# THE NEW DECADE:

Meeting the challenges of the 2020s with next-gen communications infrastructure





# THE FUTURE IS NOW. SEIZE IT.

2020 promises to be a ground-breaking year for the telecommunications industry.

The large-scale rollout of 5G, the rapid growth of edge computing and IoT, and the launch of over-the-top (OTT) streaming services offer a myriad of opportunities. As augmented and virtual reality, distance learning, edge computing, e-sports, smart cities, telemedicine, and streaming video continue to explode, our modern world's dependence on a fast, reliable—and indispensable—communications infrastructure becomes more and more inevitable.

While keeping a close eye on the ever-changing regulatory landscape, service providers are relentlessly looking for new ways to capitalize on these trends, transform operations, and launch new, cost-efficient offerings faster than ever before.

### CAPITALIZE ON NEW TECHNOLOGIES

Emerging technologies like 5G and SD-WAN are disrupting markets and increasing competition. They're providing an entry point for startups and niche providers, and driving mergers and acquisitions among traditional market giants striving to stay relevant. Investments in fiber and 5G will likely increase as telcos and service providers partner to become primary OTT solution providers to build customer loyalty, bolster revenues, and offset price pressures on last-mile connectivity.

The capital-expenditure competition of the past decade will also continue as businesses and developers begin to understand the capabilities of 5G and deliver new, next-gen "killer apps." Research and development of industry applications will accelerate to keep pace as telcos strive to revolutionize the delivery of goods and services in new areas such as agribusiness, energy, and transportation.

Moreover, consumer-driven data consumption—fueled by IoT devices using broadband and mobile services—continues to soar, putting unprecedented pressure on networks. The introduction of GDPR has also made users, organizations, and lawmakers increasingly aware of concerns over privacy, data protection, and infrastructure security.

#### PARTNER FOR SUCCESS

With all of these concerns, telcos and service providers are under pressure to focus on creating competitive differentiation. As a result, dependable partners who can build, maintain, and upgrade infrastructure on schedule and within budget are in demand.

# Region Authority Corp can help!



# **REGION AUTHORITY CORP: YOUR INTELLIGENT ALTERNATIVE**

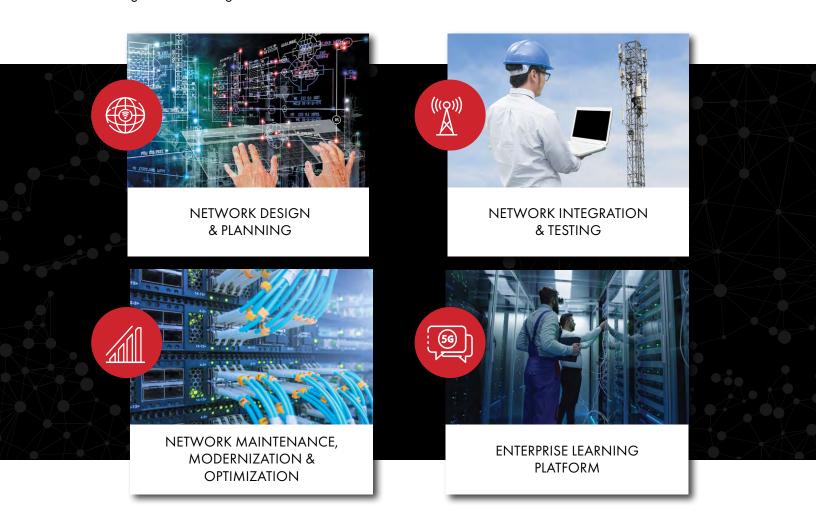
Leveraging over 20 years' experience in the telecommunications industry, Region Authority partners with clients to deliver world-class communications solutions supplying extensive coverage and based on exceptional quality, reliability, and safety. Whether it's designing, building, modernizing, optimizing, or maintaining your telecommunication networks, we'll manage your projects to deliver the services your consumers demand.

