liquidated damages. Thus, there is no justification for capping such consequences whether for an individual CLEC or for the CLEC industry as a whole.

should pay out any amount in excess of the cap, including accrued interest, according to Commission order.

The level of the procedural cap must be set high enough that meaningful incentives are immediately payable without intervention of the Commission. To permit otherwise would effectively prevent the performance consequences from being self-enforcing. It is reasonable to expect that any procedural cap should be proportionate to the size of the local market at issue. It is therefore recommended that, if a procedural cap is adopted, that it be determined from the estimated dollar amount that the ILEC stands to retain in monopoly based revenues.

2. Other Provisions Protect ILECs From The Impact Of Extraordinary Events

The cut of a single cable may result in higher trouble rates and longer mean times to repair over a short period of time. This is referred to as clustering. While clustering may in fact occur, there is no particular reason to believe that any such events would result in disproportionate impacts on the ILEC or even the CLECs. Furthermore, there may be other events demonstrably beyond the control of the ILEC that may affect its service quality differently from the CLECs'. This condition does not argue that automatic exclusion should be provided for an otherwise applicable consequence. Nevertheless, the ILEC should not be denied protection from extraordinary impacts not anticipated in the construction of the consequence plan²⁸. As a result, if

²⁸ Root cause analysis should not defer payments of consequences. ILECs must be liable to pay any consequences for poor performance. Completion of root cause analysis must not be a prerequisite for the delivery of payments to either the CLEC(s) or to the designated Tier II fund. Root cause analyses tend to be time consuming to conduct. While root cause analysis is desirable for long range performance improvement purposes, it is antithetical to self-enforcing consequences. Finally, the provisions set forth in the immediately preceding section provide a procedural mechanism available to ILECs

such events occur, the ILEC should be permitted to pursue relief according to the following:

(1) The ILEC should notify the Commission and any potentially affected CLEC(s), using written and verifiable means of notice, of the intent to pursue an exception. Such notification must be provided before the applicable consequence is payable; otherwise the ILEC waives its rights.

(2) All consequences not at issue under the exception petition must be immediately payable as provided for elsewhere in the plan. Those that are subject of the potential exemption shall be paid into an interest bearing escrow account no later than the due date applicable to the consequences that are at issue.

(3) No later than 15 calendar days following the due date of the consequences for which an exemption is sought, the incumbent shall submit to the Commission and all other affected parties all factual evidence supporting the exemption. To the extent the ILEC seeks proprietary protection of the information submitted, it shall employ a standard nondisclosure form, approved by the Commission, before the plan is put into operation. The ILEC may not rely upon the lack of the proprietary form as a basis to delay the submission to the Commission, nor may the incumbent delay access to information by any CLEC that agrees to sign the standard nondisclosure form.

(4) By the later of 30 calendar days following notice by the incumbent or 15 calendar days following the ILEC's compliance with (3) above, interested

should after-the-fact root cause analysis indicate that a consequence was misapplied from the ILEC's perspective.

CLECs shall file comments regarding the requested exemption. By mutual agreement, this period may be extended up to 15 calendar days.

(5) Following closure of the comment period provided in (4), if the ILEC and CLEC(s) have not reached a mutually agreeable settlement, the Commission shall either

- (a) render a decision regarding the requested exemption, or
- (b) seek further comment. The Commission shall render its decision regarding the exemption, which shall be binding on all parties, within 90 calendar days of the payment due date of the consequences at issue.

(6) Payout of the consequences shall be according to Commission direction and liquidate the entire escrow account, including accrued interest. In addition, the ILEC should be responsible for reimbursing reasonably incurred legal fees of the CLECs. Such amounts should be reimbursed in the following proportion:

$[1 - (\text{amount returned to the incumbent})] / \text{total escrow balance at liquidation.}$

As discussed in Attachment F, other steps may be taken to address potential measurement correlation issues once actual data has been gathered under the performance measurement system.

3. Additional Consequences Enforce the Operation of the Plan

Additional consequences should be applicable for other ILEC failures related to performance reporting. At a minimum, consequences for the following areas of non-compliance are appropriate:

Late performance reports - If performance data and associated reports are not available to the CLECs by the due day, the ILEC should be liable for payments of \$5,000 to a state fund for every day past the due date for delivery of the reports and data. The ILEC's liability should be determined based on the latest report delivered to a CLEC.

Incomplete or revised reports - If performance data and reports are incomplete, or if previously reported data are revised, then the ILEC should be liable for payments of \$1,000 to a state fund for every day past the due date for delivery of the original reports.

Inability to access detailed data - If a CLEC cannot access its detailed data underlying the ILEC's performance reports due to failures under the control of the ILEC, then the ILEC should pay the affected CLEC \$1000 per day (or portion thereof) until such data are made available.

Interest on late consequence payments - If the ILEC fails to remit a consequence payment by the 15th business day following the due date of the data and the reports upon which the consequences are based, then it should be liable for accrued interest for every day that the payment is late. A per diem interest rate that is equivalent to the ILEC's rate of return for its regulated services for the most recent reporting year should apply.

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Attachment A

Sufficient Disaggregation Is Essential to Permit Detection of Discrimination

A meaningful system of performance consequences cannot operate without a high-quality system of performance measurements. This requires not only a robust system of performance measurements that monitors all key aspects of market entry and ILEC support but also that the results derived from such measurements are sufficiently discrete to permit meaningful comparisons.²⁹

Sufficient disaggregation is absolutely essential for accurate comparison of results to expected performance. This is true regardless of whether parity or a benchmark serves as the performance standard. Inadequate disaggregation of results means that not all key factors driving differences in performance results have been identified, which in turn interjects needless variability into the computed results. Such an outcome has two adverse effects. First, the ability to detect real differences is reduced for parity measures, because the modified z-statistic employs only the incumbent's variance in the denominator, which will increase with inappropriate averaging of dissimilar results (thus causing the calculated z-statistic to be smaller). Second, benchmark standards may be more permissive, both in terms of the absolute standard and the percentage "miss" accepted (to the extent it is factually supported at all), if the factual data underlying them are averages of widely divergent processes. Accordingly, inadequately disaggregated data impose very lenient targets that result in a very low probability that performance requirements will be missed.

²⁹ Although some incumbents have raised vague concerns that sufficient disaggregation of results may over-burden regulators, those concerns are unfounded for two reasons. First, careful advance specification of disaggregation requirements will reduce, rather than increase, regulatory burden and permit superior quality decision making. Second, if fewer performance results are desired, statistical procedures for re-aggregating disaggregated results provide a superior approach to reliance upon overly aggregated measurement results.

Only incumbents, such as BellSouth, have access to the highly detailed information regarding their retail performance necessary to determine the level of disaggregation that is required to permit apples-to-apples comparisons. Moreover, there are analytical procedures that allow factual conclusions to be made regarding how much disaggregation is "enough."³⁰ Indeed, in the limited instances where CLECs have been provided access to ILEC data and at least limited public disclosure of analysis was permitted, the facts showed both that ILECs have very detailed data and that very disaggregated results comparisons are necessary to avoid bias.³¹ Establishing the appropriate level of disaggregation is not a "once-and-done" undertaking. Provision can be made to review, perhaps annually, the appropriateness of the disaggregation contained in the ILEC's performance measurement system. In this review process, an ILEC may demonstrate, through data it has collected pursuant to its performance measurement system, that the existing level of disaggregation is not providing any additional insight to an assessment of its performance quality and nondiscrimination. In that same review process, individual CLECs should also be permitted to request additional disaggregation.³² The party requesting a change should have the burden of showing why the proposed change is appropriate provided that all parties have equal access to detailed data necessary to support the proposal.

There should not be any presumption that additional disaggregation creates a burden, for either the ILEC or this Commission. For all incumbents in

³⁰ For example, regression procedures may provide a workable methodology for establishing the extent of disaggregation required to make accurate comparisons.

³¹ See AT&T Ex Parte filed July 20, 1999 in CC Docket 98-56.

³² In such cases, the requesting CLEC should be required to make its request for further disaggregation to the incumbent ILEC at least three months before initiation of the review process.

general, additional disaggregation (once correct implementation is validated) simply involves repetitive computation – a task readily and quickly accomplished by today’s computers. Such a small and largely one-time effort is a small price to pay for the vastly improved capability to protect the prospects for competition in Florida.

ATTACHMENT B

SERVICE QUALITY MEASUREMENTS

PRE-ORDERING

1. Average Response Time and Response Interval (Pre-Ordering)
2. Interface Availability (Pre-Ordering)
3. Interface Availability (Maintenance & Repair)
4. Response Interval (Maintenance & Repair)
5. Loop Make-up Manual
6. Loop Make-up Electronic

ORDERING

1. Percent Flow-through Service Requests
2. Order Acknowledgement Timeliness
3. Order Acknowledgement Completeness
4. Percent Rejected Service Requests
5. Reject Interval
6. Firm Order Commitment Timeliness
7. Firm Order Commitment/Rejection Response Completeness
8. Speed of Answer in Ordering Center
9. Percent Order Accuracy
10. Timeliness of Response for BST to CLEC Trunks
11. LNP Percent Rejected Service Requests
12. LNP Reject Interval
13. LNP Firm Order Commitment Timeliness
14. Call Abandonment Rate

PROVISIONING

1. Mean Held Order Interval & Distribution Intervals
2. Average Jeopardy Notice Interval & % of Orders Given Jeopardy Notices
3. Percent Orders Completed On Time (or missed appointment)
4. Average Completion Interval
5. Average Completion Notice Interval
6. Coordinated Customer Conversions
7. Hot Cut Timeliness with Interval
8. % Provisioning Troubles w/i 30 days of Service Order Completion
9. Percent Completions/Attempts without Notice or with Less Than 24 Hours Notice
10. % on time hot cuts
11. Percent of Orders Cancelled or Supplemented at the Request of the ILEC
12. Percent of Hot Cuts Not Working as Initially Provisioned
13. Average Recovery Time

14. Mean Time to Restore Customer to the ILEC
15. % Customer Restored to ILEC
16. % Cooperative Acceptance Testing
17. % Successful xDSL Loops Cooperatively Tested
18. % Completion of Timely Loop Modification
19. LNP Missed Appointments
20. LNP Disconnect Timeliness

MAINTENANCE & REPAIR

1. Customer Trouble Report Rate
2. Maintenance Average Duration
3. Percent Repeat Troubles w/i 30 days)
4. Average Answer Time - Repair Centers
5. Mean Jeopardy Interval for Maintenance & Trouble Handling
6. Percent Missed Repair Appointments
7. Mean Time To Answer Calls(Repair Service Center)

BILLING

1. Usage Data Delivery Accuracy
2. Mean Time to Deliver Usage
3. % Billing Errors Corrected in X Days
4. Usage Timeliness
5. Recurring charge completeness
6. Non recurring charge completeness
7. % on time mechanized invoice delivery
8. Invoice accuracy

OTHER

1. Mean Time To Answer(OS/DA)
2. E-911 Timeliness
3. E-911 Accuracy
4. E-911 Mean Interval
5. Percent Call Completion (Trunking)
6. Database Average Update Interval
7. Database Percent Update Accuracy
8. NNX and LRN loaded by LERG Effective Date
9. % On Time Response Commitments
10. Mean Time to Notify CLEC of Network Outages
11. % on Time Notification of Interface Outages
12. % Change Management Notices Sent on Time
13. % Change Management Documentation Sent on Time
14. Average Delay Days for Change Notices
15. Average Delay Days for Documentation
16. ILEC vs CLEC Changes Made
17. % Software Certification Failures
18. % Software Problems Resolved on Time

Attachment C

Permutation Analysis Procedural Steps

Permutation analysis is applied to calculate the z-statistic using the following logic:

1. Choose a sufficiently large number T .
2. Pool and mix the CLEC and ILEC data sets
3. Randomly subdivide the pooled data sets into two pools, one the same size as the original CLEC data set (n_{CLEC}) and one reflecting the remaining data points, (which is equal to the size of the original ILEC data set or n_{ILEC}).
4. Compute and store the Z-test score (Z_s) for this sample.
5. Repeat steps 3 and 4 for the remaining $T-1$ sample pairs to be analyzed. (If the number of possibilities is less than 1 million, include a programmatic check to prevent drawing the same pair of samples more than once).
6. Order the Z_s results computed and stored in step 4 from lowest to highest.
7. Compute the Z-test score for the original two data sets and find its rank in the ordering determined in step 6.

