

Our History

Commdux Consulting, LLC, is a wireless systems integrator headquartered in Norcross, Georgia specializing in design and implementation of wireless solutions. Commdux provides infrastructure engineering and management consulting services to the telecommunications industry across the country. Since inception in 2001, Commdux has designed and implemented numerous wireless systems nationwide utilizing the most sophisticated features and functionality.

What We Do

Commdux provides the finest management services and solutions for telecommunications networks from concept to completion. We specialize in providing 'tailor-made' network solutions to telecommunications service providers and manufacturers for the deployment of telecom networks, facilities and supporting systems. We deliver quality services utilizing the most up-to-date and leading-edge technology and methodologies.

Our depth of experience in implementing single and multi-site telecom networks and switching systems enables us to provide highly responsive and cost effective solutions. Through our efficient management and quality consulting services we ensure that our clients get maximum return on investment by managing systems to meet their current and future needs. Commdux understands the unique needs of wireless infrastructure, and develops solutions to address those individual needs.

Our Values

Our customers are our passion. We believe that the most effective way to service our clients is by dedicating ourselves to their objectives. We embrace your goals, commit to your mission and always act in your best interests.

At Commdux, our clients' goals are our obsession - we listen intently and innovate to help you achieve your objectives. We are responsive to your needs and believe in providing the right solution the first time. We are very careful about making promises to our customers. And, when we make a promise, we honor that commitment.

Our Growth and Stability

Our track record of successes and satisfied customers speaks volumes. Because of our quality service, satisfied clientele, and repeat business, Commdux has grown by more than 25% each year since inception with more than 90% of our business coming from repeat customers and customer referrals. All through this growth Commdux has remained profitable and debt free, which has allowed us to service our customers and employees at the highest level.



Benefits clients can realize when working with Commdex professionals:

Depth of experience – nationwide

COMMDEX brings a tremendous depth of experience in designing and managing telecom systems. Our consultants are seasoned and certified professionals in their fields with an average of 15+ years of experience in the telecommunications industry. Commdex has successfully planned, executed, controlled and delivered numerous projects throughout the US.

Field operations management – your “eyes and ears on the ground”

Take confidence in delegating field operations without losing control. You will be an integral part of the loop without the headache and responsibility of day-to-day implementation. Our team will gladly assume responsibility for assigned elements of the project and manage them from beginning to end. We will establish and track schedules as well as pricing at all stages of project to ensure their completion within budgetary and time constraints.

Sound project strategies

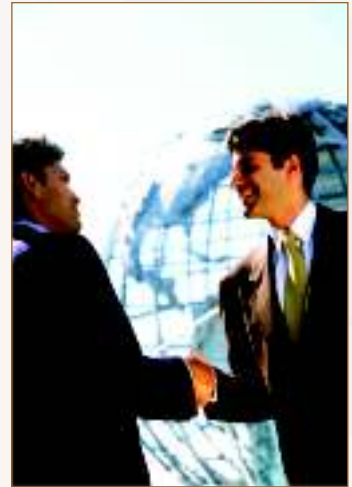
Our consultants facilitate creative and practical design solutions by introducing different perspectives into the project. In addition, we will ensure that project recommendations meet all your business objectives, engineering criteria, and are economically feasible. Commdex utilizes state of the art software applications to manage the project and communicate real-time progress reports.

Technical and creative counsel

Our staff is skilled across all project disciplines. We offer you sound advice based on years of experience, clear direction, and honest, unbiased project assessments. Commdex's obligation on the project (contractual or otherwise) is always to our customer. We will operate as your agent to ensure that all design specialist, contractors, and subcontractors operate with your best interests in mind!

Teaming partners

Through our vast project experience, working relationships and knowledge base, Commdex has built contacts and relationships with some of the leading suppliers and subcontractors in the country. Should the need arise for ancillary services, rest assured that our partner providers are an extension of the quality and integrity standards found at Commdex.