As a Technical Service Provider (TSP) providing comprehensive infrastructure engineering services, IT solutions, training, and management services tailored to meet the needs of various industries, our out-of-the-box thinking and innovative capabilities enable our clients to reinvent and rebrand themselves in the global marketplace.

#### WHAT WE DO

Based on a deep understanding of the telecommunications industry, we provide expert telecommunications infrastructure consulting, project planning, and management services. Our expertise encompasses network design, engineering, integration, optimization, and maintenance of next-gen infrastructure for telcos and service providers across the USA and internationally. We'll work with your existing suppliers, introduce you to new ones, and coordinate the planning, delivery, and support of new, upgrade, or maintenance projects.

Our management consulting services fall into four broad areas:



USING ADVANCED, DATA-DRIVEN ANALYTICS AND INNOVATIVE SOFTWARE PLATFORMS, OUR HIGHLY SKILLED TEAM PROVIDES YOU WITH THE OPTIMAL TECHNOLOGICAL SOLUTIONS TO HELP REALIZE YOUR VISION, DRIVE COMPETITIVE DIFFERENTIATION, AND PROTECT YOUR BUSINESS.

# HOW WE DO IT

Our results-focused, synergistic partnering approach results in the whole being greater than the sum of its parts as management, employees, vendors, and end-users focus on a mutual goal – to develop the economic potential of the markets in which we operate.

Our success and the success of our clients is based on our proven ability to:

- Manage the project from beginning to end—on schedule and within budget.
- Focus on innovative, tailored approaches for realizing a competitive advantage.
- Coordinate available resources to achieve cost objectives without compromising quality.
- Deliver flexible, wide-reaching solutions to meet the complex and varied needs of our clients.
- Accelerate delivery and improve quality with detailed planning and informed decision making.
- Ensure on-time delivery and infrastructure maintenance with a well-managed supply chain.
- Optimize cost control and efficiency through standardization and intensive training programs.
- Stimulate innovation by uniting diverse perspectives and industry-leading technology.
- Maintain excellent communication and ongoing engagement with all stakeholders.
- Help you develop long-lasting relationships to grow your enterprise.

The collective expertise and experience of the members of our Superior Advantage Partner Program offer an extended team with the flexible resources and skills your organization needs to take advantage of new opportunities.



# REGION AUTHORITY'S SUPPLIER LIFE-CYCLE, PROCUREMENT & INVENTORY MANAGEMENT PLATFORM

Based on years of experience, we've developed an enterprise SaaS application for end-to-end field management. Packed with powerful but easy-to-use features, the application enables you to:

- Streamline and accelerate onboarding of new suppliers
- Manage the entire supplier life-cycle, including
  - o Procurement
  - o Inventory
  - o Upgrades
  - o EOL
  - o Disposal
- Deliver cross-functional performance evaluations
- Assure effective governance and risk mitigation





# **NETWORK DESIGN & PLANNING**

Ensuring the optimal network capacity to meet customer demand at the right time and place doesn't happen by chance. Delivering unused, excess capacity wastes scarce resources that could be invested elsewhere, and delaying expansion plans only results in bottlenecks resulting in poor service, jeopardizing customer loyalty and business growth.

# FIXED & MOBILE NETWORK DESIGN/PLANNING

Crafted to meet rapidly growing and ever-changing traffic demands, our design services include:

- Complete or partial network design
  - o Backbone
  - o Cable broadband
  - o Enterprise network
  - o Fiber network
- Traffic dimensioning
- Access network planning
- Scenario planning
- Detailed, custom-designed reports
- Compliance with regulatory and service availability limitations

Leveraging extensive experience combined with innovative planning tools, our designs incorporate the latest proven technologies providing multi-vendor and multi-operator solutions.

