IV. Pre-Ordering (PRE) Domain Results and Analysis

1.0 Description

The purpose of this section is to present the specific tests, results, and analysis from KCI's evaluation of the systems, processes, and other operational elements associated with BellSouth's support for Wholesale Pre-Ordering. The Pre-Order (PRE) tests evaluated the systems, processes, and other operational elements associated with BellSouth's ability to provide Competitive Local Exchange Carriers (CLECs) with non-discriminatory access to its Operational Support Systems (OSS) supporting order functions. CLECs submit pre-order queries to validate existing customer information, to verify BellSouth facility availability, and to obtain data (e.g., telephone numbers) that will be input on subsequent service orders. This test assessed the functionality of BellSouth's systems in processing pre-order queries submitted via the Telecommunications Access Gateway (TAG) Client Application Program Interface (API).

2.0 Methodology

The scope of the PRE tests in Georgia encompassed the review and analysis of BellSouth's processes, procedures, interfaces and systems for pre-orders. This was accomplished by reviewing and assessing relevant documentation, testing the functionality of BellSouth's pre-ordering systems, testing the capability to increase system capacity and reviewing metrics reports.

2.1 Business Process Description

TAG

Pre-orders can be submitted electronically to BellSouth through the Telecommunications Access Gateway (TAG), a CORBA-based interface. TAG allows for bi-directional flow of information between BellSouth's Operational Support Systems (OSS) and CLEC customers. CLECs develop their own software applications to obtain information from BellSouth's OSS and can incorporate various internal functions, such as down loading information directly to their own inventory/billing systems, creating their own customer databases and generating internal reports.

TAG provides a standard Application Program Interface (API) to BellSouth's pre-ordering and ordering OSS. TAG transactions are real time. TAG allows CLECs to do the following:

- Address Validation

- Telephone Number Selection / Reservations / Assignment

- TN Inquiry

- Appointment Availability

- Available Primary Interexchange Carrier (PIC) Inquiry

- Service Availability

- Customer Records

- Due Date Calculation

Figure IV-1: TAG Pre-Order Process Flow
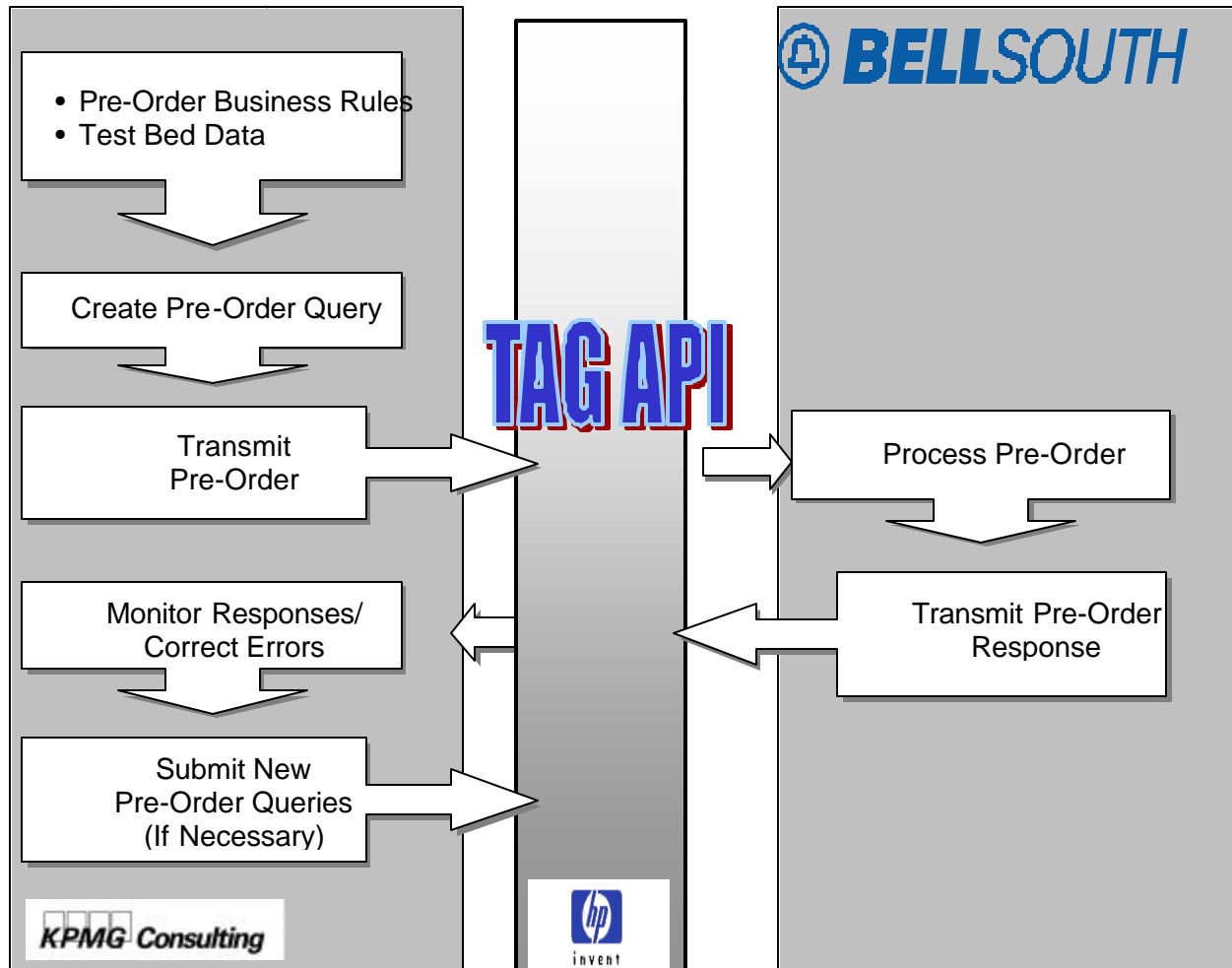
Pre-Ordering

