



# **EXHIBIT OSS – 46**

**Pre-Ordering, Ordering, and Provisioning for Unbundled  
Loops and UNE-P**

# Pre-Ordering Ordering Provisioning for UNE loops and UNE-P

## Acronyms

ATLAS - Application for Telephone Number Load Administration and Selection

CABS - Carrier Access Billing System

CN - Confirmation Notice

COSMOS - COmputer System for Mainframe Operations

CRIS - Customer Record Information System

EDI - Electronic Data Interchange

FOC - Firm Order Confirmation

LENS - Local Exchange Navigation System

LEO - Local Exchange Ordering system

LESOG - Local Exchange Service Order Generator

LFACS - Loop Facilities Assignment and Control System

LMOS - Loop Maintenance Operations System

LSR - Local Service Request

NSDB - Network Services Database

OSS - Operations Support System

RSAG - Regional Street Address Guide

SOAC - Service Order Analysis & Control

SOCS - Service Order Communications System

TAG - Telecommunication Access Gateway

TIRKS - Trunks Integrated Record Keeping System

WFA - Work Force Administration

WFA-C - Work Force Administration-Control

WFA-DI - Work Force Administration -Dispatch In

WFA-DO - Work Force Administration -Dispatch Out

# Pre-Ordering Ordering Provisioning for

UNE LOOP  
(SL1 & SL2)

# Pre-Ordering

This section describes the pre-ordering steps to submit an LSR for an unbundled SL1 or SL2 loop.

Please refer to Appendix A, figure A-1 for the pre-ordering flow.

Address validation is the only necessary pre-ordering step for an unbundled SL1 or SL2 loop. The CLEC must validate the end user's address to ensure a clean and correct LSR. Please refer to Appendix B, figures B-1 through B-4 (screen captures for address validation).

To validate an address, the CLEC service representative enters the end user's address into the CLEC's client. Next, the CLEC's server sends the address across the TAG gateway. Then, BellSouth's RSAG database validates the address.

RSAG sends the valid address across the TAG gateway to the CLEC's server. The CLEC's server sends the data to the CLEC's client for display to the CLEC's service representative.

RSAG returns the validated address in a parsed format. The CLEC can integrate the parsed address into its OSS in order to place an LSR. This is illustrated in Appendix B, figure B-3.

# Ordering

This section describes the ordering steps to submit an LSR for an unbundled SL1 or SL2 loop.

Please refer to Appendix A, figures A-2 for the ordering flow.

After completing the necessary pre-ordering steps, the CLEC's service representative can use TAG or EDI to input the LSR. Please refer to Appendix B, figures B-7 through B-12 (screen prints of ordering).

After the CLEC's service representative enters the required data in the CLEC's ordering system, the CLEC's server performs certain up-front editing. This includes editing for required fields, valid data types, and combinations of data for different fields.

If the LSR passes these edit checks, the CLEC's server submits the LSR. The LSR is sent across the TAG gateway and into LEO.

LEO performs certain edit checks and data formatting to ensure a complete and correct LSR. If it finds any errors, LEO sends a clarification back to the CLEC's server. The clarification describes the error so that the CLEC understands the error. If the LSR contains no errors, LEO electronically submits the LSR to LESOG.

LESOG applies additional edits to the LSR. If LESOG finds an error, LESOG sends a clarification explaining the error to the CLEC's server. After verifying that the LSR is error free, LESOG manipulates the LSR into BellSouth's service order record formats so that the order can be handled by BellSouth's downstream OSS. LESOG transmits the service order to SOCS.

When SOCS receives the service order, it applies the remaining edit checks to it. If SOCS finds an error, SOCS sends a clarification explaining the error to the CLEC's server. If the service order passes the additional edit checks and is accepted by SOCS, SOCS sends an FOC to LEO, which, in turn, sends the FOC to the CLEC's server.

# Provisioning

This section describes the steps for the provisioning an unbundled SL1 loop. The SL1 loop is “non-designed.”

Please refer to Appendix A, Figure A-3 for the provisioning flow.

SOCS assigns an order number to the order and passes the order electronically to SOAC. Then, SOAC routes the service order data to downstream assignment systems.

LFACS uses the validated address from the service order and the loop inventory data to select and assign the loop facilities.

COSMOS makes the assignments on the main distribution frame in the central office to cross connect the CLEC switch port to the loop facility assigned by LFACS.

COSMOS issues a frame work order to the central office personnel to perform the frame cross connect wiring functions in accordance with the service order.

COSMOS returns the switch port and loop assignment information to SOAC for entry into the service order assignment section.

SOAC transmits a copy of the service order back to SOCS. SOCS routes a copy of the service order image to the LMOS.

LMOS updates the record of the service and assignments. LMOS is used by other operations systems and personnel during maintenance and repair activities.

By generating a work order to the Work Management Center load control group that dispatches field technicians, LMOS initiates the dispatch of a field technician to cutover the loop on the date specified on the order.

After the field technician completes the order, LMOS sends the completed order back to SOCS. SOCS sends the order to CRIS to start billing the service.

After the downstream OSS notifies SOCS that the service order is complete, SOCS sends a CN to LEO, which, in turn, sends the CN to the CLEC’s server.



# Provisioning

This section describes the steps for the provisioning an unbundled SL2 loop. The SL2 loop is “designed.”

Please refer to Appendix A, Figure A-4 for an illustration of the process flow.

SOCS assigns an order number to the order and passes the order electronically to SOAC. Then, SOAC routes the service order data to downstream assignment systems.

The LFACS uses the validated address from the service order and the loop inventory data to select and assign the loop facilities.

SOAC next routes the service order to TIRKS for access by the Circuit Provisioning Group to design the circuit.

TIRKS coordinates the necessary assignments and issues the Work Order Record Details document into the next downstream systems.

TIRKS sends the Work Order Record Details document to the NSDB and to the WFA system modules. The WFA-C module is used by the UNE Center to coordinate the installation, testing, and turn-up of the loop. The WFA-DO module is used by the WMC to dispatch field Special Services Installation & Maintenance technicians. The WFA-DI module is used to dispatch central office (inside) technicians.

The UNE Center completes the order in WFA-C after the work is completed and successfully tested. WFA-C reports the completion back to TIRKS, which updates its database and passes the completion notice back to SOCS.

SOCS sends the record to the Carrier Access Billing System (CABS) to start the billing process.

After the downstream OSS notifies SOCS that the service order is complete, SOCS sends a Completion Notice (CN) to LEO, which, in turn, sends the CN to the CLEC’s server.

# Pre-Ordering Ordering Provisioning for

## UNE-P

# Pre-Ordering

This section describes the pre-ordering steps to submit an LSR for UNE-P.

Please refer to Appendix, figure A-1 A for the pre-ordering flow.

If the end user is an established customer, address validation is the only necessary pre-ordering step for UNE-P. The CLEC must validate the end user's address to ensure a clean and correct LSR. If the end user is a new customer, then the CLEC also must reserve a telephone number from the BellSouth's ATLAS database.

To validate an address, the CLEC service representative enters the end user's address into the CLEC's client. Next, the CLEC's server sends the address across the TAG gateway. Then, BellSouth's RSAG database validates the address. Please refer to Appendix B, figures B-1 through B-4 (screen prints for address validation).

RSAG returns the validated address in a parsed format. The CLEC can integrate the parsed address into its OSS in order to place an LSR. This is illustrated in Appendix B, figure B-3.