Client Added Value

Resource Staffing Flexibility

- » Commdex staff assigned on an as-needed basis
- » Staffing based on anticipated work load
- » Customers able to focus on core business processes

Faster Implementation

- » Project completion ahead of schedule
- » Manage efficient interaction among teams
- » Project tracking and coordination

Quality Assurance

- » Continuous monitoring of work product
- » Exception reporting and progress assessment
- » Test and acceptance

Risk Mitigation

- » Strong risk mitigation process
- » Identify and resolve risks quickly and efficiently
- » Constant critical path, issues and budget monitoring

Single Point of Contact

- » Simplified reporting procedures
- » Detailed comprehensive status reports
- » Certified professionals manage day-to-day activities

Cost Reductions

- » Reduction in staffing
- » Maximized value from service providers
- » Leverage Commdex experience



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



Management Consulting

COMMDEX's Management Consulting Services provide you with the appropriate expertise required to make the optimum managerial solution for critical needs of your telecommunications projects.

COMMDEX Management Consultants bring a tremendous depth of experience in managing telecom systems. We will assist you with developing the most comprehensive solutions for effectively managing your telecom systems integration project from concept to completion. Our core capabilities include:

- ▶ Assessment and analysis of critical situations to develop practical action plans
- ▶ Strategy recommendations for your new initiatives
- ▶ Design of effective management processes for your projects
- ▶ Re-engineering of existing operations to optimize results and minimize costs.



Management Solutions

Strategic Planning

- » Customer requirement gathering and analysis
- » Management of strategic planning initiatives
- » Transition planning and cutover execution
- » Assistance with federal, state and municipal approvals
- » Change management

Process Design/Optimization

- » Develop business cases
- » Feasibility studies
- » Customer needs and requirements analysis
- » Cycle-time Analysis and Improvement Recommendations
- » Quantitative and qualitative analysis

Systems Integration

- » Write telecommunications system specifications
- » Assist with network planning and design
- » Manage wireless infrastructure installs

Business Consulting

- » Strategic Planning
- » Performance Management/Balanced Scorecard
- » Communications Assessments
- » Continuity of Operations Planning

Telecommunications Strategy Development

- » Identification and assessment of technical and/or regulatory alternatives
- » Rapid assessment and analysis of critical situations
- » Recommendations that attain organization goals
- » Design review/alternatives assessment

Technology Evaluation and Consulting

- » Assessment of wireline and wireless telecom technologies
- » Determination of appropriate application and IT architectures
- » Assistance with process, function and information requirements
- » Formulation of systems development programs & projects

QA/QC Program Development and Implementation

- » Assessment of quality issues
- » Support during implementation of QA/QC programs



Program Management

COMMDEX's Program Management Services are available during any stage of your project. From project concept to the commissioning of operations, our #1 goal is to deliver to you, our customer, an efficient and cost effective systems design and solution. We accept full ownership and responsibility for developing, establishing and tracking project timelines and pricing schedules throughout the term of the project helping to ensure completion within budget and project deadlines.

COMMDEX Program Managers are certified Program Management Professionals (PMP) with over 10 years of experience in the field of telecommunications management solutions. Our highly experienced Program Management personnel will deliver comprehensive solutions utilizing the most current methodologies, procedures, databases and project tracking tools available in the industry.

COMMDEX Program Managers become the single-point contact to coordinate and oversee all technical aspects of your network deployment. By working closely with you during the project planning stage, our Program Management team will create the optimum solution, while addressing the critical project components of quality, cost, and scheduling.

