

Switch Support Services

/// FIXED NETWORK ENGINEERING SERVICES PORTFOLIO ///



SWITCH SUPPORT SERVICES

The variable and often increasing charges associated with switch management and maintenance represent a large portion of a cellular carrier's Operating Expense budget. LCC has the resources and expertise associated with the operation of all MSCs and BSCs in the wireless networks of today. Its FNE managers work with customers to provide staff augmentation or to develop end-to-end solutions that meet technical and functional objectives while also improving the bottom line. LCC is a proven force in the industry, and its experienced personnel are successfully providing switch translations and O&M services to a number of global carriers and equipment manufacturers including Ericsson, Nortel, Nokia, Lucent, Motorola, and Siemens.

SERVICES OFFERED

- > **Resource Augmentation for day-to-day Business Requirements**
- > **Routine Operations and Maintenance Support**
 - Fault Monitoring, Isolation and Resolution
 - Alarm Monitoring and Status
 - Processor and Traffic Load Monitoring
 - Support to Base Station Field Personnel
 - System Backups
- > **Trunking support to fit the customer's needs**
 - New T1 Integration, Test and Turn-up
 - Trunk Route Analysis: Monitoring trunk loads and Designing new routes
 - Traffic Forecasting for future trunk Augments
- > **Translations Support**
 - Updating Switch Translations Tables to ensure the most efficient routing
 - Monitoring the LERG for new LEC, CLEC, and Mobile Carrier Code Assignments
 - Short Codes
- > **Turnkey solutions for new switch installations, switch consolidations, or unique projects**
 - System Support for Migration from Legacy Systems to Softswitches
- > **Switch Support for E911 Augmentations**
- > **Switch Parameter Analysis and Optimization**
 - Evaluation of Individual Switch Parameter Settings and Identification of performance concerns
 - Comparison of Switch Configurations across a market or larger region
 - Standards Specification and Management of standardization process

In LCC's previous experiences, switch support services have often been correlated to network optimization programs or softswitch integration efforts. LCC possesses extensive service portfolios in each of these areas as well and has supported its customers by performing all tasks in multi-discipline projects, including overall project management.

The following selections summarize some of LCC's previous project experience in performing switch support services.

PROJECT EXAMPLES

- > For two years, LCC has been responsible for all O&M of Ericsson MSCs and BSCs throughout five markets in California and Nevada for a national mobile operator. LCC sources 22 engineers that not only support the switching elements, but also manage all MSOs and support the O&M of all ancillary network elements.
- > For nearly two years, LCC has been responsible for the O&M of all Nortel and Nokia MSCs and BSCs throughout the Carolinas for a national mobile operator. In addition to BAU switch O&M, this program comprises network capacity growth and new site deployments. LCC's FNE engineers are also responsible for BSS Integration, including channel adds and site modifications.
- > LCC performed a switch parameter survey and analysis in Chicago for a large mobile operator. The objective of the analysis was to identify discrepancies in switch configurations and determine the parameter settings that generated optimal service. Upon completion of the survey, LCC's optimization team developed a recommendation report that defined a configuration standardization template and process.
- > For over a year, LCC has provided resource support to a significant softswitch manufacturer and has contributed to market launches for several mobile operators. In particular, LCC engineers have participated in softswitch cutovers in Austin, Dallas, Chicago, Houston, Boston, Santa Clara, and San Diego. In each of these engagements, the engineers were responsible for project planning and specification of data translations configurations, as well as troubleshooting.
- > For over two years, LCC has supported the Project Implementation team of a national mobile operator with the project planning and implementation of NSS and BSS network element integrations throughout the Northeast Region. LCC engineers have been responsible for facilitating the integration of new MSCs, BSCs, CTMs, and other elements, as well as managing equipment expansions and capacity augments. They have also been responsible for typical BAU capacity planning and dimensioning of switch trunk groups, including IMTs, A-links, TTY, SS7, and Gb.

LCC has the expertise and experience to address all of your Fixed Network Engineering needs.

Service Offerings Include:

- > Transport Design
- > Turnkey Microwave Services
- > Network Optimization Services
- > Circuit Provisioning & Testing Services
- > Switch Support Services
- > Network Database Services
- > Network Inventory Services
- > RF Testing & Measurement Services
- > BSS Expansion & Integration Services
- > Broadband Wireless Services
- > IP Solutions

For more information on LCC and our Fixed Network Engineering services, please contact us at (703) 873.2000 or visit us on line at www.lcc.com.



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