8. Repeat the steps 2-7 ten times and combine the results to determine
 $P = (\text{Summation of ranks in each of the 10 runs divided by } 10T)$

9. Using a cumulative standard normal distribution table, find the value Z_A such that the probability (or cumulative area under the standard normal curve) is equal to P calculated in step 8.

10. Compare Z_A with the desired critical value as determined from the critical Z table. If $Z_A >$ the designated critical Z -value in the table, then the performance is non-compliant.

Attachment D

Statistical Demonstrations of Non-Parity are Sufficient: Notes on "Competitive Significance"

Some incumbents have proposed that, when comparing the CLEC data set to the ILEC data set for a particular performance measurement result, a lack of parity should not be declared unless both the performance difference is statistically significant and the difference has "competitive or economic significance." This notion is contrary to FCC's interpretation of the terms of the 1996 Act (the Act). The FCC has found that the term "nondiscriminatory" as used in the Act is a more stringent standard than the "unjust and unreasonable discrimination" standard set forth in other provisions of the Communications Act.³³ Thus, the term "nondiscriminatory access" means that: (1) the quality of performance must be equal among all carriers requesting the support, and (2) where technically feasible, the support must be no less in quality and timeliness than that which the incumbent provides to itself.³⁴

Some ILECs have also argued that, as the number of data points underlying the computed performance result increases (all other factors held constant),

³³ See FCC Docket No. 96-98, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order released August 8, 1996, ¶ 217, 859 ("Local Competition Order").

³⁴ Local Competition Order, ¶315 (access must be provided on terms that are "equal to the terms and conditions under which the incumbent LEC provisions such elements to itself"); Second Order on Reconsideration, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98 (released December 13, 1996) ¶9 (OSS access "must be equal to" the access that the ILEC provides to itself); FCC CC Docket No. 97-137, In the Matter of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region InterLATA Services in Michigan, Memorandum Opinion and Order released August 19, 1997 ("Ameritech Michigan Order"), ¶139 ("BOC must provide access to competing carriers that is equal to the level of access that the BOC provides to itself . . . in terms of

smaller differences in means will be statistically significant. This statement is true; nevertheless, as explained in the text, the consequences defined by this plan do not increase with the number of data points. Therefore, the statistical test and z-score have achieved their exact purposes by *identifying unequal performance* and increasing consequences with *severity* of failure. Furthermore, the term “discriminatory” under the Act should not be confused with direct and provable competitive injury. The language of the Act does not permit the incumbent to discriminate against a CLEC by showing that no specific competitive harm was experienced by the CLEC.³⁵ Moreover, as a theoretical matter, although statistical science can be used to evaluate the impact of different choices of alternative hypothesis in the balancing methodology, there is not much that an appeal to statistical principles can offer in directing specific choices. These specific choices are best left to telephony experts.

These judgements should consider the financial impact (on the CLECs) of violations of various degrees. As a first approximation, the ILEC has data, generated by its routine management procedures, that could be used to calibrate the effect of various violations. The Commission should require the ILEC to produce evidence, relating to its management procedures, that would help the Commission understand what deviations from target performance routinely signal the need for correction.

It is certainly not sufficient to consider only the resulting critical values or error probabilities.

quality, accuracy and timeliness”); ¶166 (ILEC “must provide competing carriers access to such OSS function equal to the access that it provides to its retail operations”).

³⁵ Indeed, requiring a CLEC to demonstrate the specific anticompetitive consequences of an ILEC performance failure would effectively render these new protections into mere reiterations of Section II of the Sherman Act. Long experience under antitrust law shows how difficult and protracted such a requirement is in practice.

Attachment E

Mitigation for Potential Impacts of Random Variation is Unnecessary When Type I and Type II Error is Balanced

Random variation is differences in the expected output (or result) of a process that cannot be entirely explained as a result of differences in the inputs to the process. Said another way, running the very same process multiple times using exactly the same key inputs may not (and likely will not) produce exactly the same outcomes. The differences in the outcomes are "explained" as random variation.

There is little debate that the support processes that incumbents utilize to support CLECs tend to be complex and that a variety of factors influence the quantity and quality of the support delivered. As a result, provided the necessary steps have been taken to disaggregate measurement results sufficiently to account for factors correlated with different outcomes, random variation should be accommodated. In doing so, a reasonable balance needs to be struck between (1) protecting the ILEC from consequences that are a result of random variation, and (2) protecting competitors from the adverse effects of discrimination by the ILEC.

As discussed above, the first step in mitigating the effects of random variation is to minimize the risk of making an incorrect decision. In this situation, the two potential incorrect decisions are (1) declaring performance compliant when it is actually discriminatory and (2) declaring performance non-compliant when it is actually within acceptable limits. If these two probabilities are balanced, then, the consequences for "false" failures conceptually offset the consequences for undetected failures. Otherwise stated, the small remedy payment by the ILEC under falsely declared non-

compliance is conceptually balanced with the market losses experienced by the CLECs due to falsely declared compliance.

Some regulators have expressed concerns, in light of what they consider to be sizable consequences necessary to motivate compliant ILEC performance and the inability to precisely balance risk, that additional mitigating factors should be instituted. Unfortunately, virtually all the mechanisms discussed are designed to protect the incumbent at the expense of the protecting the competitive process. The following mechanisms have been proposed, but each suffer from serious flaws.

a. Credits for "Better than Required" Performance Permit Gaming

This approach to mitigation is misguided and has the potential to cause extreme harm with little upside potential. In this flawed approach to mitigation, consequences for failed performance could be negated if the incumbent provides "better than required" performance at a different time (or for a different measurement) and thus earns a "credit." For example, the incumbent could deliver bad performance in one area and offset the consequence through performance credits "earned" in a separate but unrelated area or through credits for compliant performance previously (or subsequently) delivered. In all cases, such credits provide incumbents extensive opportunities to "game the system." Credits give ILECs the opportunity to deliver highly variable results that swing between very good and extremely poor performance and still be absolved of any consequence. Likewise, incumbents have the opportunity to temporarily provide compliant performance and then discriminate with impunity. In either case, the CLECs' position in the marketplace compared to the incumbent is harmed. Moreover, because CLECs only learn of "better" performance after the fact (in a performance report), they cannot take practical advantage of such

performance. Thus they get no benefit that offsets the real harm they and their customers have actually suffered.

b. Absolute Caps On Liability Are Unwarranted

There is no logical or practical basis to set an absolute limit on any incumbent's liability under any consequences plan, especially for Tier I type consequences. Such consequences are intended to compensate CLECs for actual harm they have sustained as a result of documented poor performance. Thus, there should never be a limit on this type of consequence. Moreover, to the extent that Tier II consequences become especially large, it may be appropriate to establish a procedural cap to provide an opportunity to assess whether the calculated consequence for an incumbent's market-affecting behavior should be limited.

Attachment F

Addressing Measurement Overlap And Correlation

Measurement overlap occurs when one or more measurements effectively measure the same performance. If two measurements overlap, then consequences should attach to only one of them. Note, however, a measurement addressing timeliness and a measurement addressing quality for the same area of performance do not overlap.

Measurement correlation is different from measurement overlap.

Measurement correlation occurs when one or more measurement results move at the same time. The direction of movement need not be the same. That is, one may improve (e.g., quality) while another deteriorates (e.g., timeliness). As such, measurement correlation does not automatically argue for adjustment to the measurements eligible for consequences. Indeed, an incumbent that is intentionally and pervasively discriminating would be capable of showing a high degree of correlation among all measurement results both within and across months – all results would be deteriorating.

If there are reasons to believe that measurements are somewhat overlapping and correlation is suspected, the solution is not to immediately eliminate one or both measurements. Rather the potentially superior approach is to create “families” for the purpose of applying consequences. Each measurement “family” would be eligible for only a single consequence. Whether and to what degree a family is eligible for a consequence would be determined by the worst performing individual measurement result within the family for the month under consideration. Thus, use of measurement families eliminates the possibility of consequence “double jeopardy”³⁶ without making any

³⁶ If the measurements in the family are truly overlapping and correlated they point to the same conclusion (incidents of failure and severity). Measurement families thus treat the

advance value judgement regarding the usefulness of individual measurements.

Use of measurement families has the potential for significant harm for an otherwise effective consequence plan due because: (1) inappropriate grouping can mask areas of discrimination by placing non-overlapped measurements in the same family; and, (2) by reducing eligible measurements, without adjusting the per measurement consequence, the overall plan incentives are diminished. As a result, establishment of measurement families must be approached with extreme caution and sparingly used. At least the following conditions must be imposed.

- (1) measurements that address separate support functionality may not be placed in the same family;
- (2) measurements that address different modes of market entry may not be placed in the same family;
- (3) measurement families may not be used as a means to avoid disaggregation detail;
- (4) measurements that address (a) timeliness, (b) accuracy, and (c) completeness may not be placed within the same family;
- (5) measurement families, to the extent used, must be identical across all CLECs;
- (6) even if correlation can be demonstrated, measurement families must not be used to combine otherwise independent measurements of a deficient process; and,
- (7) establishment of measurement families must not reduce the maximum consequence payable by more than 10% without an

incumbent preferentially: either the measurements are effectively the same and only one consequence applies or they were inappropriately grouped and the incumbent avoids one or more consequences that should have been incurred.

offsetting increase in the basic, intermediate, and severe consequence payable per failed measurement.

To the extent new measurement families are proposed or a proposal is set forth to eliminate or modify an existing family, the advocate of the change should bear the burden of demonstrating compliance with the above minimum requirements. The consideration should be in a public forum where all interested parties participate, and in the event of a disagreement, the Commission should decide based upon the record established. Prospective changes of measurement families should not affect any prior determinations regarding consequences.

No proposal to establish measurement families should be considered until the consequence plan has been operational and produced at least six months of independently verified data.

Attachment G
Graphs and Tables of Consequence Functions

The consequences as a function of performance are completely calculable from the equations presented in Tables 1,3,4, and 5 of the text. In fact using the equations in these tables directly is the appropriate way to program the computer that will perform the calculations when the plan is implemented. However, in this attachment we give graphical representations of the consequences as a function of performance and also present the functions in tabular form. The latter may be used as a less accurate alternative to the equations in the text tables to look up the consequence amounts.