#### PROOF OF CONCEPT (POC) SUPPORT

Building a PoC environment allows you to evaluate the capabilities of new technologies and solutions, providing the basis for informed decision making before making significant investments. It also allows you to identify and address potential issues and develop RFPs that reflect your real needs.

Our consulting support services include:

- Expert advice from our technical engineers
- Recommendations for equipment testing and network designs prior to investment
- Ensuring compatibility between proposed and existing systems
- Knowledge sharing and transfer of new technologies and equipment
- Matching requirements and adjusting technical designs if necessary
- Addressing potential concerns before purchase and rollout



# **NETWORK INTEGRATION & TESTING**

Whether network simulation or fault diagnostics, it's critical that together we address essential network KPIs and solve any reliability, scalability, traffic load and shaping, or quality of service (QoS) issues based on your specific data, protection mechanisms, and cost concerns.

Our comprehensive network integration management services include:

- Component and unit pre-configuration
- Cabinet installation/sub-rack assembly
- Cable and harness preparation
- Fiber installation, splicing, and testing
- Cable termination and testing
- Network simulation, performance, and reliability tests
- Fault diagnostics based on simulation
- Customer premises equipment installation
- Hosting services integration and testing
- On-site testing and commissioning
- De-installation and de-commissioning (recovery)
- As-built reports and documentation





# **NETWORK MAINTENANCE, MODERNIZATION & OPTIMIZATION**

As networks continue to evolve and require upgrading, the operating environment becomes increasingly complex. In the mobile space, 2G, 3G, 4G, and 5G technologies will continue to coexist for years to come, with similar challenges facing fixed network operators. Fewer resources—combined with the rapid rollout of modernization projects to ensure consumer demand—creates problems when it comes to maintaining accurate records of existing assets, upgrading and introducing new equipment, and fine-tuning of operations.

Modernizing your network and optimizing the maintenance efficiency, resource allocation, service capacity, and security of your environment, Region Authority's services address all of your audit, planning, and implementation needs. Including performance data collection, optimization engineering, and performance feedback, coupled with evolving original designs and developing implementation strategies, our focus is on improving network KPIs while reducing operational costs over the long term.

#### **NETWORK AUDITS & SITE SURVEYS**

Carefully crafted audits and surveys ensure accurate records required for seamless network upgrade planning, equipment maintenance and replacement, and managing operational costs. Our extensive review and survey services include:

- Floor plans
- Rack plans
- Equipment plans (including serial numbers)
- Site power supply layout
  - o 24x7 UPS capability
- Site access control

#### CORE NETWORK ENGINEERING

Delivering flexible, far-reaching solutions, our results-focused maintenance and optimization services transform the output of our network audits and site surveys into actionable intelligence ensuring optimal capacity, availability, and reliability.

From designing and integrating new technologies and core platforms to maintaining and optimizing existing systems, our services include:

- Design consultation
- Integration and support of modern platforms
- Back-office core support services
- Logistics and supply chain support
- Alarm reduction programs
- Core incident/ticket management services
- Service enhancement and continuous improvement schedules
- Training and team mentoring





# **ENTERPRISE LEARNING PLATFORM**

Committed to sharing best practices and technical awareness with clients and partners, we've pooled a wealth of collective knowledge over the years. Facilitated by expert instructors, our professional courses enable you to embrace new technologies and tools, accelerate innovation, and empower team members to deliver better solutions — faster.