Program Management Solutions

Project Implementation Services

- » Forecasting
- » Value Engineering
- » Cash-Flow Analysis and Trending
- » Contract Document Review
- » Contract Administration
- » Customer Relations
- » Vendor/Contractor Pre-qualification
- » Bid Evaluation
- » Vendor Selection
- » Overall Deployment Program
- » Tracking and Coordination
- » Detailed Design Reviews
- » Test and Acceptance
- » Exception Reporting and Progress Assessment

Project Planning Services

- » Feasibility Studies
- » Risk Planning
- » Implementation Strategy Development
- » Scope of Work Development
- » Program Development Management
- » Engineering Design and A&E Team Evaluations
- » Estimating
- » Budgeting
- » Critical Path Scheduling (MS project, Primavera, Clarity)



Construction Engineering

COMMDEX's Construction Engineering service works with you to design cost efficient, fault tolerant and intrinsically safe telecommunications facilities. Backed by our highly experienced teams of engineers, planners and managers, we offer a full range of pre-, during and post-construction services under the umbrellas of Facilities Planning and Construction Management.

Facilities Planning

During the pre-construction phase, our Facilities Planning Consultants will analyze your requirements to create a forward-thinking design that will satisfy today's needs and be flexible enough to accommodate future growth. Working directly with your user groups, we will help you design cost efficient, fault-tolerant and intrinsically safe telecommunications facilities including cell sites, control offices, dispatch centers and master switches.

Construction Management

During the construction phase, our Construction Management services provide you with the appropriate expertise required to minimize risk and ensure quality construction throughout the building process. We will be your "eyes and ears on the ground" to manage the infrastructure construction and ensure quality construction and cost savings throughout the building process.



Construction Engineering Solutions

Facilities Design

- » Value engineering & constructability analysis
- » Mission critical data center design
- » Control center design
- » Grounding and surge protection
- » Electrical and backup power (UPS and generator)
- » (N+1)2 redundancy designs

Management of Pre-construction Activities

- » Site visits
- » Site acquisition
- » Zoning approvals
- » Regulatory (FAA, FCC, NEPA, SHPO) permits
- » Construction drawings
- » Material ordering (antenna, lines, equipment, etc.)
- » Bidding and contractor selection
- » Construction estimating and budget preparation
- » Detailed construction schedules

Management of Construction Activities

- » Site/utility/construction permit coordination
- » Ongoing monitoring and site/technical inspections
- » Manage change order applications
- » Coordinate offsite storage facilities
- » Claim resolution
- » Monitor and manage safety and accident prevention programs
- » Ongoing organized record keeping
- » Implement and manage quality review program
- » Ensure strict conformity of all laws, rules and regulations

Disaster Recovery Planning

- » Analysis of existing facilities
- » Analysis of single points of failure
- » Backup power and grounding analysis
- » Reliability and redundancy evaluations
- » Fault tolerant design



Comprehensive Telecom Solutions, Nationwide

There's no substitute for experience.

ALABAMA

- » Calhoun County, 800 MHz Voice System
- » Southern Company iDEN System

ARIZONA

- » DHS Mt Lemmon Project

DELAWARE

- » State of Delaware 800 MHz SmartZone Simulcast Astro Radio System

FLORIDA

- » State of Florida, Statewide Motobridge Interoperability Project
- » Osceola County 800 MHz Trunked SmartNet Radio
- » Orange County 800 MHz Trunked SmartZone Radio
- » Orlando 800 MHz Trunked SmartZone Radio

GEORGIA

- » State of Georgia, Converged Communications Outsourcing Project
- » Metropolitan Atlanta Rapid Transit Authority (MARTA), 800 MHz Simulcast System
- » Southern Company iDEN System
- » Lowndes County, 800 MHz Trunked Digital Simulcast Radio System
- » Dekalb County, Astro 25 Simulcast System Upgrade
- » Hall County, 800 MHz Project 25 Simulcast System

ILLINOIS

- » AT&T Outside Plant E140 Cable Project

KENTUCKY

- » Metro Louisville, Public Safety Radio Network

MAINE

- » Maine Statewide Communications Network

MARYLAND

- » Prince George's County, MD 800 MHz Trunked Radio System
- » University of Maryland, 800MHz Trunked SMARTNET Radio System
- » Montgomery County, MD 800 MHz Trunked Radio System