Applicable Consequences for Tier I Parity Submeasures

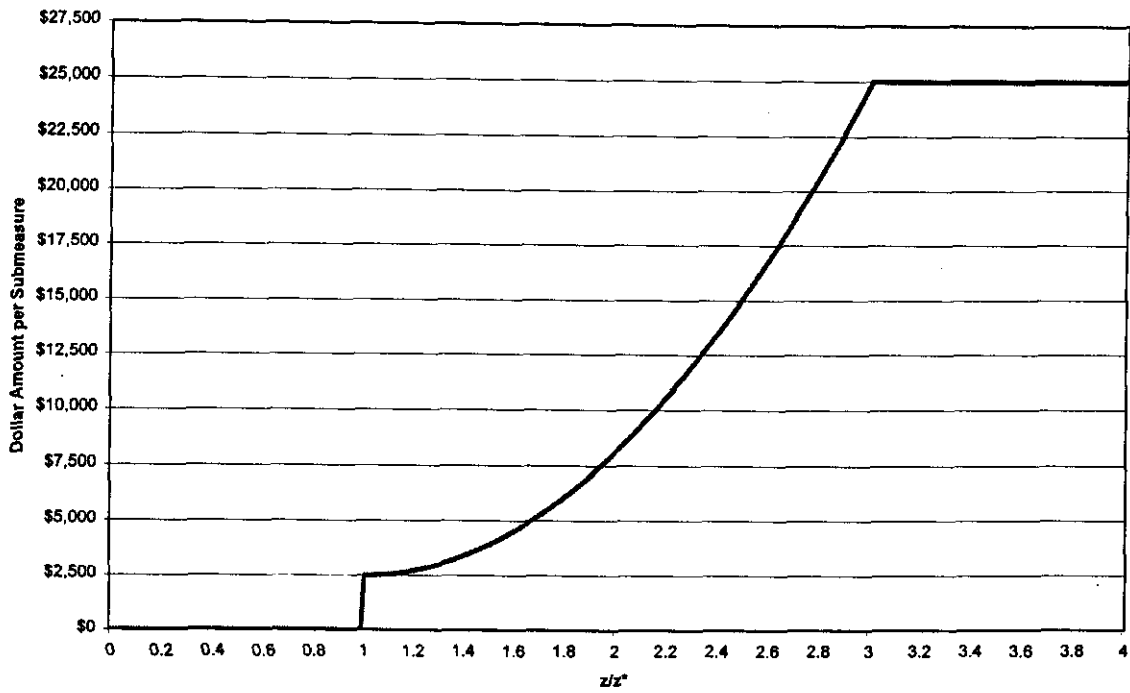


Figure G-1

Table G-1 Applicable Tier I Consequences for Parity Submeasures

z/z*	Amount
0.0 or less	\$0.00
0.1	\$0.00
0.2	\$0.00
0.3	\$0.00
0.4	\$0.00
0.5	\$0.00
0.6	\$0.00
0.7	\$0.00
0.8	\$0.00
0.9	\$0.00
1.0	<u>\$0.00</u>
1.1	\$2,556.25
1.2	\$2,725.00
1.3	\$3,006.25
1.4	\$3,400.00
1.5	\$3,906.25
1.6	\$4,525.00
1.7	\$5,256.25
1.8	\$6,100.00
1.9	\$7,056.25
2.0	\$8,125.00
2.1	\$9,306.25
2.2	\$10,600.00
2.3	\$12,006.25
2.4	\$13,525.00
2.5	\$15,156.25
2.6	\$16,900.00
2.7	\$18,756.25
2.8	\$20,725.00
2.9	\$22,806.25
3.0 or more	\$25,000.00

Table G-2 Applicable Tier I Consequences for (95%) Benchmark
Submeasures

x (%)	Amount
90.0 or less	\$25,000.00
90.5	\$20,725.00
91.0	\$16,900.00
91.5	\$13,525.00
92.0	\$10,600.00
92.5	\$8,125.00
93.0	\$6,100.00
93.5	\$4,525.00
94.0	\$3,400.00
94.5	\$2,725.00
95.0	<u>\$0.00</u>
95.5	\$0.00
96.0	\$0.00
96.5	\$0.00
97.0	\$0.00
97.5	\$0.00
98.0	\$0.00
98.5	\$0.00
99.0	\$0.00
99.5	\$0.00
100.0	\$0.00

Applicable Consequences for Tier II Parity Submeasures (n=10)

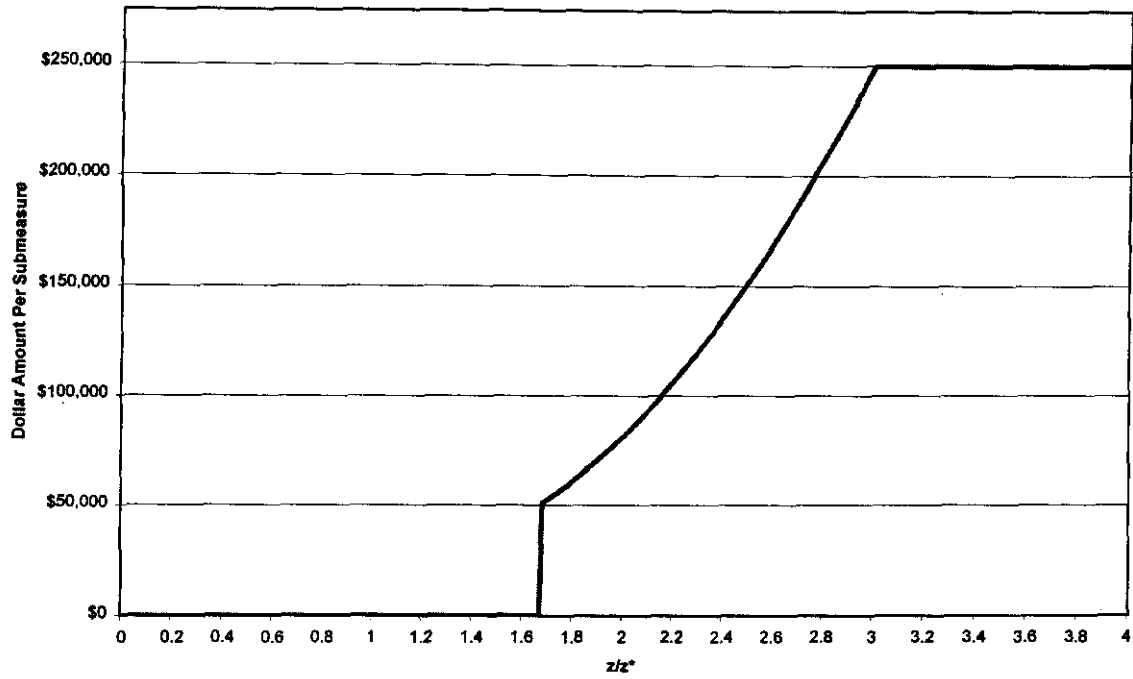


Figure G-3

Table G-3 Applicable Tier II Consequences for Parity Submeasures (n = 10)

z/z*	Amount
0.0 or less	\$0.00
0.1	\$0.00
0.2	\$0.00
0.3	\$0.00
0.4	\$0.00
0.5	\$0.00
0.6	\$0.00
0.7	\$0.00
0.8	\$0.00
0.9	\$0.00
1.0	\$0.00
1.1	\$0.00
1.2	\$0.00
1.3	\$0.00
1.4	\$0.00
1.5	\$0.00
1.6	\$0.00
1.7	\$52,562.50
1.8	\$61,000.00
1.9	\$70,562.50
2.0	\$81,250.00
2.1	\$93,062.50
2.2	\$106,000.00
2.3	\$120,062.50
2.4	\$135,250.00
2.5	\$151,562.50
2.6	\$169,000.00
2.7	\$187,562.50
2.8	\$207,250.00
2.9	\$228,062.50
3.0 or more	\$250,000.00

Applicable Consequences for Tier II (95%) Benchmark Submeasures (n=10)

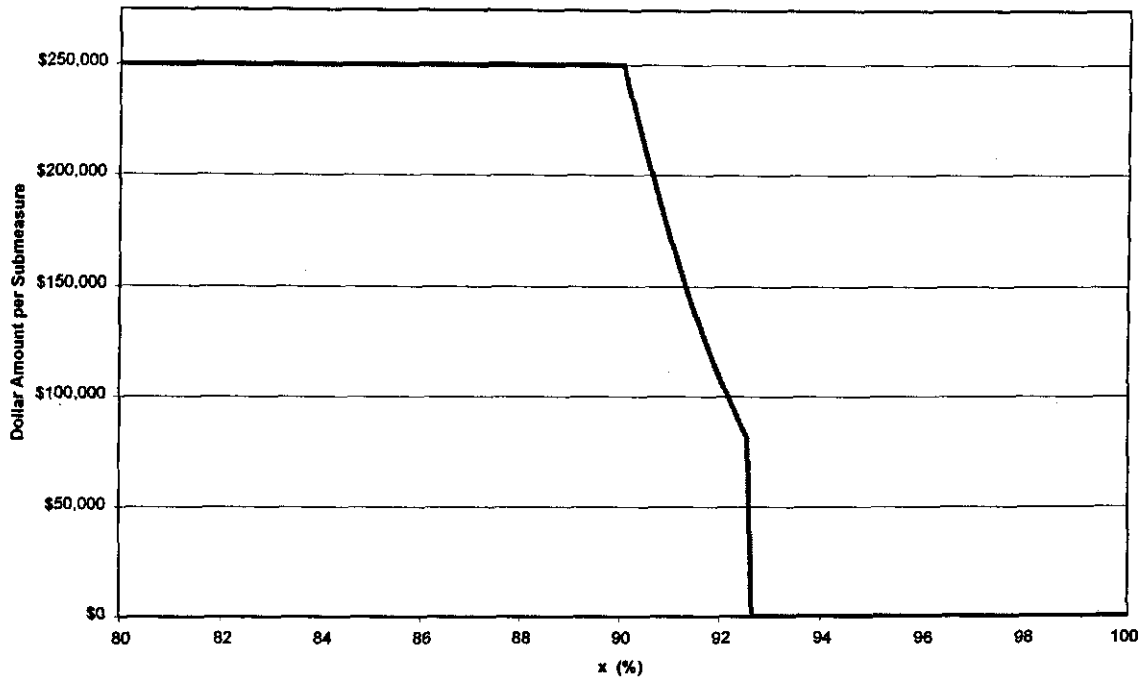


Figure G-4

Table G-4 Applicable Tier II Consequences for (95%) Benchmark
Submeasures (n = 10)

x (%)	Amount
90.0 or less	\$250,000.00
90.5	\$207,250.00
91.0	\$169,000.00
91.5	\$135,250.00
92.0	\$106,000.00
92.5	<u>\$0.00</u>
93.0	\$0.00
93.5	\$0.00
94.0	\$0.00
94.5	\$0.00
95.0	\$0.00
95.5	\$0.00
96.0	\$0.00
96.5	\$0.00
97.0	\$0.00
97.5	\$0.00
98.0	\$0.00
98.5	\$0.00
99.0	\$0.00
99.5	\$0.00
100.0	\$0.00

Sample Benchmark Adjustment Table

CLEC Data Set Size	Benchmark Percentage Adjustments for Small Data Sets (Applicable to Data Sets < 30)		
	85.0%	90.0%	95.0%
5	80.0%	80.0%	80.0%
6	83.3%	83.3%	83.3%
7	85.0%	85.7%	85.7%
8	75.0%	87.5%	87.5%
9	77.8%	88.9%	88.9%
10	80.0%	90.0%	90.0%
20	85.0%	90.0%	95.0%
30	83.3%	90.0%	93.3%

ILEC Monthly Performance Measurement Results Reporting
ATTACHMENT 01
Sample ILEC PM Results Summary Report

