

# Wireless Engineering

**COMMDEX'S Wireless Engineering** services supplies our customers with the necessary engineering expertise and state-of-the-art management tools to successfully implement wireless solutions. We will assist you with the development of your technology migration paths. In addition, our engineers will create a deployment plan that facilitates the most strategic project decisions.

**COMMDEX Wireless Engineering** will support you with a complete suite of services including:

- ▶ Design for your optimal wireless solution
- ▶ Deployment of the designed systems
- ▶ System testing
- ▶ Integration of the wireless solution with existing systems



## Wireless Engineering Solutions

### Technologies

- » Broadband wireless (WiFi/Mesh)
- » Terrestrial systems (cellular, land mobile radio)
- » Point to point microwave and satellite systems
- » Integrated voice, video, and data portable systems
- » In-building wireless networks
- » Emergency services data systems

### System Design

- » Wireless system and customer needs analysis
- » Technology and product selection
- » RF coverage modeling and analysis
- » Antenna system design and mapping
- » Design of cell structure, security protocols
- » System capacity and grade of service analysis
- » Bandwidth and link budget analysis
- » Inter-modulation analysis, frequency planning
- » Co-channel and adjacent channel interference analysis

### System Deployment

- » Pre-deployment site surveys and site selection
- » Fleetmapping and subscriber templates
- » Network installation management
- » Fleet tracking and management systems

### System Testing

- » Acceptance testing plans
- » Coverage drive test
- » RF product evaluation and testing

### Rebanding Services

- » Inventory of existing equipment
- » Suitability assessment
- » Cutover, transition and fallback planning
- » Evaluation of interoperable communications needs
- » System baselining
- » Management system modifications

