

Local Number Portability Cost Justification

Operating Support Systems Requiring Modification

OSS Name	System Function	Reason for Modification	
DCAS Direct Customer Access System	Mechanized wholesale service order entry system used by CLECs.	Modification required to port telephone numbers between carriers.	To enable the automated generation of a CLEC service order to port telephone numbers. Absent this LNP modification, DCAS would be unable to accept any mechanized CLEC service orders that contained number portability data.
SSNS Sales and Service Negotiation System	Mechanized retail service order entry system used by Bell Atlantic-customer service employees.	Modification required to port telephone numbers between carriers.	To enable the required number portability data elements to be entered as part of the service order process. Without modifications, service rep could not process orders from CLEC customers porting in to Bell Atlantic.
SOAC Service Order Analysis and Control System.	Main service order sequence, control and coordination system for service provisioning. System is primary interface with internal OSSs and the LNP ASMS	Modification required to port telephone numbers between carriers.	To recognize and process number portability field identifiers and USOCs on service orders for customers porting-in to Bell Atlantic and CLEC orders to port telephone numbers/customers from Bell Atlantic's network. Modification also enables SOAC to communicate with four provisioning systems listed below to assign facilities, transmit data to the switch that will provide customer service, administer telephone numbers and communicate order information to field personnel. SOAC is also the sole OSS interface for order information delivery to the LNP Advanced Service Management System (ASMS). Without SOAC modifications, no customer or CLEC service order activity involving number portability could be processed on a mechanized basis..
LFACS Loop Facilities Assignment Control System	Maintains Bell Atlantic's inventory of available cable facilities and assigns cable and pair to service orders. Service orders flow from SOAC to LFACS for assignment to provision customer's service orders.	Modification required to port telephone numbers between carriers.	LFACS was modified to permit the system to recognize number portability data fields on a service order request from SOAC and assign correct cable and pair facilities to orders porting in CLEC NXXs. Without modifications, Bell Atlantic could not provision service to ported-in number.
MARCH	System that receives service order information from SOAC and activates CO switch translation with provisioning data for the switch serving the customer.	Modification required to port telephone numbers between carriers.	MARCH was modified to accept ten-digit triggers on pending number portability orders from SOAC and to translate the trigger indicators to the switch involved in an order to port. Without this modification, there could be a loss of service while a customer is porting from one provider to another.

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NSDB/WFA Network Services Data Base/Work Force Administration.	System used by field technicians to access service order and maintenance trouble report data.	Modification required to port telephone numbers between carriers.	Modification enabled systems to identify, process and track number portability data fields to ensure that provisioning and repair personnel are able to differentiate between ported numbers and non-porting numbers. Without the modifications to the systems, personnel working on orders would not be able to locate the facilities associated with ported-in telephone numbers. Orders could be wired or connected improperly, thereby making it impossible to port.
LIVEWIRE Telephone number administration in Bell Atlantic – South SWITCH Telephone number administration and inventory in Bell Atlantic - North Telephone number inventory in Bell Atlantic - South	Perform telephone number administration, central office equipment assignment and inventory functions.	Modification required to port telephone numbers between carriers.	Systems were modified to: 1) add LNP port-out field to numbers ported to CLECs to prevent automatic system reassignment of number to new Bell Atlantic customer; 2) enable ported-in numbers from CLEC-assigned NXXs to be added and tracked as working telephone numbers on Bell Atlantic's network; and 3) add LNP number aging field to populate on disconnect orders involving numbers ported in to Bell Atlantic in compliance with NANC/FCC rules. Without modifications the same telephone number could be assigned to different customers, ported-in numbers could not be shown as working number on the network, and Bell Atlantic would be unable to comply with the "snap back" rule which requires disconnected ported-in number to be returned to the original CLEC after aging process.
RETAS Repair Trouble Administration System	Mechanized wholesale trouble report entry and tracking system for resellers that interconnects with LMOS.	Modification required to provide unimpaired level of service to customers with ported telephone numbers.	System was modified to enable resellers to be able to enter and monitor trouble reports on customers. Without modifications, resellers would be unable to submit mechanized trouble reports in connection with ported lines, thereby delaying the processing of trouble reports for those lines.
STARREP	Front-end trouble ticket entry and tracking system used by Bell Atlantic repair attendants. System interfaces with LMOS database and field personnel via NSDB - WFA/C.	Modification required to provide unimpaired level of service to customers with ported telephone numbers.	To allow attendants to see the porting indicators in LMOS. Without modifications, Bell Atlantic personnel would start to process trouble reports on numbers which had been ported to another service provider, which would delay processing of trouble for affected line as well as interfere with the timely processing of trouble reports on non-porting lines.