STANDARD REPORTING FIELDS FOR A PM RESULTS SUMMARY REPORT						THESE FIELDS WOULD BE REPORTED FOR EACH OF THE 12 MONTHS				
PM#	PM CATEGORY	PM NAME	STANDARD	BENCHMARK	GEO AREA	CLEC OBSV	CLEC VALUE	ILEC VALUE	Z-VALUE	RESULT
1-01	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Address Verification - DATAGATE	Benchmark	4.7	CO	x	3.2		(1.50)	Pass
1-02	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Req. for Telephone Number - DATAGATE	Benchmark	4.5	CO	x	3.2		(1.30)	Pass
1-03	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Req. for CSR - DATAGATE	Benchmark	6.6	CO	x	3.8		(2.80)	Pass
1-04	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Serv. Availability - DATAGATE	Benchmark	6.6	CO	x	0.8		(5.80)	Pass
1-05	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Serv. Appointment Scheduling - DATAGATE	Benchmark	1.0	CO	x	0.5		(0.50)	Pass
1-06	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Dispatch Required - DATAGATE	Benchmark	12.8	CO	x	9.4		(3.20)	Pass
1-07	Pre-Ordering	Avg. Resp. for OSS Pre-Order - PIC - DATAGATE	Benchmark	28.0	CO	x	21.2		(6.80)	Pass
1-08	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Address Verification - VERIGATE	Benchmark	4.7	CO	x	5.5		0.79	Pass
1-09	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Req. for Telephone Number - VERIGATE	Benchmark	4.5	CO	x	2.5		(2.01)	Pass
1-10	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Req. for CSR - VERIGATE	Benchmark	6.6	CO	x	2.8		(3.96)	Pass
1-11	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Serv. Availability - VERIGATE	Benchmark	6.6	CO	x	3.1		(3.46)	Pass
1-12	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Serv. Appointment Scheduling - VERIGATE	Benchmark	1.0	CO	x	0.5		(0.46)	Pass
1-13	Pre-Ordering	Avg. Resp. for OSS Pre-Order - Dispatch Required - VERIGATE	Benchmark	12.8	CO	x	8.6		(3.97)	Pass
1-14	Pre-Ordering	Avg. Resp. for OSS Pre-Order - PIC - VERIGATE	Benchmark		CO	x	19.2		n/a	-
2-01	Pre-Ordering	Avg. Resp. Rec. within 12 sec. - Address Verification - DATAGATE	Benchmark	95.0%	CO	x	98.6%		(3.60)	Pass
2-02	Pre-Ordering	Avg. Resp. Rec. within 9.5 sec. - Req. for Telephone Number - DATAGATE	Benchmark	95.0%	CO	x	98.6%		(3.60)	Pass
2-03	Pre-Ordering	Avg. Resp. Rec. within 13 sec. - Req. for CSR - DATAGATE	Benchmark	95.0%	CO	x	99.1%		(4.10)	Pass
2-04	Pre-Ordering	Avg. Resp. Rec. within 18 sec. - Service Availability - DATAGATE	Benchmark	95.0%	CO	x	99.9%		(4.90)	Pass
2-05	Pre-Ordering	Avg. Resp. Rec. within 2 sec. - Serv. Appointment Scheduling - DATAGATE	Benchmark	95.0%	CO	x	98.8%		(3.80)	Pass
2-06	Pre-Ordering	Avg. Resp. Rec. within 25 sec. - Dispatch Required - DATAGATE	Benchmark	95.0%	CO	x	99.8%		(4.80)	Pass
2-07	Pre-Ordering	Avg. Resp. Rec. within 80 sec. - PIC - DATAGATE	Benchmark	95.0%	CO	x	99.1%		(4.10)	Pass
2-08	Pre-Ordering	Avg. Resp. Rec. within 7 sec. - Address Verification - VERIGATE	Benchmark	90.0%	CO	x	85.8%		4.25	Fail
2-09	Pre-Ordering	Avg. Resp. Rec. within 9 sec. - Req. for Telephone Number - VERIGATE	Benchmark	80.0%	CO	x	80.0%		0.02	Pass
2-10	Pre-Ordering	Avg. Resp. Rec. within 10 sec. - Req. for CSR - VERIGATE	Benchmark	90.0%	CO	x	98.5%		(8.49)	Pass
2-11	Pre-Ordering	Avg. Resp. Rec. within 13 sec. - Service Availability - VERIGATE	Benchmark	90.0%	CO	x	97.9%		(7.85)	Pass
2-12	Pre-Ordering	Avg. Resp. Rec. within 3 sec. - Service Appointment Scheduling - VERIGATE	Benchmark	80.0%	CO	x	89.0%		(9.01)	Pass
2-13	Pre-Ordering	Avg. Resp. Rec. within 19 sec. - Dispatch Required - VERIGATE	Benchmark	90.0%	CO	x	97.2%		(7.20)	Pass
2-14	Pre-Ordering	Avg. Resp. Rec. within X sec. - PIC - VERIGATE	Benchmark		CO	x	n/a		n/a	-
3-01	Pre-Ordering	EASE Average Response Time	Parity		TX	x	0.71	0.74	0.00	Pass
4-01.1	Pre-Ordering	OSS Interface Availability - DATAGATE	Benchmark	99.5%	CO	x	100.0%		(0.50)	Pass
4-01.2	Pre-Ordering	OSS Interface Availability - VERIGATE	Benchmark	99.5%	CO	x	100.0%		(0.50)	Pass
4-01.3	Pre-Ordering	OSS Interface Availability - LEX	Benchmark	99.5%	CO	x	100.0%		(0.50)	Pass
4-01.4	Pre-Ordering	OSS Interface Availability - EDI	Benchmark	99.5%	CO	x	100.0%		(0.50)	Pass
4-01.5	Pre-Ordering	OSS Interface Availability - TOOLBAR	Benchmark	99.5%	CO	x	100.0%		(0.50)	Pass
4-01.6	Pre-Ordering	OSS Interface Availability - LRAF	Benchmark	99.5%	CO	x	100.0%		(0.50)	Pass
4-02	Pre-Ordering	Consumer EASE Availability	Benchmark	99.5%	TX	x	100.0%		0.00	Pass
4-03	Pre-Ordering	Business EASE Availability	Benchmark	99.5%	TX	x	100.0%		0.00	Pass
5-01	Pre-Ordering	% FOCs Rec. Within 5 Hours - Residence and Simple Business - LEX	Benchmark	95.0%	TX	x	95.8%		(0.84)	Pass
5-02	Pre-Ordering	% FOCs Rec. Within 24 Hours - Complex Business (1 - 200 Lines) - LEX	Benchmark	94.0%	TX	x	93.4%		0.59	Pass

ALEC Penalty Plan for Covad Examples

In response to a request made during the hearing, BellSouth has attempted to ascertain what penalties would have been paid to Covad under BellSouth's plan for BellSouth's performance in December, 2000. In order to determine any penalties with accuracy, it is necessary to have the cell level data for both Covad and for BellSouth's corresponding and comparable data, to insure that "like-to-like" comparisons are done.

The cell level information for BellSouth's retail analogs is not available for December, 2000. The performance plan that BellSouth has proposed with the specific recommended analogs was not in place in Florida in December, and thus the necessary data to make these comparisons was not captured and retained. BellSouth has conducted an inquiry to determine whether the necessary information could be recovered from another source, but has been unable to conclude that the data could be recovered, and, if it could be recovered, whether it could be recovered within a reasonable time period and at a reasonable cost.

FLORIDA PUBLIC SERVICE COMMISSION
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COMPANY/
WITNESS: Burak
DATE: 4-25-28-01

Local Competition Users Group

Statistical Tests for Local Service Parity

February 6, 1998
Membership: AT&T, Sprint, MCI, LCI, WorldCom

Version 1.0

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FLORIDA PUBLIC SERVICE COMMISSION
DOCKET
NO. 000121-TP EXHIBIT NO. 27
COMPANY/ Bell
WITNESS: _____
DATE: 4-25-27-01

Executive Summary

The Local Competition Users Group has drafted 27 Service Quality Measurements (SQMs) that will be used to measure parity of service provided by incumbent local exchange carriers (ILECs) to competitive local exchange carriers (CLECs). This set of measures includes means, proportions, and rates of various indicators of service quality. This document proposes statistical tests that are appropriate for determining if parity is being provided with respect to these measurements.

Each month, a specified report of the 27 SQMs will be provided by the ILEC, broken down by the requested reporting dimensions. The SQMs are to be systematically developed and provided by the ILECs as specified. Test parameters will be calculated so that the overall probability of declaring the ILEC to be out of parity purely by chance is very small. For each SQM and reporting dimension reported, the difference between the ILEC and CLEC results is converted to a z-value. Non-parity is determined if a z-value exceeds a selected critical value.

Introduction

Purpose

The Local Competition Users Group (LCUG) is a cooperative effort of AT&T, MCI, Sprint, LCI and WorldCom for establishing standards for the entry of new companies (competitive local exchange carriers, or CLECs) into the local telecommunications market. A key initiative of the LCUG is to establish measures of parity for services provided by incumbent local exchange carriers (ILECs). In short, parity means that the support ILECs provide on behalf of the CLECs is no lesser in quality than the service provided by the ILECs to their own customers.

The LCUG has drafted a document listing service quality measurements (SQMs) that must be reported by the ILECs to insure that CLECs are given parity of support. The SQM document has been submitted to the FCC and made available to PUCs in all 50 states and is pending approval by many of these regulatory agencies. This document has been drafted to describe statistical methodology for determining if parity exists based on the measurements defined in the SQM document.

Service Quality Measurements

The LCUG has identified 27 service quality measurements for testing parity of service. These are:

Pre-Ordering	PO-1	Average Response Interval for Pre-Ordering Information
Ordering and Provisioning	OP-1	Average Completion Interval
	OP-2	Percent Orders Completed on Time
	OP-3	Percent Order Accuracy
	OP-4	Mean Reject Interval
	OP-5	Mean FOC Interval
	OP-6	Mean Jeopardy Interval
	OP-7	Mean Completion Interval
	OP-8	Percent Jeopardies Returned
	OP-9	Mean Held Order Interval
	OP-10	Percent Orders Held \geq 90 Days
	OP-11	Percent Orders Held \geq 15 Days
Maintenance and Repair	MR-1	Mean Time to Restore
	MR-2	Repeat Trouble Rate
	MR-3	Trouble Rate

	MR-4	Percentage of Customer Troubles Resolved Within Estimate
General	GE-1	Percent System Availability
	GE-2	Mean Time to Answer Calls
	GE-3	Call Abandonment Rate
Billing	BI-1	Mean Time to Provide Recorded Usage Records
	BI-2	Mean Time to Deliver Invoices
	BI-3	Percent Invoice Accuracy
	BI-4	Percent Usage Accuracy
Operator Services and Directory Assistance	OSDA-1	Mean Time to Answer
Network Performance	NP-1	Network Performance Parity
Interconnect / Unbundled Elements and Combos	IUE-1	Function Availability
	IUE-2	Timeliness of Element Performance

The Service Quality Measurements document describes the importance of each measure as an indicator of service parity. The SQM document also describes reporting dimensions that will be used to break each measure out by like factors (*e.g.*, major service group).

Why We Need to Use Statistical Tests

The Telecommunications Act of 1996 requires that ILECs provide nondiscriminatory support regardless of whether the CLEC elects to employ interconnection, services resale, or unbundled network elements as the market entry method. It is essential that CLECs and regulators be able to determine whether ILECs are meeting these parity and nondiscriminatory obligations. In order to make such a determination, the ILEC's performance for itself must be compared to the ILEC's performance in support of CLEC operations; and the results of this comparison must demonstrate that the CLEC receives no less than equal treatment compared to that the ILEC provides to its own operations. Where a direct comparison to analogous ILEC performance is not possible, the comparative standard is the level of performance that offers an efficient CLEC a meaningful opportunity to compete.

When making the comparison of ILEC results to CLEC results, it is necessary to employ comparative procedures that are based upon generally accepted statistical procedures. It is important to use statistical procedures because all of the ILEC-CLEC processes that will be measured are processes that contain some degree of randomness. Statistical procedures recognize that

there is measurement variability, and assist in translating results data into useful decision-making information. A statistical approach allows for measurement variability while controlling the risk of drawing an inappropriate conclusion (*i.e.*, a "type 1" or "type 2" error, discussed in the next section).

