

NetworkServices

/// DELIVERING INNOVATIVE NETWORK SOLUTIONS™ ///





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The goal of every telecommunications network organization is to provide superior voice, data and content services to the end-user while maximizing ROI. The challenge is to minimize the expenditures required, both capital (CapEx) and operational (OpEx), while delivering and maintaining a superior wireless network. Today's cutting-edge solutions demand excellence and innovation in network engineering, build out, and maintenance services to drive superior end-user experience and achieve business efficiencies.

LCC continues to lead the wireless industry as the primary independent source helping clients around the world tackle the issues they face in developing and managing networks to incorporate the latest, most sophisticated features and functionality. From network design to fully outsourced operations and maintenance, LCC and its staff of highly trained RF engineers are ready to complete your project on time and above expectations.

>>> NETWORK PLANNING, DESIGN, AND OPTIMIZATION

LCC has designed more than 2500 networks worldwide and has had a key role and impact on the field of cellular RF engineering, being the first consulting firm in the business. As the wireless industry has changed with the introduction of new technologies and capabilities, LCC has adapted its practices to more efficiently design and optimize wireless networks, thus saving our clients money while maintaining high quality of service.

Today, in one way or another, our people have helped bring to market virtually every commercially available wireless access technology, improving and enhancing services to millions of wireless subscribers throughout the world. This track record of excellence continues as LCC has contributed to the introduction of wireless networks with the latest technology, including EDGE, UMTS, HSPA, EVDO, and WiMAX. LCC is the ultimate resource for radio and fixed network planning, design, and performance optimization.

>>> DEPLOYMENT (EUROPE, MIDDLE EAST AND AFRICA)

Network deployment services are available to customers in select locations throughout Europe, the Middle East and Africa. From complete to partial network deployment activities, LCC offers an array of services including; turnkey deployment, fully outsourced deployment, deployment consulting, program and vendor management, network design, site acquisition and planning, site design and construction, installation and commissioning, and logistic management.

Efficiently building new, fully deployed wireless networks requires deep insight into all facets of network planning, design, deployment, and optimization. LCC's extensive expertise can power a network, delivering 2G, 2.5G, 3G and 4G technologies that push best practices to new levels. LCC leverages effective team coordination and program management, multi-vendor equipment procurement, roll-out, local expertise and project accountability to deploy advanced networks.

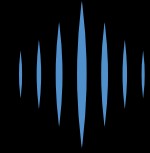
>>> LCC's Innovative Services Include:

PLANNING, DESIGN AND OPTIMIZATION

- Network Architecture Design
- Life Cycle Management
- Capacity Management
- Radio Planning
- Pre-design & Deployment Analysis
- RF Design
- Dimensioning

IMPLEMENTATION & DEPLOYMENT

- Design
- Deployment Services
- Site Acquisition
- Build and Construct
- Network Roll-Out
- Fixed Network Engineering
- Test & Integration
- Frequency Coordination
- User Device Testing



NETWORK PERFORMANCE & COST OPTIMIZATION

- RAN Optimization
- Core Network Performance & Optimization
- QoS
- Voice and Data Quality
- Drive Testing

MIGRATION & EXPANSION

- Dimensioning
- Capacity Upgrades
- Expansion Site Planning
- Re-Homes
- Technology Evolution

OPERATIONS & MAINTENANCE

- Preventive Maintenance
- Network Monitoring
- Corrective Maintenance
- Network Performance

>>> NETWORK PERFORMANCE AND COST OPTIMIZATION

LCC's network performance solutions focus on improving both the economic and technical efficiencies of wireless networks. By leveraging 25 years of global wireless experience analyzing every type of network possible, LCC offers unshakeable expertise, independent tools, and tailor-made measurements and reporting.

Networks need to operate at full efficiency with a minimal amount of maintenance to maximize the return on OpEx. To achieve this goal, LCC reviews customer requirements to define measurable objectives in terms of quality, capacity and cost, sharing risks and rewards. Services include network audits, QoS analysis, benchmarking, legacy network thinning, transport network optimization, radio network optimization, and application and handset testing.

>>> OPERATIONS AND MAINTENANCE

LCC works to ensure profitability by providing operations and maintenance solutions that range from network inspection to vendor management. A well maintained network requires less corrective maintenance and is easier and more reliable to operate. Managing network maintenance separately can be costly and inefficient, but because LCC runs maintenance activities for several operators, clients receive the best performance at the lowest possible cost.

Operation and maintenance activities can be grouped into three main categories: preventive maintenance, corrective maintenance and network operations. LCC performs an in-depth network audit to highlight immediate and imminent criticalities and define the roadmap of maintenance activities to perform. Subsequent preventive maintenance ensures that networks continue to operate under normal conditions. On the operational side, monitored activities include network surveillance, helpdesk, support, performance management, dispatch, OSS support, application management and network configuration management.

>>> ABOUT LCC

For the first ten years of the industry in the early 1980s and into the 1990s, LCC was known for building out networks, the biggest challenge facing wireless carriers and manufacturers. Whether developing the industry's first RF planning tool in the past or deploying state-of-the art networks today, LCC always delivers network services on time and on budget, with a team of experts ready to address all future needs. Now, with 25 years of wireless experience delivering turnkey network services, business strategy, tools-based consulting and training, LCC is ideally poised to help deliver the next generation of networks to the market.



www.LCC.com

/// THE KNOWLEDGE THAT POWERS THE NETWORK™ ///

The wireless industry has become global in its scope and ambitions. LCC has grown to serve it. Today our work force unites people from more than 50 nations, working together on every continent worldwide except Antarctica. We are truly as diverse as the world we serve. LCC offers one of the largest, deepest teams of brilliant, committed, determined engineering, deployment, operational and business professionals in the wireless world.

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