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LMOS Loop Maintenance Operations System	Centralized customer repair database.	Modification required to provide unimpaired level of service to customers with ported telephone numbers.	System was modified to enable customer records to be established with portability data fields when new customers port-in a CLEC NXX and to add a number portability indicator field for telephone numbers ported off Bell Atlantic's network. Without modifications, the LMOS repair service attendants would be unable to accept and act on reports from customers who ported-in to Bell Atlantic and would also be unable to identify misdirected reports on telephone numbers ported off its network so that customer could be referred to the serving CLEC for service.
MLT Mechanized Loop Test	Facilities testing module of LMOS accessed via RETAS and STARREP attendants to perform initial line testing when customers report troubles.	Modification required to provide unimpaired level of service to customers with ported telephone numbers.	MLT was modified to enable the system to use LRN to identify and test lines with telephone numbers that have been ported into or out of Bell Atlantic's network. Without modifications, customer who ported would not receive the same level of service and reliability since initial mechanized testing would not be possible.
STARMEM	System used by CLEC and Bell Atlantic repair personnel to troubleshoot customer repair reports by analyzing customer billing records, switch records and LMOS data.	Modification required to provide unimpaired level of service to customers with ported telephone numbers.	STARMEM required LNP modifications to enable it to continue to conduct on-line integrated testing by being able to locate a ported customers physical network location, billing and LMOS records. Without modifications, Bell Atlantic and CLEC repair personnel would not be able to locate and analyze information on ported lines and affect repairs in a timely manner.
CABS/ITORP Carrier Access Billing System/Independent Company Billing	Renders bills for access service customers and independent telephone companies	Modification required to provide unimpaired level of service to customers with ported telephone numbers.	Systems were modified to add the capability to recognize 10 digit ported numbers and the serving switch locations to enable accurate bill rendering on distance sensitive charges. These changes were also required for revenue sharing arrangements (such as meet point billing). Also to enable system to bill the surcharge. Without modifications, calls would be billed incorrectly and carriers would not receive accurate revenue sharing payments.

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CRIS Customer Record Information System	Renders monthly bills to end user customers and performs revenue settlement transactions among carriers	Modification required to provide unimpaired level of service to customers with ported telephone numbers.	To enable CRIS to recognize ported numbers and the serving switch location for accurate bill rendering on distance sensitive charges. The need for this change was driven by billing and rating applications that are distance dependent (within a rate center) and need to be able to associate a telephone number with a switch. For shared revenue calls, for example, where Bell Atlantic's operator services handles a call billed to a third party, the system needs to know the service provider associated with called number. Also to enable system to bill the surcharge. Without modifications, distance sensitive calls and carrier settlements would be billed incorrectly.
E911	Handles the routing of E911 emergency call to the correct emergency reporting location.	Modification required to provide unimpaired level of service to customers with ported telephone numbers.	To enable the unlocking of individual line records to allow CLECs to update E911 database and to enable 911 personnel to direct database problems to the correct service provider. Without modifications, CLEC could not keep its customer's records up to date or be notified of any problems.
InPlans/ITE Integrated Traffic Engineering	Integrated network planning system.	Modification required to ensure that queries can be made and to provide unimpaired level of service to customers with ported telephone numbers.	To enable system to obtain information from number portability network elements and systems to plan for the capacity, growth and throughput of the facilities. Without modifications, number portability systems might run out of capacity or crash.
NetMinder	Provides network traffic management functionality for the circuit switched and SS7 networks.	Modification required to ensure that queries can be made and to perform queries and to provide unimpaired level of service to customers with ported telephone numbers.	To handle increased load caused by new number portability traffic messages and to allow NetMinder to read, analyze, and respond to number portability status messages provided by the network elements. Without modifications, network traffic managers would be unaware of LNP problems in the switch or LNP databases until customers called in trouble reports because they were unable to complete calls.

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TNM Total Network Management	Provides centralized surveillance and control of the circuit switched, SS7 and broadband networks.	Modification required to ensure that queries can be made and to perform queries and to provide unimpaired level of service to customers with ported telephone numbers.	To enable continued surveillance of the network including the ability to monitor number portability traffic. Additional processors installed four years earlier than would have been required without LNP to enable TNM to handle the increased load caused by new number portability messages. Without modifications, TNM would be unable to read the alarm or failure messages coming out of the LNP databases and would not be notified of problems until customer service was impacted. Without additional capacity for LNP, the system would be unable to handle all of the alarms and would miss both LNP and non-LNP related failures which could lead to network outages.
Predictor	Maintenance system that tests lines for potential trouble before they become service affecting	Modification required to provide unimpaired level of service to customers with ported telephone numbers.	LNP modifications were necessary to enable this system to recognize porting data and locate the serving switch of a ported number for testing. Without modifications, preventative maintenance could not be done on ported numbers thereby resulting in a lesser quality of service for ported numbers.
OSCAS Operator Services Call Analysis System	Used to bill Independent Telephone Companies for call completion and directory assistance call volumes.	Modification required to ensure that system can recognize ported telephone numbers.	To read and process AMA 720 LNP Module for calls originating from, terminating to, or billed to ported numbers. Without this modification, AMA records for ported numbers would be rejected and would not be counted in OSCAS call volumes.
VSOP/DBAS II Data Base Administration System	Operator services systems that update the Line Information Data Base ("LIDB") database. VSOP is the service order processing system - DBAS II is LIDB management system.	Modification required to permit completion of calls billed to ported telephone numbers.	Modification enables carriers to update customer records at the telephone number level. Prior to this change, access for account management was only provided at the NPA-NXX level. Also added a line level service provider field for uploading to LIDB. If these changes had not been made, service providers would be unable to access and update their customers' records and carriers would be unable validate the service provider and telephone number for call processing and billing.
LIDB Line Information Data Base	Database service available to all carriers which provides customer information for alternately billed calls and customer toll billing exception.	Modification required to permit completion of calls billed to ported telephone numbers.	Modification was needed to enable database to store and interpret LNP information for carrier use in validation and billing of alternately billed calls. Without modifications, alternately billed calls, such as credit cards and third-party billed calls, would not be processed or billed correctly.

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XEA/NSS Xpress Electronic Access/ North Subscription System	Processes carrier initiated requests by which end user customers may select Primary Interexchange Carrier (PIC) to carry interLATA/intraLATA calls.	Modification required to provide unimpaired level of service to customers with ported telephone numbers.	To properly handle PIC change requests for ported in and ported out numbers. Without these modifications, PIC assignments and changes for ported numbers could not be processed.