Basic Concepts and Terms

Populations and Samples

Statistical procedures will permit a determination whether the support that the ILECs provide to CLECs is indistinguishable from the support provided by the ILECs to their own customers. In statistical terms, we will determine whether two "samples", the ILEC sample and the CLEC sample, come from the same "population" of measurements.

The procedures described in this paper are based on the following assumption: *When parity is provided, the ILEC data and CLEC data can both be regarded as samples from a common population of possible outcomes.* In other words, if parity exists, the measured results for a CLEC should not be distinguishable from the measured results for the ILEC, once random variability is taken into account. Figure 1 illustrates this concept. On the right side of the figure are histograms of two samples. In this illustration, the ILEC sample contains 200 observations (data values) and the CLEC sample contains 50. Note that the two histograms are not exactly alike. This is due to sampling variation. The assumption that parity exists implies that both samples were drawn from the same population of values. If it were possible to observe this population completely, the population histogram might appear as shown on the left of the Figure. If the samples were indeed taken from this population, histograms drawn for larger and larger samples would look more and more like the population histogram. Figure 1 shows that even when parity is being provided, there will be differences between the samples due to sampling variability. Statistical tests quantify the differences between the two samples and make proper allowance for sampling variability. They assess the chance that the differences that are observed are due simply to sampling variability, if parity is being provided.

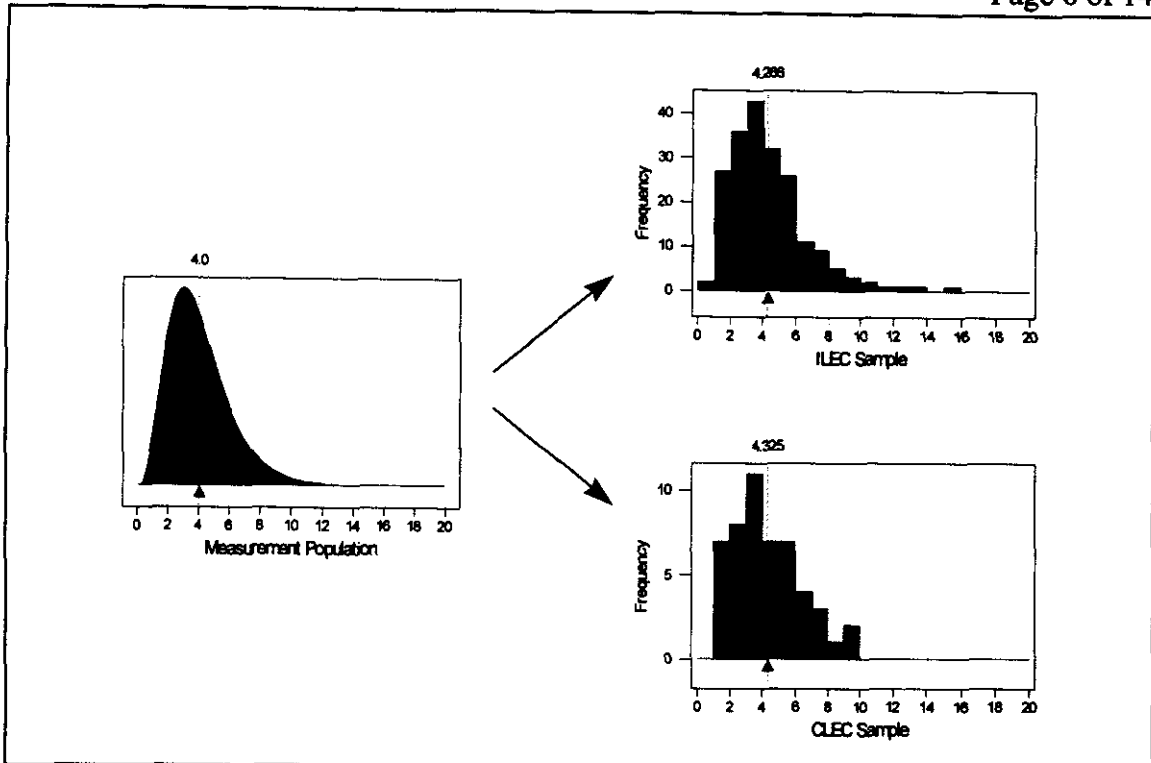


Figure 1.

Measures of Central Tendency and Spread

Often, distributions are summarized using "statistics." For the purpose of this paper, a "statistic" is simply a calculation performed on a sample set of data. Two common types of statistics are known as measures of "central tendency" and "spread."

A measure of central tendency is a summary calculation that describes the middle of the distribution in some way. The most common measure of central tendency is called the "mean" or "average" of the distribution. The mean of a sample is simply the sum of the data values divided by the sample size (number of observations). Algebraically, this calculation is expressed as

$$\bar{x} = \frac{\sum x}{n},$$

where x denotes a value in the sample and n denotes the sample size. The mean describes the center of the distribution in the following way: *If the histogram for a sample were a set of weights stacked on top of a flat board placed on top of a fulcrum (a "see-saw"), the mean would be the position along the board at which the board would balance.* (See Figure 1.) The

mean in Figure 1 is indicated by the small triangle at approximately the value "4" on the horizontal axis.

A measure of spread is a summary calculation that describes the amount of variation in a sample. A common measure of spread is called the "standard deviation" of the sample. The standard deviation is the typical size of a deviation of the observations in the sample from their mean value. The standard deviation is calculated by subtracting the mean value from each observation in the sample, squaring the resulting differences (so that negative and positive differences don't offset), summing the squared differences, dividing the sum by one less than the sample size, then taking the square root of the result. Algebraically, this calculation is expressed as

$$\sigma = \sqrt{\frac{\sum(x - \bar{x})^2}{n - 1}}$$

While the notion of mean and standard deviation exists for populations as well as samples, the mathematical definition for the mean and standard deviation for populations is beyond the scope of this paper. However, their interpretation is generally the same as for samples. In fact, for very large samples, the sample mean and sample standard deviation will be very close to the mean and standard deviation of the population from which the sample was taken.

Sampling Distribution of the Sample Mean

In Figure 1 we showed the positions of the means of the population and the two samples with triangular symbols beneath the distributions. If we sample over successive months, we will get new ILEC samples and new CLEC samples each and every month. These samples will not be exactly like the one for the first month; each will be influenced by sampling variability in a different way. In Figure 2, we show how sets of 100 successive ILEC means and 100 successive CLEC means might appear. The ILEC means can be thought of as being drawn from a population of sample means; this population is called the "sampling distribution" of these ILEC means. This sampling distribution is completely determined by the basic population of measurements that we start with, and the number of observations in each sample. The sampling distribution has the same mean as the population.

Figure 2 illustrates two important statistical concepts:

1. The histogram of successive sample means resembles a bell-shaped curve known as the Normal Distribution. This is true even though the individual observations came from a skewed distribution.

- The standard deviation of the distribution of sample means is much smaller than the standard deviation of the observations themselves. In fact, statistical theory establishes the fact that the standard deviation on the population of means is smaller by a factor \sqrt{n} , where n is the sample size. This effect can be seen in our example: the distribution of the CLEC means is twice as broad as the distribution of the ILEC means, since the ILEC sample size (200) is four times as large as the CLEC sample size (50).

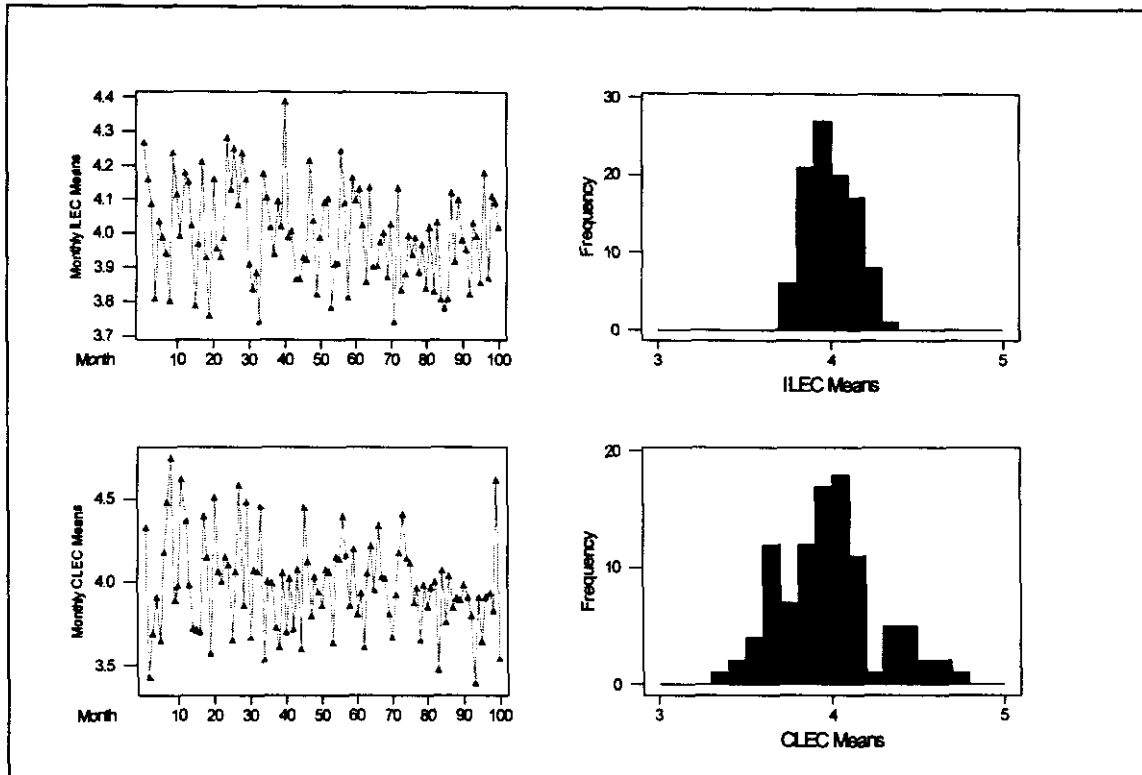


Figure 2.

It is common to call the standard deviation of the sampling distribution of a statistic the "standard error" for the statistic. We shall adopt this convention to avoid confusion between the standard deviation of the individual observations and the standard deviation (standard error) of the statistic. The latter is generally much smaller than the former. In the case of sample means, the standard error of the mean is smaller than the standard deviation of the individual observations by a factor of \sqrt{n} .

The Z-test

Our objective is to compare the mean of a sample of ILEC measurements with the mean of a sample of CLEC measurements. Suppose both samples were drawn from the same population; then the difference between these

two sample means (*i.e.*, $DIFF = \bar{x}_{CLEC} - \bar{x}_{ILEC}$) will have a sampling distribution which will

- (i) have a mean of zero; and
- (ii) have a standard error that depends on the population standard deviation and the sizes of the two samples.

Statisticians utilize an index for comparing measurement results for different samples. The index employed is a ratio of the difference in the two sample means (being compared) and the standard deviation estimated for the overall population. This ratio is known as a z-score. The z-score compares the two samples on a standard scale, making proper allowance for the sample sizes.

