



*Committed backhaul experts
Serving your business needs*



Professional services



Our experts - rising to your backhaul challenge

Since we first started providing wireless backhaul solutions over two decades ago, we've helped our customers face countless challenges – and we pride ourselves on being able to rise to them every time.

We have people who understand the technology and the business. Our wireless backhaul experts allow you to challenge them and leverage their experience and knowledge in order to achieve your business goals.



*Challenge us
to take you further*



To achieve the highest value for you

Our team of experts recognize that they have to achieve three things for you:

Increase your operational efficiency

Plan, rollout, manage and maintain your network in a way that maximizes resource utilization and labor productivity.

Ensure your peace of mind

You enjoy peace of mind as you know you have the best professional experts at your disposal. You can leverage our experience and never have to worry about unexpected challenges.

Keep your customers satisfied

That's why we're all here. We rise to the challenge because it gives your customers a better experience. Enhancing your customers' experience will allow you to acquire more customers in a shorter period of time, while keeping them happy throughout the process.



Increase your
operational efficiency



Ensure your
peace of mind



Enhance QoE
for your customers



Ceragon – Professional Services

Ceragon offers a variety of comprehensive Professional Services in order to deliver the most efficient network solutions for you during the entire life-cycle of your project. Whether you are planning a network expansion/upgrade, setting up a new network, or managing an existing network, Ceragon's Professional Services experts will allow you to meet your goals within your budget while ensuring the best experience for your customers.

Ceragon's various professional services can be bundled or acquired separately, depending on specific needs, network complexity and installed based.

Our Professional Services include:

Detailed Solution Design

Preventive Maintenance

On-Site Consulting

Network Audit

Network Optimization

Training





Detailed Solution Design – DSD (Pre-rollout)

This advanced planning service allows you to improve your operational efficiency by optimizing your network rollout process. Pre-rollout planning allows you to ensure high performance quality of experience and on-time delivery of your services, while improving resource usage (equipment, frequency, personnel etc.) and shortening time to market.

Deliverables

- BOM validation
- Detailed DCN/IP plan
- RF planning
- QoS parameters changes/optimization
- Cutover plan and guidance
- Loading predefined configuration files to network elements
- Guidance for: Resilience protocols, TDM/PWE and ring configuration integration with other vendors and detailed synchronization plan

YOUR BENEFITS

Improve network performance and efficiency | Reduce on-site interventions
Improve spectrum allocation | Optimize network topology





Preventive Maintenance

Ensure your service availability and your customers' quality of experience with Ceragon's Preventive Maintenance service, allowing you to proactively run, monitor and maintain your network health for best performance and functionality.

Preventive Maintenance services include two variants, to best fit your needs and budget:

Network Monitoring (NOC)

Ensure your peace of mind with a 24x7x365 Network Operations Center (NOC) operated by Ceragon.

- Remote monitoring of events and alarms
- Incidents and alarms ticketing
- Field Service Engineers dispatch according to priorities defined by the customer
- Escalation of incidents to other departments according to escalation matrix
- On call support for off-hours events
- Monthly reports

Network Health Check

Ceragon's support center can provide Health Check verification for the network, monitoring your network status and alarms.

- Creation of incident tickets for incidents and alarms
- Escalation of incidents to other departments, if necessary according to escalation matrix

YOUR BENEFITS

Improve network performance and efficiency | Increase network availability



YOUR BENEFITS

Improve network performance and availability





On-Site Consulting

Enhance your customers' quality of experience and increase your operational efficiency with Ceragon's on-site consulting services:

On-Site Engineer

Leverage Ceragon's experts' experience and in-depth understanding of network technologies at your site – optimizing your network and increasing your customers' quality of experience. Any challenge and skill required can be addressed: Microwave links, Packet-Switched technologies, Ethernet and IP, LAN, WAN, MPLS, Carrier Ethernet, ATM and TDM.

Deliverable

- Periodic top management updates on network issues and activities executed for overall improvement

Field Preventive Maintenance

This service offers dedicated Field Technical Experts for preventive maintenance to verify health and condition of the entire system.

Deliverable

- Update and remediation of network issues



YOUR BENEFITS

Early identification of site issues affecting link operations | Reduce unplanned on-site interventions
Early identification of need for expansion or reconfiguration | Reduce on-site interventions



Network Audit

Increase your operational efficiency by maximizing resource utilization and network performance with Network Audit services. These services allow you to be aware of your network's status, receive recommendations to help improve your network's performance and prevent future outages. Ceragons' Network Audit services include:

Network Evaluation

Network Evaluation is our basic audit service. It provides a complete report of your network's performance, outlining any configuration, capacity or design issues. The report includes detailed alternatives paths for improved network performance. This service is mainly for multi-vendor or non-Ceragon equipment.

The audit may present the following findings, amongst others:

- Links subject to improvement
- Errors (BBE\ES\SES\UAS)
- Low RSL
- Variable profile
- Traffic congestion
- Alarms

Network Analysis

Network Analysis is our enhanced audit service. It provides a complete report of your network's status, including link performance, followed by detailed recommendations for improving your transmission network performance and for taking proactive measures to prevent microwave link failures. The implementation of the recommended actions will enable you to increase your operational efficiency and enhance the Quality of Experience for your subscribers.