To reserve a telephone number, the CLEC service representative sends a request from the CLEC's client. Next, the CLEC's server sends the request across the TAG gateway and into ATLAS. ATLAS then returns the amount of telephone numbers requested by the CLEC and then takes those numbers off the "available list" in ATLAS. Please refer to Appendix B, figures B-5 and B-6 (screen prints for telephone reservation).

# Ordering

This section describes the ordering steps to submit an LSR for UNE-P

Please refer to Appendix A, figure A-2 for the ordering flow.

After completing the necessary pre-ordering steps, the CLEC's service representative can use TAG or EDI to input the LSR. Please refer to Appendix B, figures B-13 through B-17 (screen prints of ordering).

After the CLEC's service representative enters the required data in the CLEC's ordering system, the CLEC's server performs certain up-front editing. This includes editing for required fields, valid data types, and combinations of data for different fields.

If the LSR passes these edit checks, the CLEC's server submits the LSR. The LSR is sent across the TAG gateway and into LEO.

LEO performs certain edit checks and data formatting to ensure a complete and correct LSR. If it finds any errors, LEO sends a clarification back to the CLEC's server. The clarification describes the error so that the CLEC understands the error. If the LSR contains no errors, LEO electronically submits the LSR to the Local Exchange Service Order Generator (LESOG).

LESOG applies additional edits to the LSR. If LESOG finds an error, LESOG sends a clarification explaining the error to the CLEC's server. After verifying that the LSR is error free, LESOG manipulates the LSR into BellSouth's service order record formats so that the order can be handled by BellSouth's downstream OSS. LESOG transmits the service order to SOCS.

When SOCS receives the service order, it applies the remaining edit checks to it. If SOCS finds an error, SOCS sends a clarification explaining the error to the CLEC's server. If the service order passes the additional edit checks and is accepted by SOCS, SOCS sends an FOC to LEO, which, in turn, sends the FOC to the CLEC's server.

# Provisioning

This section will describe the steps for the provisioning of UNE-P. UNE-P is “non-designed.”

Please refer to Appendix A, figure A-3 for the provisioning flow.

SOCS assigns an order number to the service order and passes the order electronically to SOAC. Then, SOAC routes the service order data to downstream assignment systems.

LFACS uses the validated address from the service order and the loop inventory data to select and assign the loop facilities.

COSMOS makes the assignments on the main distribution frame in the central office to cross connect the CLEC switch port to the loop facility assigned by LFACS.

COSMOS issues a frame work order to the central office personnel to perform the frame cross connect wiring functions in accordance with the service order.

COSMOS returns the switch port and loop assignment information to SOAC for entry into the service order assignment section.

SOAC transmits a copy of the service order back to SOCS. SOCS routes a copy of the service order image to the LMOS.

LMOS updates the record of the service and assignment. LMOS is used by other operation systems and personnel during maintenance and repair activities.

By generating a work order to the WMC load control group that dispatches field technicians, LMOS initiates the dispatch of a field technician to cutover the loop on the date specified on the order.

After the field technician completes the order, LMOS sends the completed order back to SOCS. SOCS sends to the order to CRIS to start billing the service.

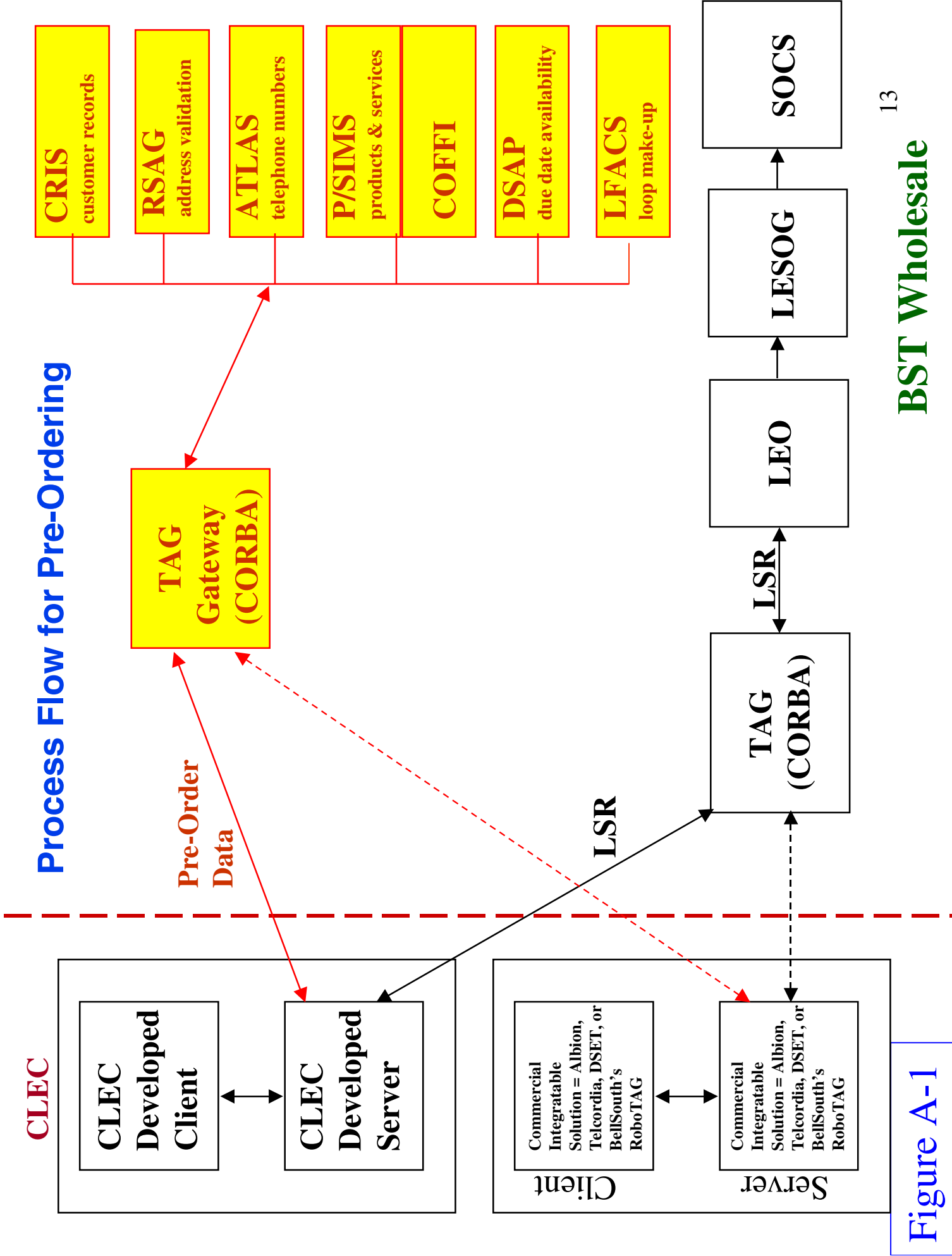
Later, after the downstream OSS notifies SOCS that the service order is complete, SOCS sends a CN to LEO, which, in turn, sends the CN to the CLEC’s server. The CN confirms the establishment of service.