The computation of the difference in the two sample means is straightforward.

$$DIFF = \bar{x}_{CLEC} - \bar{x}_{ILEC}$$

The standard deviation is less intuitive. Nevertheless, statistical theory establishes the fact that

$$\sigma_{DIFF}^2 = \frac{\sigma^2}{n_{CLEC}} + \frac{\sigma^2}{n_{ILEC}},$$

where σ is the standard deviation of the population from which both samples are drawn. That is, the squared standard error of the difference is the sum of the squared standard errors of the two means being compared.¹

We do not know the true value of the population σ because the population cannot be fully observed. However, we can estimate σ given the standard deviation of the ILEC sample (σ_{ILEC}).² Hence, we may estimate the standard error of the difference with

$$\sigma_{DIFF} = \sqrt{\frac{\sigma_{ILEC}^2}{n_{CLEC}} + \frac{\sigma_{ILEC}^2}{n_{ILEC}}} = \sqrt{\sigma_{ILEC}^2 \left[\frac{1}{n_{CLEC}} + \frac{1}{n_{ILEC}} \right]}$$

If we then divide the difference between the two sample means by this estimate of the standard deviation of this difference, we get what is called a "z-score".

¹ Winkler and Hays, *Probability, Inference, and Decision*. (Holt, Rinehart and Winston: New York), p. 370.

² Winkler and Hays, *Probability, Inference, and Decision*. (Holt, Rinehart and Winston: New York), p. 338.

$$z = \frac{DIFF}{\sigma_{DIFF}}$$

Because we assumed that both samples were in fact drawn from the same population, this z-score has a sampling distribution that is very nearly Standard Normal, *i.e.*, having a mean of zero and a standard error of one. Thus, the z-score will lie between ± 1 in about 68% of cases, will lie between ± 2 in about 95% of cases, and will lie between ± 3 in about 99.7% of cases, always assuming that both samples come from the same population. Therefore, one possible procedure for checking whether both samples come from the same population is to compare the z-score with some cut-off value, perhaps +3. For comparisons where the values of z exceed the cutoff value, you reject the assumption of parity as not proven by the measured results. This is an example of a statistical test procedure. It is a formal rule of procedure, where we start with raw data (here two samples, ILEC measurements and CLEC measurements), and arrive at a decision, either "conformity" or "violation".

Type 1 Errors and Type 2 Errors

Each statistical test has two important properties. The first is the probability that the test will determine that a problem exists when in fact there is none. Such a mistaken conclusion is called a type one error. In the case of testing for parity, a type one error is the mistake of charging the ILEC with a parity violation when they may not be acting in a discriminatory manner. The second property is the probability that the test procedure will not identify a parity violation when one does exist. The mistake of not identifying parity violation when the ILEC is providing discriminatory service is called a type two error. A balanced test is, therefore, required.

From the ILEC perspective, the statistical test procedure will be unacceptable if it has a high probability of type one errors. From the CLEC perspective, the test procedure will be unacceptable if it has a high probability of type two errors.

Very many test procedures are available, all having the same probability of type one error. However the probability of a type two error depends on the particular kind of violation that occurs. For small departures from parity, the probability of detecting the violation will be small. However, different test procedures will have different type two error probabilities. Some test procedures will have small type two error when the CLEC mean is larger than the ILEC mean, even if the CLEC standard deviation is the same as the ILEC standard deviation, while other procedures will be sensitive to differences in standard deviation, even if the means are equal. Our proposals below are

designed to have small type two error when the CLEC mean exceeds the ILEC mean, whether or not the two variances are equal.

Tests of Proportions and Rates

When our measurements are proportions (e.g. percent orders completed on time) rather than measurements on a scale, there are some simplifications. We can think of the "population" as being analogous to an urn filled with balls, each labeled either 0(failure) or 1(success). In this population, the fraction of 1's is some "population proportion". Making an observation corresponds to drawing a single ball from this urn. Each month, the ILEC makes some number of observations, and reports the ratio of failures or successes to the total number of observations; the ILEC does the same does the same for the CLEC. The situation is very similar to that discussed above; however, rather than a wide range of possible result values, we simply have 0's (failures) and 1's (successes). The "sample mean" becomes the "observed proportion", and this will have a sampling distribution just as before. The novelty of the situation is that now the population standard deviation is a known function of the population proportion³; if the population proportion is p , the population standard deviation is $\sqrt{p(1-p)}$, with similar simplifications in all the other formulas.

There is a similar simplification when the observations are of rates, e.g., number of troubles per 100 lines. The formulas appear below.

Proposed Test Procedures

Applying the Appropriate Test

Three z-tests will be described in this section: the "Test for Parity in Means", the "Test for Parity in Rates", and the "Test for Parity in Proportions". For each LCUG Service Quality Measurement (SQM), one or more of these parity tests will apply. The following chart is a guide that matches each SQM with the appropriate test.

Preordering Response Interval (PO-1)	Mean
Avg. Order Completion Interval (OP-1)	Mean
% Orders Completed On Time (OP-2)	Proportion
% Order (Provisioning) Accuracy (OP-3)	Proportion
Order Reject Interval (OP-4)	Mean
Firm Order Confirmation Interval (OP-5)	Mean

³ Winkler and Hays, *Probability, Inference, and Decision*. (Holt, Rinehart and Winston: New York), p. 212.

Mean Jeopardy Interval (OP-6)	Mean
Completion Notice Interval (OP-7)	Mean
Percent Jeopardies Returned (OP-8)	Proportion
Held Order Interval (OP-9)	Mean
% Orders Held > 90 Days (OP-10)	Proportion
% Orders Held > 15 Days (OP-11)	Proportion
Time To Restore (MR-1)	Mean
Repeat Trouble Rate (MR-2)	Proportion
Frequency of Troubles (MR-3)	Rate
Estimated Time To Restore (MR-4)	Proportion
System Availability (GE-1)	Proportion
Center Speed of Answer (GE-2)	Mean
Call Abandonment Rate (GE-3)	Proportion
Mean Time to Deliver Usage Records (BI-1)	Mean
Mean Time to Deliver Invoices (BI-2)	Mean
Percent Invoice Accuracy (BI-3)	Proportion
Percent Usage Accuracy (BI-4)	Proportion
OS/DA Speed of Answer (OS/DA-1)	Mean
Network Performance (NP-1)	Mean, Proportion
Availability of Network Elements (IUE-1)	Mean, Proportion
Performance of Network Elements (IUE-2)	Mean, Proportion

Test for Parity in Means

Several of the measurements in the LCUG SQM document are averages (*i.e.*, means) of certain process results. The statistical procedure for testing for parity in ILEC and CLEC means is described below:

1. Calculate for each sample the number of measurements (n_{ILEC} and n_{CLEC}), the sample means (\bar{x}_{ILEC} and \bar{x}_{CLEC}), and the sample standard deviations (s_{ILEC} and s_{CLEC}).
2. Calculate the difference between the two sample means; if *larger* CLEC mean indicates possible violation of parity, use $DIFF = \bar{x}_{CLEC} - \bar{x}_{ILEC}$; otherwise reverse the order of the CLEC mean and the ILEC mean.
3. To determine a suitable scale on which to measure this difference, we use an estimate of the population variance based on the ILEC sample, adjusted for the sized of the two samples: this gives the standard error of the difference between the means as

$$\sigma_{DIFF} = \sqrt{\sigma_{ILEC}^2 \left[\frac{1}{n_{CLEC}} + \frac{1}{n_{ILEC}} \right]}$$

4. Compute the test statistic

$$z = \frac{DIFF}{\sigma_{DIFF}}$$

5. Determine a critical value c so that the type one error is suitably small.
6. Declare the means to be in violation of parity if $z > c$.

Example:

c: [redacted] Critical value for the test

ILEC			CLEC			Test	
n	mean	variance	n	mean	variance	z	Violation
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	5.15	YES!

Test for Parity in Proportions

Several of the measurements in the LCUG SQM document are proportions derived from certain counts. The statistical procedure for testing for parity in ILEC and CLEC proportions is described below. It is the same as that for means, except that we do not need to estimate the ILEC variance separately.

1. Calculate for each sample sample sizes (n_{ILEC} and n_{CLEC}), and the sample proportions (p_{ILEC} and p_{CLEC}).
2. Calculate the difference between the two sample means; if *larger* CLEC proportion indicates worse performance, use $DIFF = p_{CLEC} - p_{ILEC}$, otherwise reverse the order of the ILEC and CLEC proportions.
3. Calculate an estimate of the *standard error for the difference* in the two proportions according to the formula

$$\sigma_{DIFF} = \sqrt{p_{ILEC}(1 - p_{ILEC}) \left[\frac{1}{n_{CLEC}} + \frac{1}{n_{ILEC}} \right]}$$

4. Hence compute the test statistic

$$z = \frac{DIFF}{\sigma_{DIFF}}$$

5. Determine a critical value c so that the type one error is suitably small.
6. Declare the means to be in violation of parity if $z > c$.

Example:

c: [redacted] Critical value for the test

ILEC			CLEC			Test	
num	den	p	num	den	p	z	Violation
		2.00%			17.50%	6.50	YES!

Test for Parity in Rates

A rate is a ratio of two counts, $num/denom$. An example of this is the trouble rate experience for POTS. The procedure for analyzing measurements results that are rates is very similar to that for proportions.

1. Calculate the numerator and the denominator counts for both ILEC and CLEC, and hence the two rates $r_{ILEC} = num_{ILEC}/denom_{ILEC}$ and $r_{CLEC} = num_{CLEC}/denom_{CLEC}$.
2. Calculate the difference between the two sample rates; if *larger* CLEC rate indicates worse performance, use $DIFF = r_{CLEC} - r_{ILEC}$, otherwise take the negative of this.
3. Calculate an estimate of the *standard error for the difference* in the two rates according to the formula

$$\sigma_{DIFF} = \sqrt{r_{ILEC} \left[\frac{1}{denom_{CLEC}} + \frac{1}{denom_{ILEC}} \right]}$$

4. Compute the test statistic

$$z = \frac{DIFF}{\sigma_{DIFF}}$$

5. Determine a critical value c so that the type one error is suitably small.
6. Declare the means to be in violation of parity if $z > c$.

Example:

c: [redacted] Critical value for the test

ILEC			CLEC			Test	
num	den	rate	num	den	rate	z	Violation
		0.409836			1.133333	6.04	YES!

Exhibit RMB-2
Permutation Analysis Procedural Steps

Permutation analysis is applied to calculate the z-statistic using the following logic:

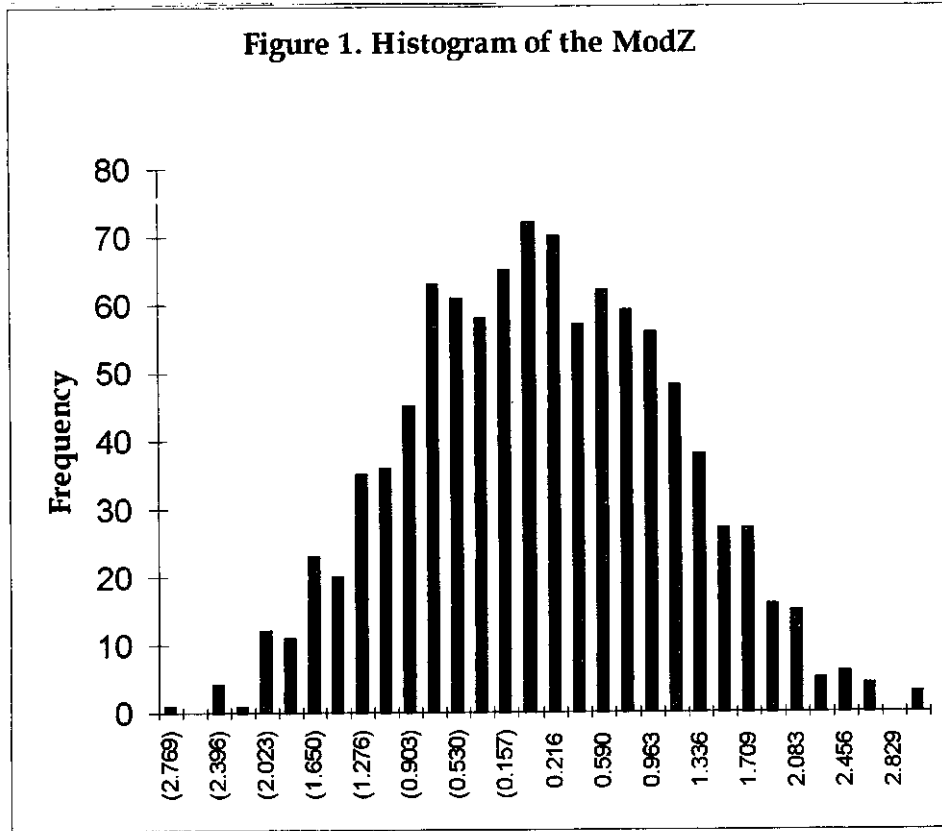
1. Choose a sufficiently large number T .
2. Pool and mix the CLEC and ILEC data sets
3. Randomly subdivide the pooled data sets into two pools, one the same size as the original CLEC data set (n_{CLEC}) and one reflecting the remaining data points, (which is equal to the size of the original ILEC data set or n_{ILEC}).
4. Compute and store the Z-test score (Z_s) for this sample.
5. Repeat steps 3 and 4 for the remaining $T-1$ sample pairs to be analyzed. (If the number of possibilities is less than 1 million, include a programmatic check to prevent drawing the same pair of samples more than once).
6. Order the Z_s results computed and stored in step 4 from lowest to highest.
7. Compute the Z-test score for the original two data sets and find its rank in the ordering determined in step 6.