KCI developed pre-order transactions in a text file format using its front-end ordering application. These text files were submitted to Hewlett Packard (HP) according to the pre-ordering schedule, which converted them into TAG pre-order format and transmitted them to BellSouth's TAG Gateway. Pre-order responses from BellSouth were similarly returned to HP and converted from TAG to text file format before reaching KCI's order management application.

Pre-order responses received via the TAG interface fall into one of three categories:

1. *TAG Error Messages*

    The TAG API performs validation activities before a CLEC pre-order query travels to BellSouth's back-end systems. Messages returned by the TAG API in response to errors notify CLECs of invalid or missing data elements on the query; TAG security violation or password expiration at the application level; or BellSouth back-end resource unavailability.

2. *BellSouth Back-end Error Messages*

    Once CLEC pre-order queries have passed through front-end edits on the TAG API, the transactions proceed through BellSouth's back-end pre-order systems for further validation. If the query is incorrectly populated, BellSouth transmits an error or "near match" message.

3. *Successful Pre-order Responses*

    BellSouth transmits a successful pre-order response after the query passes all data element validations. KCI reviewed the pre-order responses for expected customer or facility information (e.g., feature availability, confirmation of TN reservation, customer address).

2.2   Scenarios

The *Master Test Plan* defined the pre-ordering scenarios to be tested in this evaluation. The scenarios covered the above mentioned electronic pre-order query types offered by BellSouth. Using these scenarios, KCI developed one or more distinct test cases for each scenario. Test cases contained a more detailed description of the pre-order transaction to be run, including customer type (business or residential); query criteria (certain pre-order queries may be executed using more than one set of data element inputs); and other test conditions (e.g., error introduction). Each test case was then used to generate one or more distinct pre-order test instances.

The table below lists the scenarios used in the pre-order tests.

Table IV-1.1: Pre-Order Scenario Description

Scenario #	Transaction Type	Scenario Description
101	AVQ	Address Validation.
102	CSRQ[1]	Customer Service Record (CSR) Inquiry for BLS residential customer who is a potential CLEC customer.

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[1] KCI also submitted several requests for CSRs of SL2 (designed) UNE Loop customers, who are billed from
    BellSouth's Carrier Access Billing System (CABS). In order to receive CABS CSRs, a request was placed to KCI's

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Scenario #	Transaction Type	Scenario Description
103	CSRQ	CSR Inquiry for a small BLS business customer who is a potential CLEC customer.
104	CSRQ	Deferred CSR Inquiry for a large BLS business customer who is a potential CLEC customer.
105	SAQ	Feature Availability lookup.
106	AAQ	Appointment Availability.
107	TNAQ	Telephone Number (TN) Inquiry.
108	TNAQ/TNSQ/TNCAN	Reserve, extend, and cancel TNs.
109	SAQ	Available Primary Interchange Carrier (PIC) Inquiry.
110	CDD	Due Date Calculation.

2.3   Test Bed

For the purpose of submitting pre-order transactions, BellSouth designed test bed accounts according to specifications submitted by KCI. BellSouth also provided KCI with central office and customer information (e.g., telephone numbers, addresses, and switch types) required when populating pre-order transactions. In addition to using test bed accounts, KCI used BellSouth directories to obtain data for address validations.

Customer Support Manager (CSM) for one or more CABS records. The CSM faxed or mailed these records to KCI.