# Appendix A

## Process Flows

### for

## Pre-Ordering, Ordering, & Provisioning



**Figure A-1**

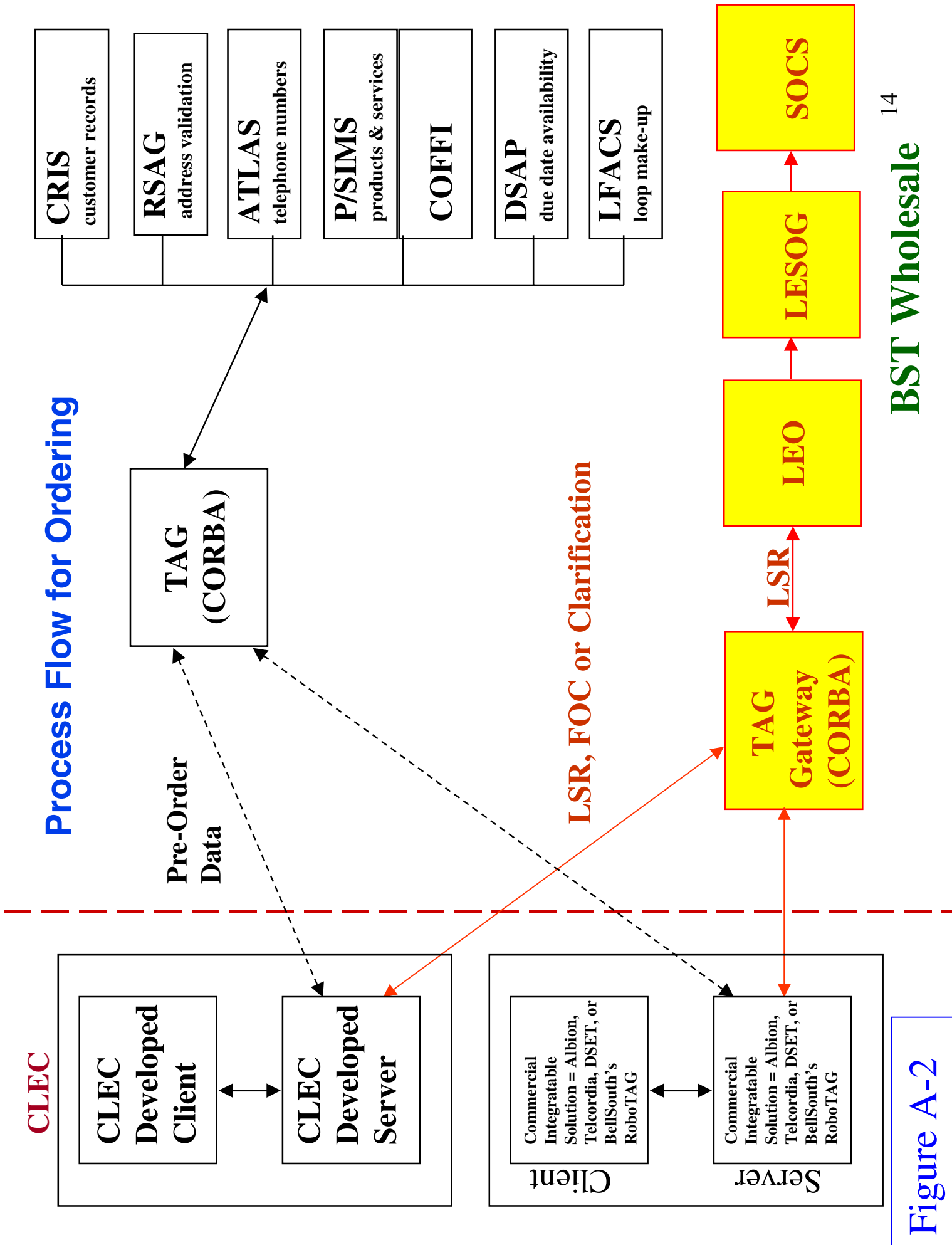


Figure A-2



# Process Flow for Provisioning (Non Designed Circuits)

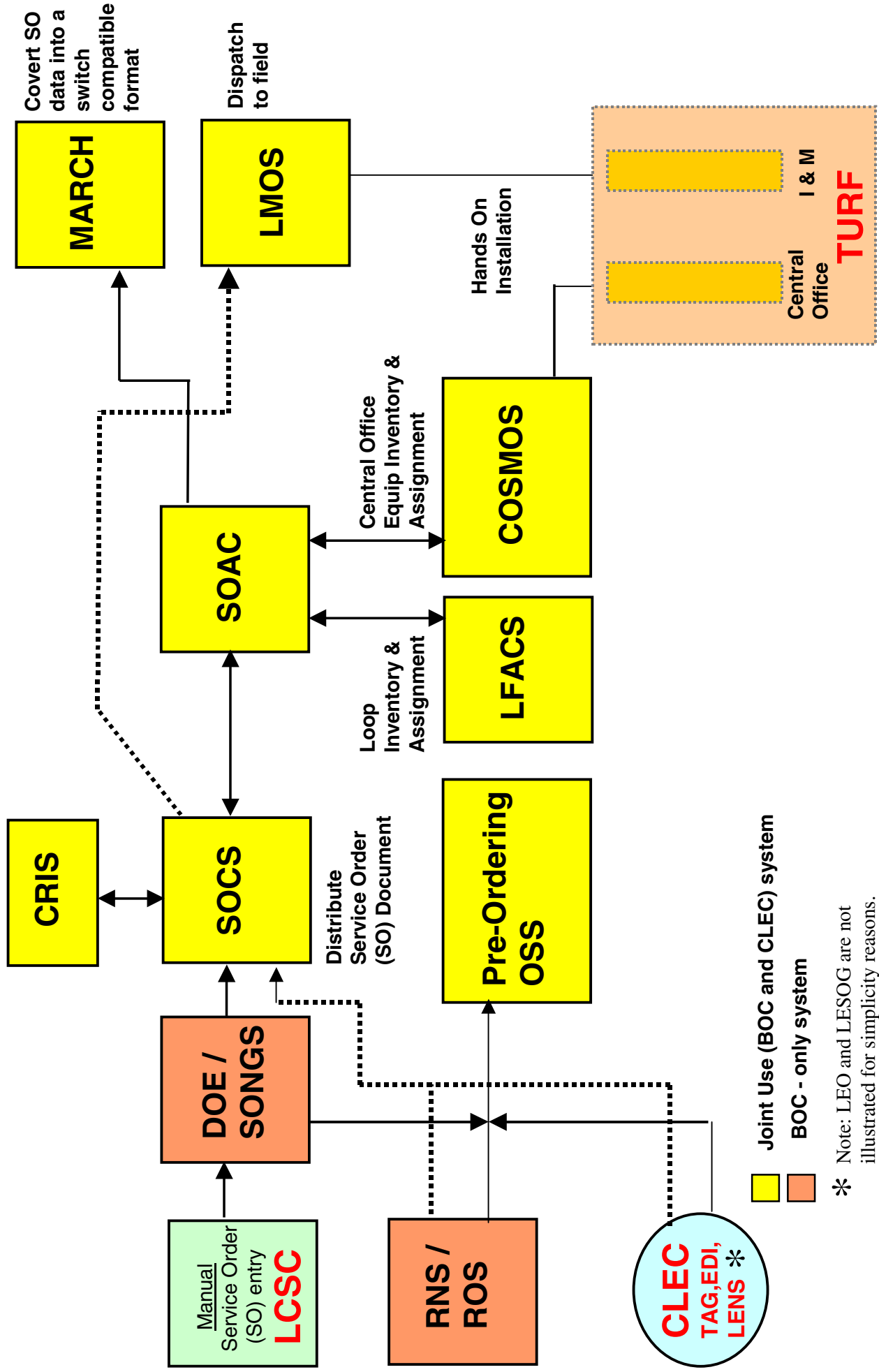


Figure A-3

# Process Flow for Provisioning (Designed Circuits)

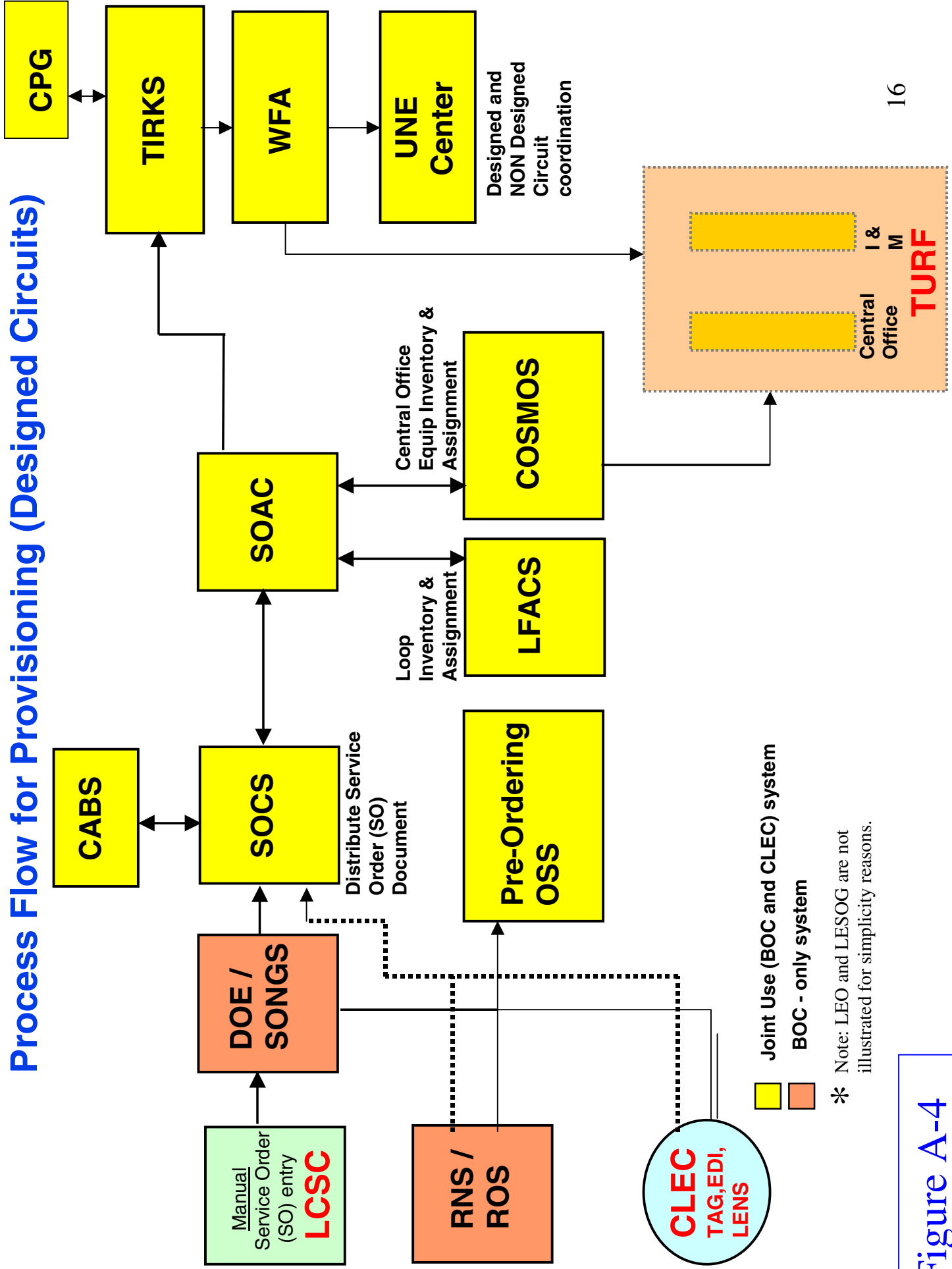


Figure A-4

# Appendix B

## Screen Prints

for

## Pre-Ordering & Ordering

BellSouth uses the RoboTAG™ interface to demonstrate pre-ordering and ordering.

# Pre-Ordering (Address Validation)

RoboTAG Address Validation - Microsoft Internet Explorer

## RoboTAG Address Validation

Telephone #:

Street Number:   Unnumbered House Indicator

Street:  771 bedford oaks dr  Suffix  Thoroughfare Suffix

City:  marietta **State:**  GA  Zip Code:

Unit:  Structure:  Type  Floor:  Value

Postal Route:  PO Box:

Descriptive Location:

Note: **Blue** fields are required.

The address is entered into RoboTAG™, then sent across the TAG gateway to RSAG for validation.