8. Repeat the steps 2-7 ten times and combine the results to determine $P =$
(Summation of ranks in each of the 10 runs divided by 10T)

9. Using a cumulative standard normal distribution table, find the value Z_A
such that the probability (or cumulative area under the standard normal
curve) is equal to P calculated in step 8.

10. Compare Z_A with the desired critical value as determined from the
critical Z table. If $Z_A >$ the designated critical Z-value in the table, then
the performance is non-compliant.

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Exhibit No. _____ (GSF-1)



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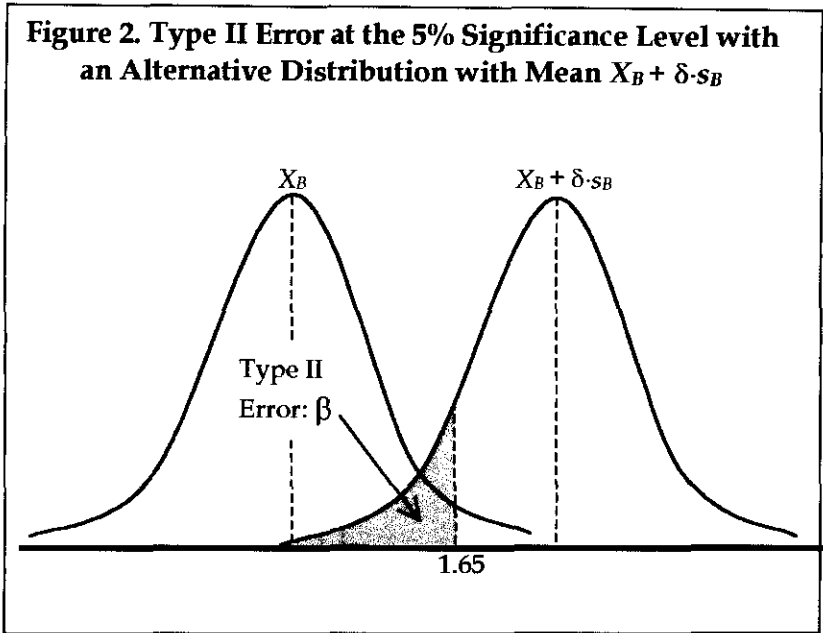
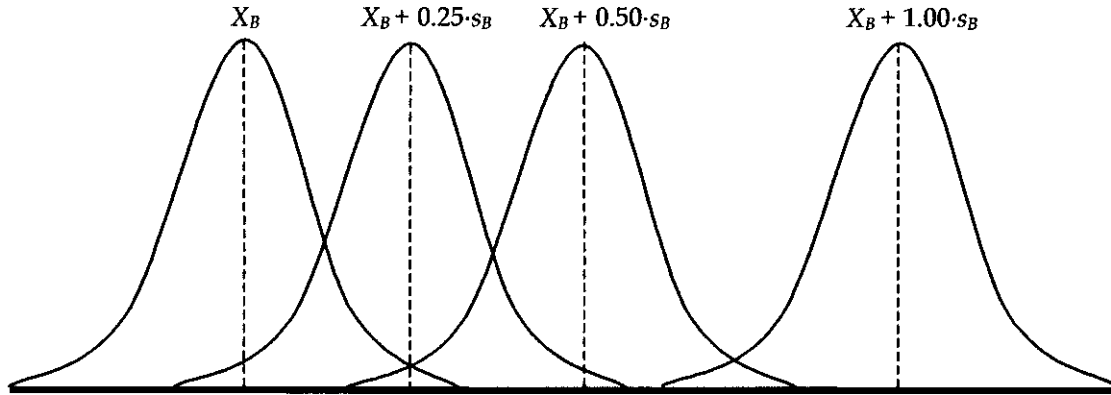
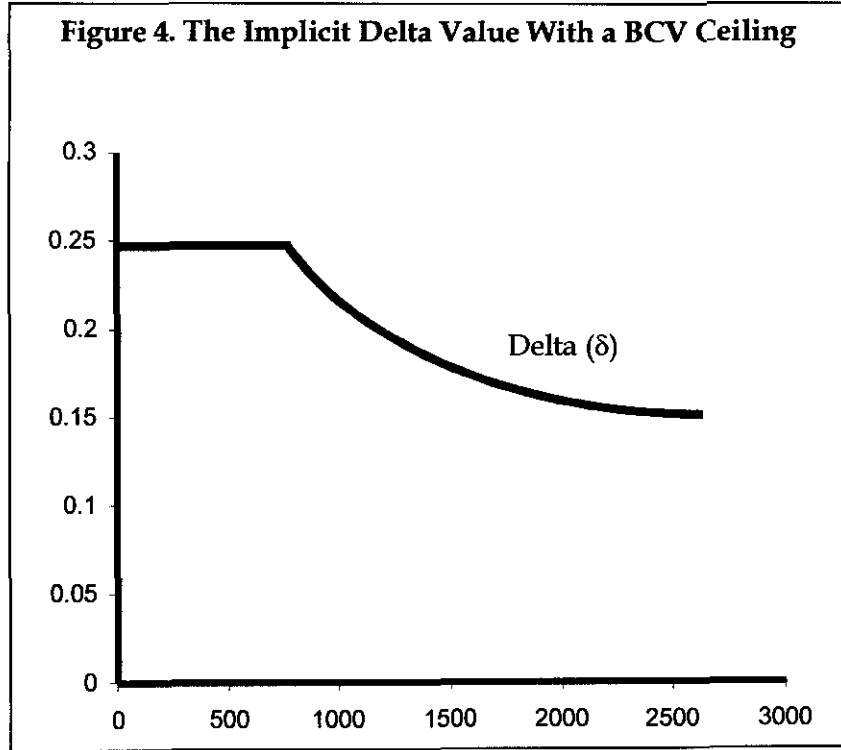


Figure 3. Location of the Alternative Distribution with Different Delta Values





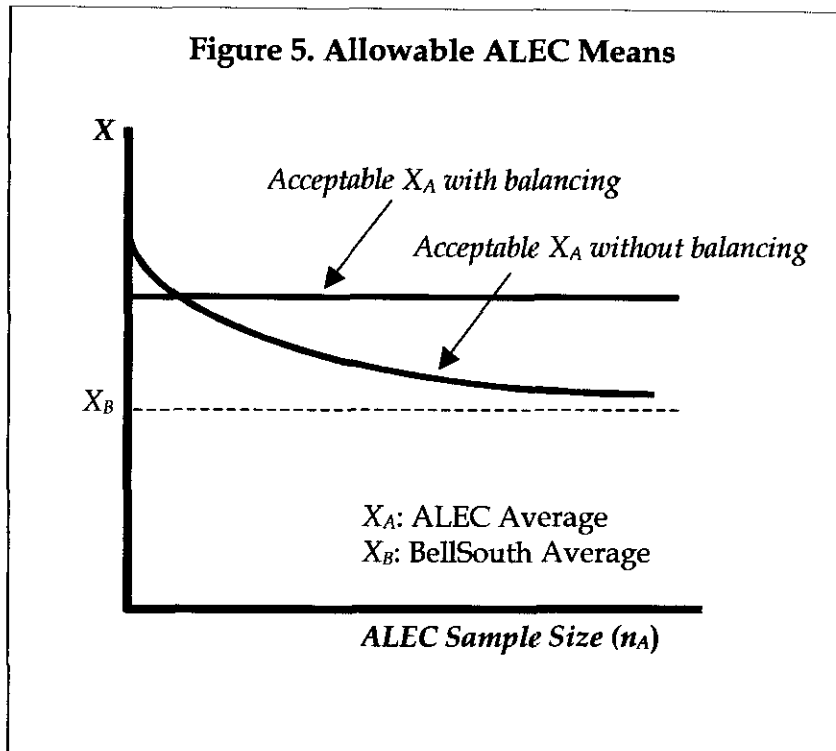


Table 1. Data for Florida from ARMIS 43-01 (1999)

(Downloaded from FCC Web Site: <http://www.fcc.gov/ccb/armis/>)

Year	Company Name	Row_#	Row_Title	Total_b	State_g	Interstate_h
1999	BellSouth	1090	Total Operating Revenues	4,211,854	2,876,616	1,074,227
1999	BellSouth	1190	Total Operating Expenses	2,743,616	1,785,836	649,943
1999	BellSouth	1290	Other Operating Income/Losses	-2,071	-1,534	-520
1999	BellSouth	1390	Total Non-operating Items (Exp)	373,725	8,819	-905
1999	BellSouth	1490	Total Other Taxes	259,794	199,244	59,871
1999	BellSouth	1590	Federal Income Taxes (Exp)	361,807	268,010	113,841
1999	BellSouth	1915	Net Return	N/A	N/A	250,957
1998	BellSouth		Access Lines (ARMIS 43-08)	6,551,570		

FCC's Net Return Calculation*

		Net Return	39% Net Return
BellSouth	"Net Return"	864,130	337,011

*Calculations in testimony based on FCC NY 271 Order at ft. 1332: "To arrive at a total "Net Return" figure that reflects both interstate and intrastate portions of revenue derived from local exchange service, we combined line 1915 (the interstate "Net Return" line) with a computed net intrastate return number (total intrastate operating revenues and other operating income, less operating expenses, non-operating items and all taxes)." Following the FCC's guidelines, the 'Net Return' is $[250957+2876616+-1534 - (1785836+8819+199244+268010)] = \864130 .

