

# UTILITY INDUSTRY

## ALTAIRIS EXPERTISE APPLIED IN THE UTILITY ENVIRONMENT

*Altairis Technology Partners focuses on challenges related to applications of broadband and LMR wireless communications technologies. We cover the full spectrum of the technology lifecycle, from conducting initial assessments, architecting system designs, facilitating sourcing processes, managing implementations, and providing post-implementation system management services.*

**Altairis Technology Partners** specializes in the engineering of wireless networks. Our team members are seasoned industry experts, most with 20+ years of knowledge and experience. We are known for our exacting attention to detail, with a depth and breadth of resources our clients seek. We are proud of our vendor independence and our ability to foster long-term partnerships with each of our clients. We are large enough to deliver and small enough to care.

### Research of Utility Communications Needs

Altairis experts will conduct needs assessment of existing systems including: Operational Technologies, Voice and Video. We will evaluate the abilities of the existing networks to deliver optimal performance, cost, reliability, capacity and other relevant criteria and then perform analysis of the gaps between current and anticipated future needs and the capabilities of the current systems. Altairis will then provide recommendations for enhancement or replacement of the existing systems.

### Wireline and Wireless Networks Technical Assessment

Altairis experts will evaluate the status of existing networks including: installation, maintenance, and capability to perform to specifications.

### Wireless Architecture Design and System Applications Assessment

When a new system is needed, Altairis experts will develop complete network design and specifications, including coverage and capacity modeling, backhaul design and budgetary estimates.

### Private LTE Feasibility Evaluation

Is a private broadband wireless network the right solution for you? That answer depends on many factors. Altairis experts will evaluate the ability of LTE (4G) or 5G to meet your communications needs. Altairis will assist in preparing the business case and estimates for total cost of ownership, including cost and time. Altairis will then formulate high-level functional, technical and other requirements that are appropriate for your needs. Because a private network will often replace a multitude of systems and support many different uses, Altairis will also support integration, compatibility, and functionality verification of the various device interfaces.

### Sourcing Process Management and Project Management Office (PMO) Services

Altairis experts will develop technical specifications and RFx procurement documents and will facilitate vendor contract negotiations. Altairis will then manage the sourcing process including: assistance with selecting hardware, software and verified service providers. We will act as needed in the roles of a Project Manager, Owner's Agent/Engineer, or Subject Matter Expert. We will also provide site development services including: specification development, zoning/permitting assistance, third-party facility co-location lease negotiations and construction supervision.

### Post-Implementation System Management Services

Altairis experts will develop and provide administration of vendor system management, maintenance and support procedures and contracts. This may include negotiation and management of upgrade agreements. Our experts will provide an ongoing technical review to support general system management and optimization, system expansion and interference analysis. For example, our experts will perform an analysis of existing coverage and performance issues. From the data we collect, Altairis will develop solutions for in-building coverage programs.





# CAPABILITIES FOR UTILITIES

*Regardless of the nature of your wireless systems' challenges, you can trust our hundreds of years of combined experience to address them. Whether you need a new wireless network or just help with making your existing network meet your current needs, we are here to help you.*

## SYSTEM ASSESSMENT

- Technology & Business Assessment
- Business/Technology/Financial Modeling
- Sensitivity Analysis

## SYSTEM PROCUREMENT

- Sourcing/Procurement Specification & Evaluation
- Contract Negotiation and Dispute Resolution

## SYSTEM IMPLEMENTATION & PMO SERVICES

- Comprehensive Technical PMO Services
- Detailed Design Review
- Contract Compliance Management
- Vendor Oversight & Supervision
- Acceptance Testing
- Punchlist Management

## SYSTEM MANAGEMENT

- General Management
- Process Improvement
- Technical Leadership
- Lifecycle Management

## REGULATORY & SPECTRUM MANAGEMENT

- Spectrum Management
- New Frequency Search
- Channel Planning
- FCC Contour Development and Analysis
- FCC Technical Waivers
- Wireless Regulatory, Zoning and Site Acquisition
- RF Interference Investigation

## ENGINEERING DESIGN & PLANNING

- System Design, Integration and Testing
- Coverage Design and Testing
- Product Development
- Communications Facility and Site Development
- Communication Centers
- Voice Recording Systems
- Network/Fault Management
- Site Development
- Logging Recorder Systems
- Interoperability Switch Systems
- Dispatch Design
- Regional Interoperability Planning and Coordination
- Network Security
- 3rd Party Vendor Integration
- Communications Site Management and Co-Location
- Service Delivery Negotiation, Management and Implementation

## TECHNOLOGIES

- Wireless & Wireline Telephony Systems
- Microwave/Wireless Backhaul Networks
- Mobile Data Systems
- SCADA Systems
- Satellite Communication
- BDA/DAS/Neutral Host Systems
- AMR/AMI
- Security Systems
- Network Monitoring

## WIRELESS TECHNOLOGIES

- LTE (4G) and 5G
- VHF, UHF, 700-800-900 MHz LMR
- Digital & Analog
- Trunked & Conventional
- Simulcast & Multicast
- APCO Project 25 & DMR
- Proprietary & Legacy Wireless Technologies



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