Figure B-1

# Pre-Ordering (Address Validation)

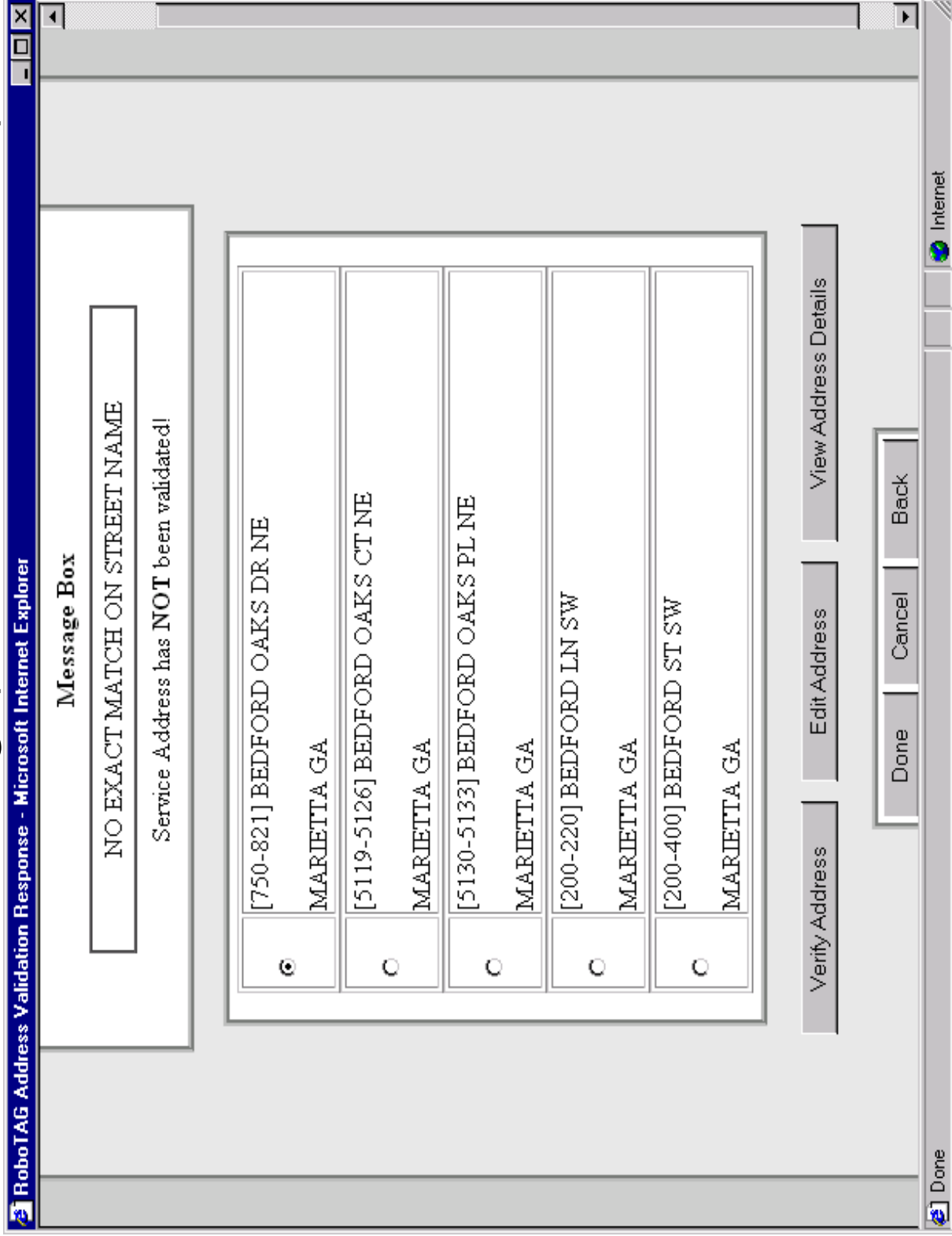


Figure B-2

# Pre-Ordering (Address Validation)

RoboTAG Address Validation - Microsoft Internet Explorer

## RoboTAG Address Validation

Telephone #:

Street Number:   Unnumbered House Indicator

Street:

Direction Name:  Thoroughfare Suffix

State:  Zip Code:

Unit:  Structure:  Type:  Value:  Floor:

Postal Route:  PO Box:

Descriptive Location:

Note: **Blue** fields are required.