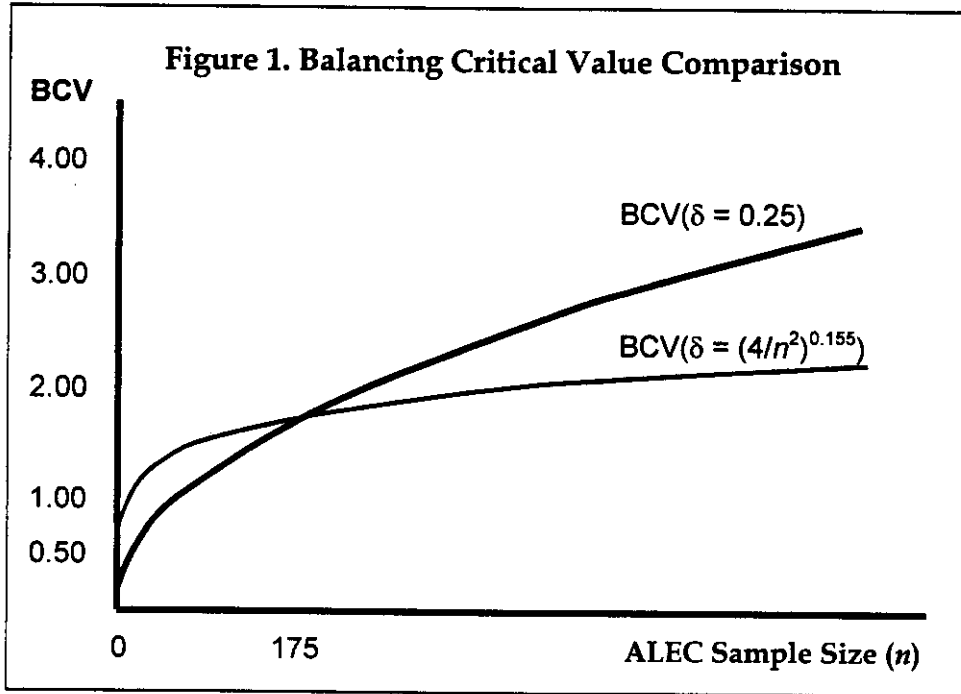


EXHIBIT WET-1

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Dr. Taylor received a B.A. magna cum laude in Economics from Harvard College, an M.A. in Statistics and a Ph.D. in Economics from the University of California at Berkeley. He has taught economics, statistics, and econometrics at Cornell and the Massachusetts Institute of Technology and was a post doctoral Research Fellow at the Center for Operations Research and Econometrics at the University of Louvain, Belgium.

At NERA, Dr. Taylor is a Senior Vice President, heads the Cambridge office and is Director of the Telecommunications Practice. He has worked primarily in the field of telecommunications economics on problems of state and federal regulatory reform, competition policy, terms and conditions for competitive parity in local competition, quantitative analysis of state and federal price cap and incentive regulation proposals, and antitrust problems in telecommunications markets. He has testified on telecommunications economics before numerous state regulatory authorities, the Federal Communications Commission, the Canadian Radio-television and Telecommunications Commission, federal and state congressional committees and courts. Recently, he was chosen by the Mexican Federal Telecommunications Commission and Telmex to arbitrate the renewal of the Telmex price cap plan in Mexico. Other recent work includes studies of the competitive effects of major mergers among telecommunications firms and analyses of vertical integration and interconnection of telecommunications networks. He has appeared as a telecommunications commentator on PBS Radio and on The News Hour with Jim Lehrer.

He has published extensively in the areas of telecommunications policy related to access and in theoretical and applied econometrics. His articles have appeared in numerous telecommunications industry publications as well as *Econometrica*, the *American Economic Review*, the *International Economic Review*, the *Journal of Econometrics*, *Econometric Reviews*, the *Antitrust Law Journal*, *The Review of Industrial Organization*, and *The*

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Encyclopedia of Statistical Sciences. He has served as a referee for these journals (and others) and the National Science Foundation and has served as an Associate Editor of the *Journal of Econometrics*.

EDUCATION

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UNIVERSITY OF CALIFORNIA, BERKELEY
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B.A., Economics, 1968
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EMPLOYMENT

NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC. (NERA)
1988- Senior Vice President, Office Head, Telecommunications Practice Director. Dr. Taylor has directed many studies applying economic and statistical reasoning to regulatory, antitrust and competitive issues in telecommunications markets. In the area of environmental regulation, he has studied statistical problems associated with measuring the level and rate of change of emissions.

BELL COMMUNICATIONS RESEARCH, INC. (Bellcore)
1983-1988 Division Manager, Economic Analysis, formerly Central Services Organization, formerly American Telephone and Telegraph Company. While at Bellcore, Dr. Taylor performed theoretical and quantitative research focusing on problems raised by the implementation of access charges. His work included design and implementation of demand response forecasting for interstate access demand, quantification of potential bypass liability, design of optimal nonlinear price schedules for access charges and theoretical and quantitative analysis of price cap regulation of access charges.

BELL TELEPHONE LABORATORIES
1975-1983 Member, Technical Staff, Economics Research Center. Performed basic research on theoretical and applied econometrics, focusing on small sample theory, panel data and simultaneous equations systems.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Fall 1977 Visiting Associate Professor, Department of Economics. Taught graduate courses in econometrics.

CENTER FOR OPERATIONS RESEARCH AND ECONOMETRICS

Université Catholique de Louvain, Belgium.

1974-1975 Research Associate. Performed post-doctoral research on finite sample econometric theory and on cost function estimation.

CORNELL UNIVERSITY

1972-1975 Assistant Professor, Department of Economics. (On leave 1974-1975.) Taught graduate and undergraduate courses on econometrics, microeconomic theory and principles.

MISCELLANEOUS

1985-1995 Associate Editor, *Journal of Econometrics*, North-Holland Publishing Company.

1990- Board of Directors, National Economic Research Associates, Inc.

1995- Board of Trustees, Treasurer, Episcopal Divinity School, Cambridge, Massachusetts.

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Montana Public Service Commission (Docket No. 90.8.46), October 4, 1990.
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Tennessee Public Service Commission, February 20, 1991.
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California Public Utilities Commission (Phase II of Case 90-07-037) with Timothy J. Tardiff, August 30, 1991. Supplemental testimony January 21, 1992.

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Montana Public Service Commission (Docket No. 90.12.86), November 4, 1991. Additional testimony January 15, 1992.

Federal Communications Commission (Pacific Bell Tariff F.C.C. No. 128, Transmittal No. 1579) with T.J. Tardiff, April 15, 1992. Reply comments July 31, 1992.

California Public Utilities Commission (Docket No. I.87-11-033), with T.J. Tardiff, May 1, 1992.

Delaware Public Utilities Commission (Docket No. 33), June 22, 1992.

Florida Public Service Commission (Docket No. 920260-TL), December 18, 1992.

California Public Utilities Commission (Docket No. I.87-11-033), with T.J. Tardiff, April 8, 1993, reply testimony May 7, 1993.

Canadian Radio-Television and Telecommunications Commission (Docket No. 92-78), with T.J. Tardiff, April 13, 1993 (2 filings).

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Delaware Public Utilities Commission (Docket No. 33), June 1, 1993. Supplementary statement, June 7, 1993. Second supplementary statement, June 14, 1993.

Vermont Public Service Board (Dockets 5700/5702), September 30, 1993. Rebuttal testimony July 5, 1994.

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Massachusetts Department of Public Utilities (Docket No. D.P.U. 94-50), April 14, 1994. Rebuttal October 26, 1994.

Federal Communications Commission (CC Docket 94-1), May 9, 1994. Reply June 29, 1994.

Federal Communications Commission (CC Docket 94-1) with R. Schmalensee, May 9, 1994. Reply June 29, 1994.

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Mississippi Public Service Commission (Docket No. 95-UA-313), October 13, 1995.

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Vermont Public Service Board (Docket no. 6000), January 19, 1998.

Colorado Public Utilities Commission (Docket No. 97A-540T, January 30, 1998. Rebuttal May 14, 1998.

California Public Utilities Commission, affidavit on economic principles for updating Pacific Bell's price cap plan. Filed February 2, 1998.

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Federal Communications Commission (Docket Nos. 94-1, 96-26), January 7, 2000. Reply comments filed January 24, 2000, Ex parte comments filed May 5, 2000.

New Mexico Public Regulation Commission, direct testimony filed December 10, 1999.

Arizona Corporation Commission (Docket No. T-01051B-99-105), rebuttal filed August 21, 2000; rejoinder filed September 19, 2000.

Connecticut Department of Public Utilities (Docket No. 00-07-17), filed November 21, 2000.

Pennsylvania Public Utility Commission (Docket No. P-00981449), filed October 31, 2000.

NERA Report: Economic Assessment of the Consumer Choice and Fair Competition Telecommunications Amendment (Proposition 108) (with Aniruddha Banerjee and Charles Zarkadas), on behalf of Qwest Corporation, November 2000.

Canadian Radio-Television and Telecommunications Commission, in response to CRTC Telecom Public Notice CRTC 2000-108, oral panel testimony, January 11, 2001.

Maine Public Utilities Commission (Docket No. 99-851, January 8, 2001.

Payphone

California Public Utilities Commission (Case 88-04-029), July 11, 1988.
Illinois Commerce Commission (Docket No. 88-0412), August 3, 1990. Surrebuttal December 9, 1991.
Michigan Public Service Commission (Case No. U-11756), October 9, 1998.
South Carolina Public Service Commission (Docket No. 97-124-C), December 7, 1998.
New Jersey Board of Public Utilities (OAL DOCKET Nos. PUCOT 11269-97N, PUCOT 11357-97N, PUCOT 01186-94N AND PUCOT 09917-98N), March 8, 1999. Surrebuttal June 21, 1999.
Louisiana Public Service Commission (Docket No. U-22632), July 17, 2000.
Tennessee Regulatory Authority (Docket No. 97-00409), October 6, 2000.

Economic Costing and Pricing Principles

Florida Public Service Commission (Docket No. 820400-TP), June 25, 1986.
Delaware Public Service Commission (Docket No. 86-20, Phase II), March 31, 1989. Rebuttal November 17, 1989.
Delaware Public Service Commission (Docket No. 89-24T), August 17, 1990.
Florida Public Service Commission (Docket No. 900633-TL), May 9, 1991.
Maryland Public Service Commission (Case No. 8584, Phase II), December 15, 1994.
Additional direct testimony May 5, 1995. Rebuttal testimony filed June 30, 1995.
Canadian Radio-Television and Telecommunications Commission, Response to Interrogatory SRCI(CRTC) 1Nov94-906, "Economies of Scope in Telecommunications," January 31, 1995.
Pennsylvania Public Utility Commission (Docket Nos. A-310203F0002, A-310213F0002, A-310236F0002 and A-310258F0002), March 21, 1996.
State of Connecticut, Department of Public Utility Control (DPUC Docket No. 95-06-17), July 23, 1996.
New Jersey Board of Public Utilities (Docket No. TX95120631), August 15, 1996. Rebuttal filed August 30, 1996.
Florida Public Service Commission (Docket No. 980000-SP), September 24, 1998.
Nebraska Public Service Commission, on behalf of U S WEST (Application No. C-1628), October 20, 1998. Reply November 20, 1998.
Florida Public Service Commission (Docket No. 980000-SP), November 13, 1998.
Wyoming Public Service Commission (Docket No. 70000-TR-99), April 26, 1999.
New Mexico Public Regulation Commission (Utility Case No. 3147), December 6, 1999, rebuttal testimony filed December 28, 1999.
New Mexico Public Regulation Commission (Case No. 3008, rebuttal testimony filed May 19, 2000.

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March, 2001

BellSouth OSS Testing
Florida Interim Performance Metrics

Note 3: For all services that indicate 'No' for flow-through, the following reasons, in addition to errors or complex services, also prompt manual handling: Expedites from CLECs, special pricing plans, denials restore and conversion or disconnect and conversion both required, partial migrations (although conversions-as-is flow through), class of service invalid in certain states with some TOS e.g. gov't, or cannot be changed when changing main TN on C activity, low volume e.g. activity type T=move, pending order review required, more than 25 business lines, restore or suspend for UNE Combos, CSR inaccuracies such as invalid or missing CSR data in CRIS, Directory listings – Indentions, Directory Listings – Captions, transfer of calls option for CLEC end user- new TN not yet posted to BOC RIS. Many are unique to the CLEC environment.

Note 4: Services with C/S in the Complex Service and/or the Complex Order columns can be either complex or simple