The audit may recommend the following actions, amongst others:

- Changing equipment settings
- Link capacity upgrade\downgrade
- New feature implementations
- New frequency configurations
- Interference analysis
- Optimization of the network topology
- QoS implementation
- Advanced training

YOUR BENEFITS

Improve network performance | Early identification of network need for expansion or reconfiguration | Reduce on-site interventions | Optimize network topology





Network Design Review

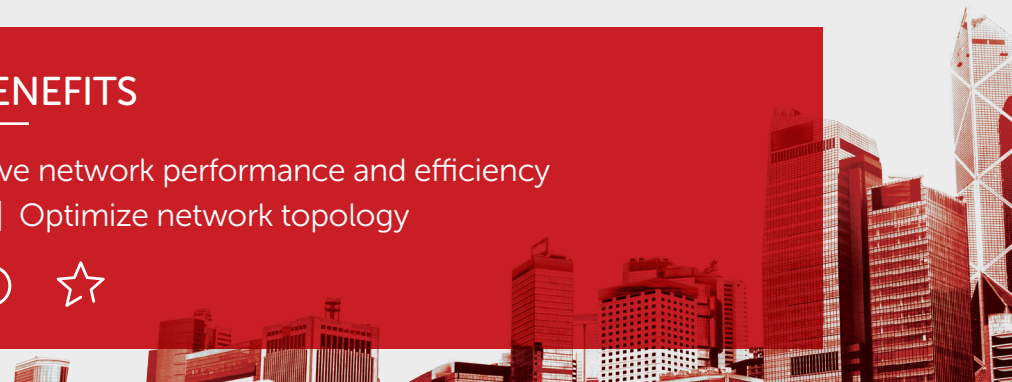
Design Network Review services help increase your operational efficiency and enhance your customers' quality of experience by providing periodic verification to keep your network design and configuration optimal and up-to-date.

Deliverables

- BOM validation
- Detailed DCN/IP plan review
- RF planning
- QoS parameters changes/optimization review
- Cutover plan and guidance
- Resilience protocols guidance review
- TDM/PWE configuration guidance
- Ring configuration guidance
- Integration with other vendors' guidance
- Detailed synchronization plan review and guidance

YOUR BENEFITS

Enhance customer satisfaction | Improve network performance and efficiency
Reduce on-site interventions | Optimize network topology





Network Optimization

Optimize your business and increase your operational efficiency with remote Network Optimization services. These services ensure your peace of mind by preparing your network to meet future business requirements. Ceragon's Network Optimization services include:

Traffic/Capacity planning

Receive input related to the resources needed to meet your current and future needs:

- Traffic engineering/modelling guidelines
- Capacity and quality objectives
- Bandwidth assessment and path studies
- Network and service plans
- Capacity plan
- Database update, when needed

Interference analysis

Increase network performance by eliminating interferences:

- Intra network interference report
- Inter network interference report (together with Field Service)

Remote equipment and network configuration

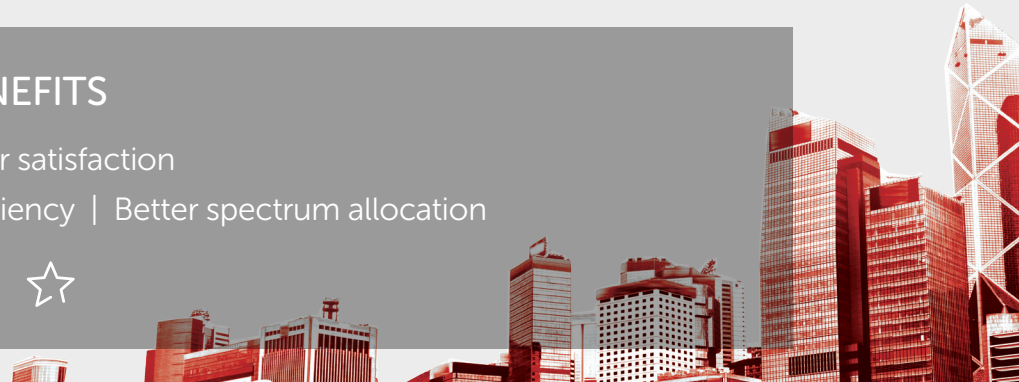
The Ceragon support center provides remote network configuration services:

- Provide network configuration based on service requests received from planning
- Service reconfiguration
- Identification of patches missing on the field

YOUR BENEFITS

Improve customer satisfaction

Improve network performance and efficiency | Better spectrum allocation





Training

Improve your staff productivity and efficiency by enhancing their knowledge of Ceragon's products, technologies and solutions through theoretical sessions and hands-on practice. Our training services include:

Instructor Lead Training (ILT)

Virtual Class Training (VCT)

E-learning - Web Based Learning (WBL)

Webinars

Certifications

YOUR BENEFITS

Staff-competence gap-analysis | Consistent Professional Development | Leverage global experience and expertise | Effective learning and development | Skilled and productive workforce | High employee retention | Optimized network performance | Improved customer satisfaction





About Ceragon

Ceragon Networks Ltd. is the world's #1 wireless backhaul specialist. We help operators and other service providers worldwide increase operational efficiency and enhance end customers' quality of experience with innovative wireless backhaul solutions. Our customers include wireless service providers, public safety organizations, government agencies and utility companies, which use our solutions to deliver 4G, mission-critical multimedia services and other applications at high reliability and speed. Ceragon's unique multicore technology provides a highly reliable, high-capacity 4G wireless backhaul with minimal use of spectrum, power and other resources. It enables increased productivity, as well as simple and quick network modernization. We deliver a range of professional services that ensure efficient network rollout and optimization to achieve the highest value for our customers. Our solutions are deployed by more than 460 service providers, as well as hundreds of private network owners, in more than 130 countries.