Parsed Address

Figure B-3

# Pre-Ordering (Address Validation)

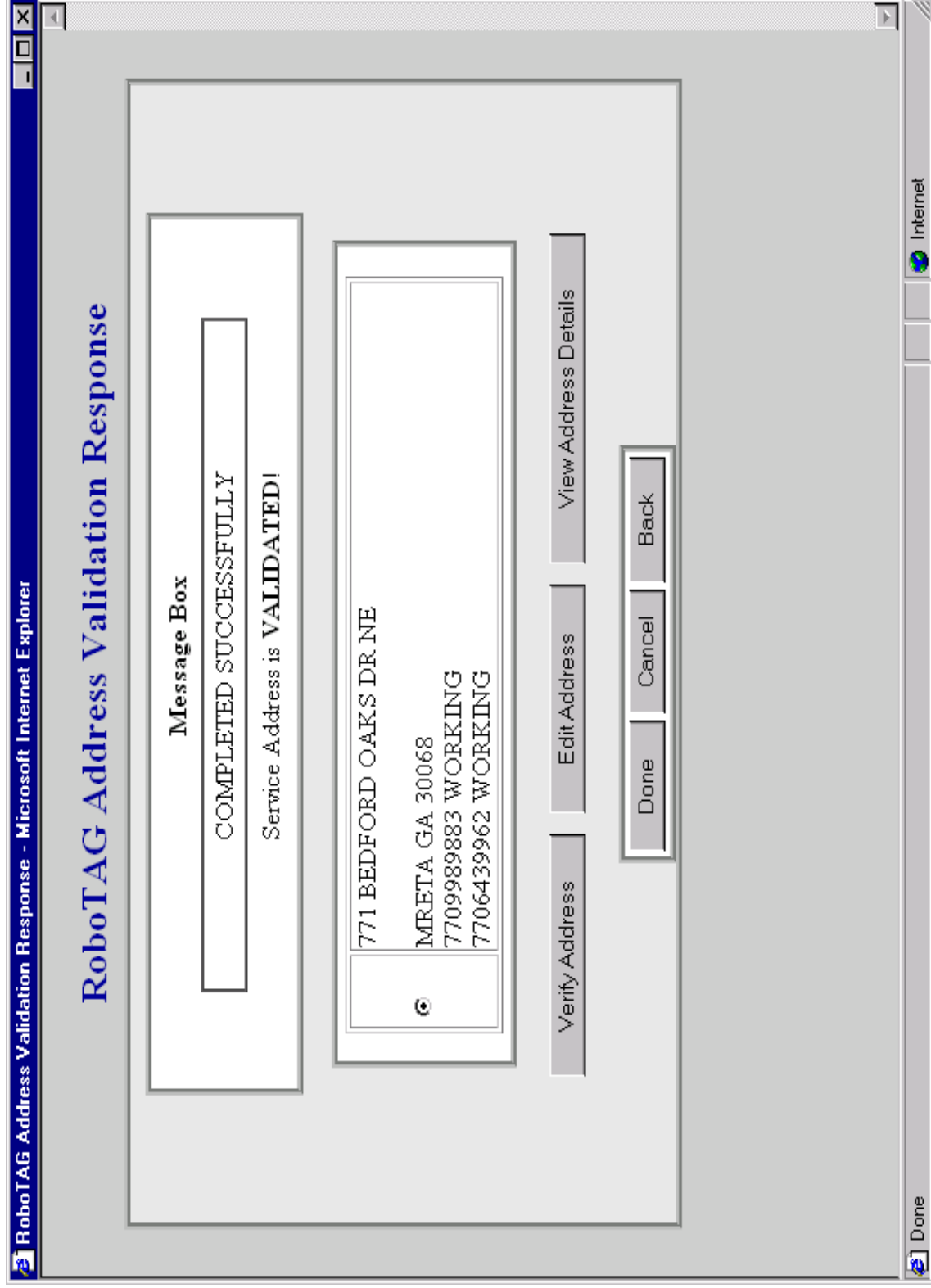


Figure B-4

# Pre-Ordering (Telephone Reservation)

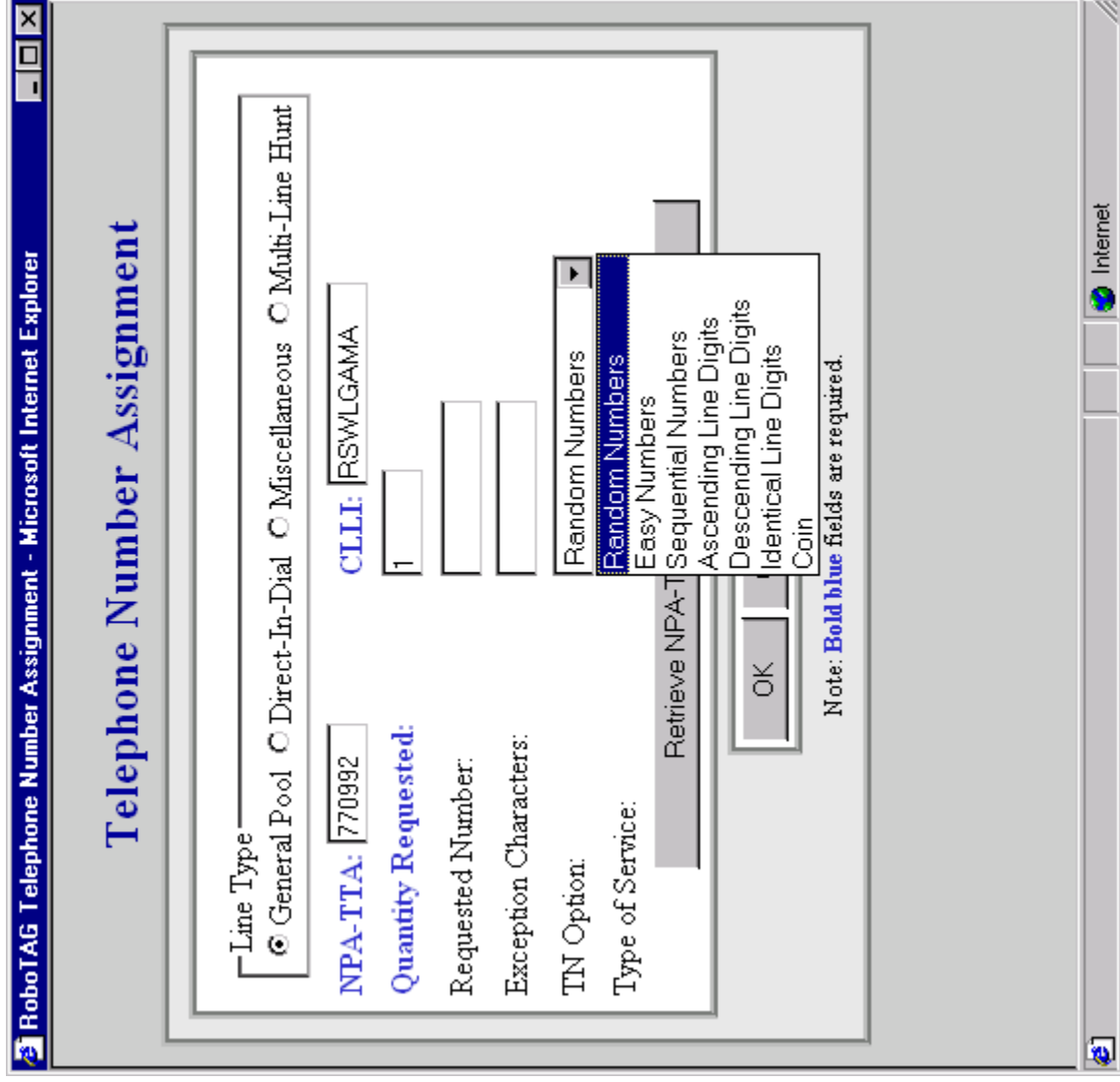


Figure B-5



# Pre-Ordering (Telephone Reservation)

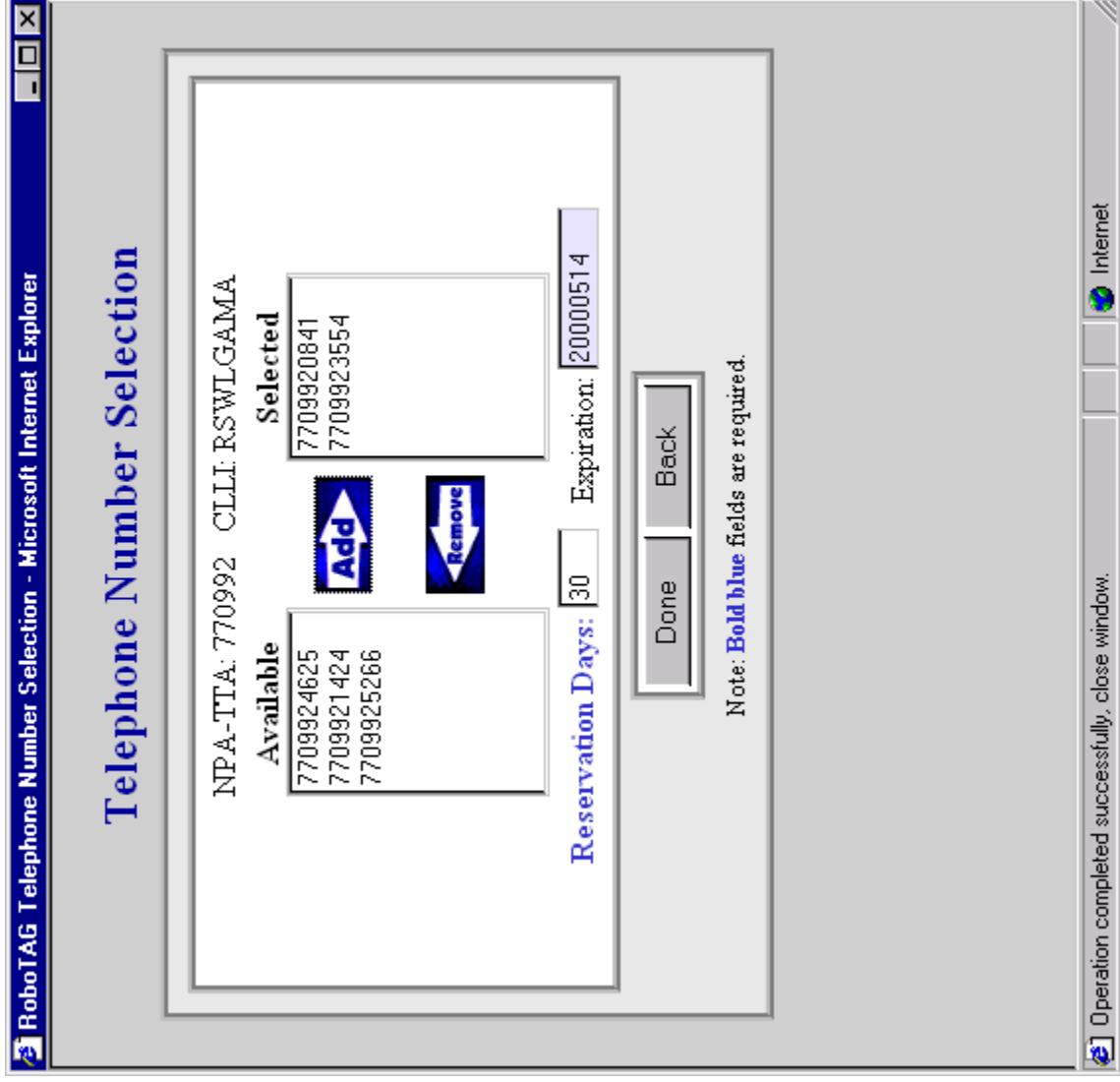


Figure B-6

# Ordering (Order Initialization)

The screenshot shows a web browser window titled "RoboTAG Firm Order Initialization - Microsoft Internet Explorer". The page content is titled "RoboTAG Order Initialization".