MICHIGAN

- » Macomb County Wireless Voice Communication System

MISSISSIPPI

- » City of Natchez-Adams County, MS 800 MHz Simulcast Trunked Radio System
- » City Of Gulfport, Radio Communications System
- » Southern Company, iDEN System
- » MS Statewide Wireless Interoperability Network

MISSOURI

- » AT&T Outside Plant E140 Cable Project

NEBRASKA

- » AT&T Outside Plant E140 Cable Project

NEW YORK

- » New York Channel 16
- » Tompkins County Mixed Mode Simulcast System

NORTH CAROLINA

- » City of Burlington, Smartzone Simulcast Radio System

OHIO

- » State of Ohio, MARCS Expansion Project

PENNSYLVANIA

- » Beford County, UHF Public Safety Radio Network

SOUTH CAROLINA

- » Statewide Radio System
- » York County 800 MHz Simulcast System

TENNESSEE

- » Shelby County, TN 800 MHz ASTRO Trunked Simulcast System

TEXAS

- » IBM Texas Microwave Project
- » City of Houston, 700/800 MHz Trunked Radio System

VIRGINIA

- » Commonwealth of Virginia, Statewide Agencies Radio System (STARS)
- » York County and James City County, 800 MHz P25 Simulcast System
- » Prince William County, 800 MHz SmartNet Simulcast Astro Digital System
- » Hanover County, VA 800 MHz Astro Simulcast Trunked Radio System
- » King George County, Upgrade To Conventional VHF Simulcast Radio System

WASHINGTON DC

- » Washington DC Metropolitan Area Rapid Transit Authority (WMATA) 490 MHz Comprehensive Radio System
- » DC Fire and Police Joint Communications System

WEST VIRGINIA

- » West Virginia Statewide Interoperability Radio Project



Customer Satisfaction is Our Bottom Line

At Commdex, our customer's goals are our passion - we embrace your objectives, commit to your mission and always act in your best interests. We listen intently and innovate to help you achieve your objectives utilizing leading-edge technology and the most up-to-date methodologies. Our responsiveness to our clients' needs and our commitment to always provide the right solution the first time are why our customers choose us for repeat business year after year.

What They're Saying About Commdex

"...superb job. Well organized, knowledgeable and resourceful. He thinks "out of the box" to find solutions to potential problems. He understands our processes and works hard to satisfy those requirements"

Ron Faulkner

Senior Program Manager

"Congratulations, all internal clients, to date, have been satisfied with Commdex's performance and would use Commdex again. Your past performance and the acceptance of your Motorola clients to use you again, is the reason I am contacting you. I would like to establish Commdex as a "preferred" supplier to Motorola."

Tami Martin

*Global Procurement Business & Financial Consulting Service
Senior Program Manager*

"...absolutely indispensable in these opportunities, especially when we have to be very creative to win the business. My gratitude for his selfless efforts for the long hours required, as well as his expertise and positive attitude/enthusiasm."

Saïid Anhary

Systems Integration Specialist

"Thank you for your leadership in making this happen."

Scott Adler

Vice President, Motorola

"Yesterday, you achieved a major breakthrough by successfully testing proper operation of..... We all appreciate your enthusiasm, energy, and attention-to-detail in completing these important milestones."

Jerry Masak

RF Engineering Manager

"I wanted to take a moment to thank you for your invaluable contribution. You were instrumental in completing this task ahead of schedule by skillfully coordinating with over 39 departments in the County. Completion of this crucial task ahead of schedule has greatly facilitated the completion of staging and other important tasks in a timely and expeditious manner. I look forward to working with you on future projects and further utilizing the advanced skills and resources offered by Commdex Consulting."

Art Harris

Project Manager

"Many thanks for a truly outstanding effort"

Joe Gordon

Account Executive

"Congratulations on completing the impossible ahead of schedule"

Mike Repella

Pre-sales Business Manager