COURSE CODE	TITLE
TECHNOLOGY	
RAC-TR101	2G, 3G, 4G, AND 5G MOBILE COMMUNICATIONS (REFRESHER)
RAC-TR102	4G-LTE AND 5G TELECOM TRAINING (REFRESHER)
RAC-TR103	5G PLANNING
RAC-TR104	5G SPECTRUM CALCULATION
RAC-TR105	5G DEPLOYMENT AND TRANSPORT NETWORK
RAC-TR106	5G RADIO ACCESS TECHNOLOGIES
RAC-TR201	FTTx NETWORKS
RAC-TR202	DISTRIBUTED ANTENNA SYSTEM (DAS)
RAC-TR203	UAVS (DRONES) FOR WIRELESS NETWORKS
RAC-TR204	CITIZENS BROADBAND RADIO SERVICE (CBRS)
TOOLS	
RAC-TR301	MICROSOFT EXCEL
HEALTH & SAFETY	
RAC-TR401	BASIC FIRST AID
RAC-TR402	OSHA 10-HOUR
RAC-TR403	OSHA 30-HOUR
RAC-TR404	RF AWARENESS



Courses may be taken either individually or as part of a certified learning plan, each with certificates issued upon completion of the relevant exams and tests

COURSE CODE	TITLE	
CERTIFICATION: 5G CORE FUNDAMENTALS SPECIALIST		
RAC-TR101	2G, 3G, 4G, AND 5G MOBILE COMMUNICATIONS (REFRESHER)	
RAC-TR102	4G-LTE AND 5G TELECOM TRAINING (REFRESHER)	
CERTIFICATION: 5G DESIGN SPECIALIST		
RAC-TR101	2G, 3G, 4G, AND 5G MOBILE COMMUNICATIONS (REFRESHER)	
RAC-TR102	4G-LTE AND 5G TELECOM TRAINING (REFRESHER)	
RAC-TR103	5G PLANNING	
RAC-TR104	5G SPECTRUM CALCULATION	
CERTIFICATION: 5G TECHNOLOGY SPECIALIST		
RAC-TR201	FTTx NETWORKS	
RAC-TR105	5G DEPLOYMENT AND TRANSPORT NETWORK	
CERTIFICATION: M	IDBAND ARCHITECT	
RAC-TR104	5G SPECTRUM CALCULATION	
RAC-TR204	CITIZENS BROADBAND RADIO SERVICE (CBRS)	
CERTIFICATION: LAND MOBILE RADIO SPECIALIST		
RAC-TR106	5G RADIO ACCESS TECHNOLOGIES	
RAC-TR202	DISTRIBUTED ANTENNA SYSTEM (DAS)	
RAC-TR203	UAVS (DRONES) FOR WIRELESS NETWORKS	
CERTIFICATION: M	ICROSOFT EXCEL EXPERT	
RAC-TR301	MICROSOFT EXCEL	
CERTIFICATION: SA	FETY EXPERT	
RAC-TR401	BASIC FIRST AID	
RAC-TR402	OSHA 10-HOUR	
RAC-TR403	OSHA 30-HOUR	
RAC-TR404	RF AWARENESS	

For more information, see Region Authority Corp's Enterprise Learning Platform Services Brief, or visit our state-of-the-art learning portal at regionauthoritylearning.com.

# WHY REGION AUTHORITY CORP?

**Maximum Network Uptime:** We excel at managing the provision of end-to-end solutions aimed at achieving maximum network uptime— one of the main concerns of most telecom service providers.

**Increased Performance:** Our innovative, proven tools help our clients increase productivity and optimize performances with highly-effective EPIT (engineer, provision, install, and test) Services.

**Expertise & Experience:** We're proud to count on a team of highly-skilled professionals with decades of training and experience handling all types of network equipment and communication systems.

**Vendor Network:** We work hard to maintain stable relationships with our equipment manufacturer and software vendor partners, enabling us to serve our global customers in the most efficiently and cost-effectively.

**Attention to Detail:** All of our customers receive detailed closeout documentation for every project we deliver, with full proof of compliance as required by the relevant authorities.

For any of the following management services, call us on 215.278.6955 or email us at director@regionauthority.com

- Document and Data Management Services
- Land Mobile Radio & BTS Systems
- Broadband Network Systems
- Wireline Access & Switching
- Optical Transport & Switching Systems
- DC Power & Infrastructure
- Rack & Stack

To learn more, visit us at regionauthority.com





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