**Customer Information:**  
Customer ID: 7709989883  
Customer Name: Bill Stacy  
Request Type: Loop  
Activity Type: New Installation  
Purchase Order Number: Loop  
Company Code: 8001  
Organizational Type: 2 = Residential  
Line Quantity: B = Single-Line  
Rate Type: - = Not Applicable

**Form Selection:** Order Initialization  
**Line Selection:** Select lines to include in order

**Existing Lines:**

Available	Selected
7709989883 <b>Add</b>	 <b>Remove</b>

**New Lines:**

Available	Selected
 <b>Add</b>	Loop 1 <b>Remove</b>

\*Quick Service  
+Connect Through

**Buttons:** Address Validation, Telephone Assign, Service Availability, Appointments, Customer Record, Save, Cancel, Sign Out, Next Screen, Submit Order

**Footer:** © Bellsouth, © Copyright 2000, 1999 BellSouth Telecommunications, Inc. All rights reserved. Done, Internet

Figure B-7

# Ordering (Administration/Billing)

RoboTAG Firm Order Initialization - Microsoft Internet Explorer

File Edit View Favorites Tools Help

## RoboTAG Administration/Billing

Customer ID: 7709989883 Customer Name: Bill Stacy  
Request Type: Loop Activity Type: New Installation  
Purchase Order Number: Loop Version: 0  
Form Selection: Administration/Billing Company Code: 8001

**Desired Due Date:** [20000501] Desired Appt Time: [ ]

Desired Due Date Out: [20000501]

Access Customer Name Abbr: [NVE] Carrier Identification Code: [5642]

Basic Class of Service: [TAF]

Account Number: [ ] Account Telephone #: [ ]

Existing Account Number: [ ] Existing Account Telephone #: [ ]

Related Purchase Order Number: [ ]

Related Order Number: [ ]

Project Identification: [UNE]

Customer Name: [John Doe]

Admin Access Billing Disconnect Hunting Locations Optional

Next Screen Submit Order

Note: **Blue** fields are required.

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View and modify additional locations. Internet

- Address Validation
- Telephone Assign
- Service Availability
- Appointments
- Customer Record
- Save
- Cancel
- Sign Out

Figure B-8

# Ordering (Loop Service)

The screenshot shows a web browser window titled "RoboTAG Firm Order Initialization - Microsoft Internet Explorer". The page content is titled "RoboTAG LOOP Service".

**Navigation Buttons:** Address Validation, Telephone Assign, Service Availability, Appointments, Customer Record, Save, Cancel, Sign Out.

**Customer Information:** Customer ID: 7709989883, Customer Name: Bill Stacy, Request Type: Loop, Activity Type: New Installation, Purchase Order Number: Loop, Version: 0, Form Selection: Loop, Company Code: 8001, Line Selection: Loop 1.

**Line Activity:** New (N)

**Location Number:** [ ]

**Out Telephone Number:** 7709989883, **Disconnect TN:** [ ]

**Cable Identification:** PTPN1, **Channel/Pair:** 133

**Connecting Facility Assignment:** [ ]

**Line Existing Acct Number:** [ ], **Line Existing Acct TN:** [ ]

**Relay Rack:** [ ], **Shelf:** 2, **Slot:** [ ]

**System Identification:** [ ], **Terminal Number:** [ ]

**Buttons:** Jacks, Optional, Transfer of Calls, UNE Options, Next Screen, Submit Order.

**Note:** Bold blue fields are required.

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Figure B-9

# Ordering (Directory Delivery Address)

The screenshot shows a web browser window titled "RoboTAG Firm Order Initialization - Microsoft Internet Explorer". The page content is titled "RoboTAG Directory Delivery Address".

**Navigation Buttons:** Address Validation, Telephone Assign, Service Availability, Appointments, Customer Record, Save, Cancel, Sign Out.

**Customer Information:**

Customer ID:	7709989883	Customer Name:	Bill Stacy
Request Type:	Loop	Activity Type:	New Installation
Purchase Order Number:	Loop	Version:	0
Form Selection:	Directory	Company Code:	8001

**Delivery Address Fields:**

Delivery Activity:	A
Delivery Name:	William Stacy
Delivery House:	771
Delivery Street:	NE Bedford oaks DR
Delivery Location:	GA 30375
Descriptive Location:	
Address Locality:	

**Buttons:** Delivery/Addr, Delivery Type, Control, Listing, Text, Misc, Lvl Detail, Next Screen, Submit Order.

**Note:** Bold blue fields are required.

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Figure B-10

# Ordering (Calculate Due Date)

**RoboTAG Firm Order Initialization - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

**BELLSOUTH**

- Address Validation
- Telephone Assign
- Service Availability
- Appointments
- Customer Record
- Save
- Cancel
- Sign Out

## RoboTAG Calculate Due Date

Customer ID: 7709989883    Customer Name: Bill Stacy  
Request Type: Loop    Activity Type: New Installation  
Purchase Order Number: Loop    Version: 0  
Form Selection: Calculate Due Date    Company Code: 8001

**Desired Due Date:** 20000501  
Estimated Due Date:

**Note: The Estimated Due Date is subject to change when the Firm Order is submitted.**

Calculate Due Date    Accept Estimated Due Date

Next Screen    Submit Order

Note: **Blue** fields are required.

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Done Internet

Figure B-11

# Ordering (LSR Summary)

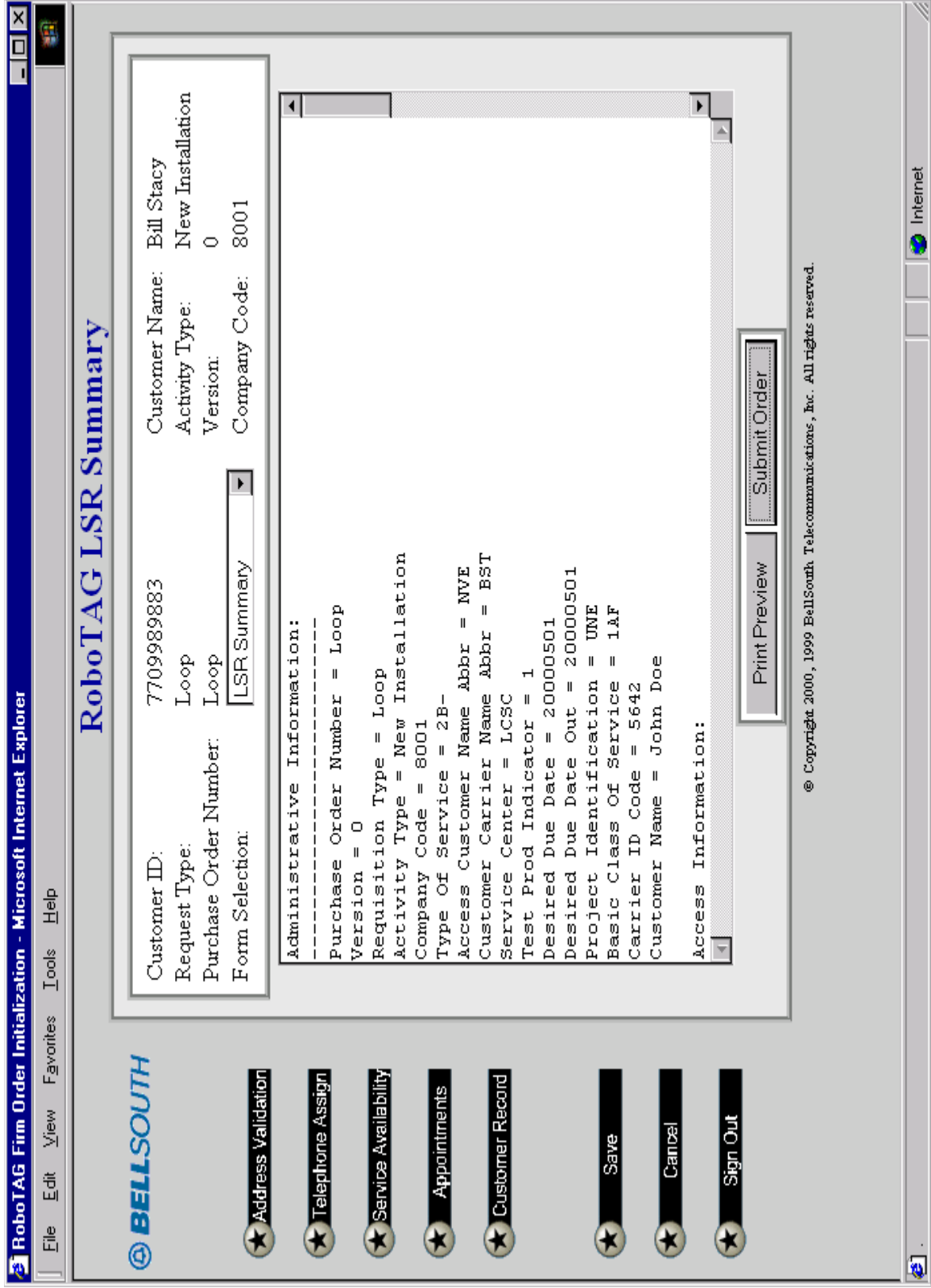


Figure B-12

# Ordering (Order Initialization)

The screenshot shows a web browser window titled "RoboTAG Firm Order Initialization - Microsoft Internet Explorer". The page content is titled "RoboTAG Order Initialization".

**Customer Information:**  
Customer ID: 7709989883    Customer Name: Bill Stacy  
Request Type: Loop/Port    Activity Type: **Change**  
Purchase Order Number: LOOPPORT01    Company Code: 8001  
Organizational Type: 2 = Residential    Line Quantity: B = Single-Line  
Rate Type: - = Not Applicable

**Form Selection:** Order Initialization    Line Selection: Select lines to include in order

**Existing Lines:**

Available	Selected
<input type="button" value="Add"/>	7709989883 <input type="button" value="Remove"/>

**New Lines:**

Available	Selected
<input type="button" value="Add"/> *Quick Service +Connect Through	<input type="button" value="Remove"/> Add Loop

**Navigation and Footer:**  
Buttons: Address Validation, Telephone Assign, Service Availability, Appointments, Customer Record, Save, Cancel, Sign Out  
Buttons: Next Screen, Submit Order  
Note: Bold blue fields are required.  
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Move the currently highlighted new lines into the list of selected lines.

Figure B-13



# Ordering (Administration/Billing)

RoboTAG Firm Order Initialization - Microsoft Internet Explorer

File Edit View Favorites Tools Help

## RoboTAG Administration/Billing

Customer ID: 7709989883 Customer Name: Bill Stacy  
 Request Type: Loop/Port Activity Type: Change  
 Purchase Order Number: LOOPPORT01 Version: 0  
 Form Selection: Administration/Billing Company Code: 8001

**Desired Due Date:** [20000501] Desired Appt Time: [ ]

Desired Due Date Out: [20000501]

Access Customer Name Abbr: [NVE] Carrier Identification Code: [5642]

Basic Class of Service: [UEPRX]

Account Number: [7709989883] Account Telephone #: [ ]

Existing Account Number: [ ] Existing Account Telephone #: [ ]

Related Purchase Order Number: [ ]

Related Order Number: [ ]

Project Identification: [UNEConversion]

Customer Name: [ ]

Admin Access Billing Disconnect Hunting Locations Optional

Next Screen Submit Order

Note: **Blue** fields are required.

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Internet

- ★ Address Validation
- ★ Telephone Assign
- ★ Service Availability
- ★ Appointments
- ★ Customer Record
- ★ Save
- ★ Cancel
- ★ Sign Out

Figure B-14

# Ordering (Directory Listing and Delivery Address)

The screenshot shows a web browser window titled "RoboTAG Firm Order Initialization - Microsoft Internet Explorer". The page content is titled "RoboTAG Directory Delivery Address".

**Navigation and Branding:**

- Browser menu: File, Edit, View, Favorites, Tools, Help
- Navigation buttons: Address Validation, Telephone Assign, Service Availability, Appointments, Customer Record, Save, Cancel, Sign Out
- Logo: BELLSOUTH
- Footer: © Copyright 2000, 1999 BellSouth Telecommunications, Inc. All rights reserved.

**Form Fields:**

**Customer Information:**

- Customer ID: 7709989883
- Request Type: Loop/Port
- Purchase Order Number: LOOPPORT01
- Form Selection: Directory
- Customer Name: Bill Stacy
- Activity Type: Change
- Version: 0
- Company Code: 8001

**Delivery Address Fields:**

- Delivery Activity: N
- Delivery Name: William Stacy
- Delivery House: Prefix: 771, Number: [ ], Suffix: [ ]
- Delivery Street: NE Bedford Oaks, Dir: [ ], Name: [ ], DR: [ ], Thoroughfare Suffix: [ ]
- Delivery Location: State: GA, Zip Code: 30375, Location: [ ]
- Descriptive Location: [ ]
- Address Locality: [ ]

**Buttons:** Delivery/Addr, Delivery Type, Control, Listing, Text, Misc, Lvl Detail, Next Screen, Submit Order

**Note:** Bold blue fields are required.

Figure B-15

# Ordering (Due Date Calculation)

**RoboTAG Firm Order Initialization - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

**BELLSOUTH**

- Address Validation
- Telephone Assign
- Service Availability
- Appointments
- Customer Record
- Save
- Cancel
- Sign Out

## RoboTAG Calculate Due Date

Customer ID:	7709989883	Customer Name:	Change
Request Type:	Loop/Port	Activity Type:	0
Purchase Order Number:	LOOPPORT01	Version:	8001
Form Selection:	Calculate Due Date	Company Code:	

Desired Due Date: 20000501

Estimated Due Date:

**Note: The Estimated Due Date is subject to change when the Firm Order is submitted.**

Calculate Due Date

Accept Estimated Due Date

Next Screen Submit Order

Note: **Blue** fields are required.

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Internet

Figure B-16

# Ordering (LSR Summary)

The screenshot shows a web browser window titled "RoboTAG Firm Order Initialization - Microsoft Internet Explorer". The page content is titled "RoboTAG LSR Summary".

**Navigation Bar:** Address Validation, Telephone Assign, Service Availability, Appointments, Customer Record, Save, Cancel, Sign Out.

**Form Fields:**

- Customer ID: 7709989883
- Request Type: Loop/Port
- Purchase Order Number: LOOPPORT01
- Form Selection: [LSR Summary]
- Customer Name: Bill Stacy
- Activity Type: Change
- Version: 0
- Company Code: 8001

**Administrative Information:**

- Purchase Order Number = LOOPPORT01
- Version = 0
- Requisition Type = Loop/Port
- Activity Type = Change
- Company Code = 8001
- Type Of Service = 2B-
- Access Customer Name Abbr = NVE
- Customer Carrier Name Abbr = BST
- Service Center = LCSC
- Test Prod Indicator = 1
- Desired Due Date = 20000501
- Desired Due Date Out = 20000501
- Project Identification = UMEConversion
- Account Number = 7709989883
- Basic Class Of Service = UEPRX
- Carrier ID Code = 5642

**Access Information:**

Buttons: Print Preview, Submit Order

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Figure B-17