Global Wireless and Broadband Infrastructure Solutions
Mer Group drives the industry with turnkey wireless and broadband infrastructure solutions
Mer Group Telecom Division provides cutting-edge, turnkey telecommunication solutions globally, with a diverse and unique wireless and broadband infrastructures portfolio.

Our tailor-made solutions include low-cost and rapid deployed cellular sites, single to multi-tenant cell-site solutions, and turnkey fiber-optic infrastructures.

Our turnkey approach covers all stages of network deployment:

- Network design
- Planning and acquisition
- Civil works
- Equipment supply, installation, optimization and implementation
- Active and passive infrastructure maintenance

Mer Group Telecom Division has earned a worldwide reputation of excellence in telecommunication tower design and manufacturing, providing our customers a one-stop shop solution for their entire network infrastructure needs.

Our extensive footprint in Africa, Asia and Latin America enables us to offer our customers:

- In-country management and support
- In-depth regional knowledge
- Short lead-time with unsurpassed time to market
- Efficient logistics chain

We are honoured to provide our services to leading telecommunication companies including America Movil, Entel, Telefonica, Tigo, Vodacom, Airtel, Orange, Liquid Telecom, Nokia, Ericsson, Huawei, ZTE, ATC, and Helios.
Providing customers with comprehensive site building services

All-Inclusive Site Design

Our structural engineering department offers comprehensive design services complying with TIA and local standards that include:

- Architectural site layout
- Towers design and detailing
- Foundations design
- Civil works- drainage, access roads, grounding, underground conduits and security
- Hybrid energy systems

Resourceful Site Construction and Civil Works

We provide our customers with planning and seamless coordination for all construction aspects:

- Site earthworks and leveling
- Design, manufacture and erection of towers and monopoles
- Supply and installation of fully equipped shelters with electrical works, air conditioning and security system
- Supply and commissioning of hybrid energy systems
- Site fencing and protection

Project Management

Mer Group Telecom Division does not spare any resources in the management of every project. Each project is supported by a large team of professionals led by a dedicated expert project manager. The team includes on-site supervisors, skilled engineers (electric, civil, radio), logistic support, quality assurance experts as well as HSE personnel.

The driving force behind this team is to deliver the project on-time and on-budget whilst meeting all of our joint goals of excellence and performance.

Quality and HSE

Our commitment to quality encompasses all aspects of our solution’s delivery from the design stage to manufacturing, implementation and maintenance.

At Mer’s the Health and Safety of its employees, sub-contractors and public in general is paramount. We have incorporated company level policies, risk management, and extensive training, all meeting the highest level of national and international standards.

Mer Group Telecom Division is certified with ISO-9001, ISO-14001 and ISO-18001.

TURNKEY SITE CONSTRUCTION

With Mer’s extensive experience of over 30,000 cellular sites built globally, our customers are confident that their wireless infrastructure roll-out is in reliable hands.
END-TO-END TELECOM IMPLEMENTATION

Mer Group Telecom Division offers a full suite of professional services and solutions for active network design, installation, commissioning, optimization and maintenance.

Network Planning and Design

Our engineers use advanced tools, including Planet, NetPlan, TEMS and iBwave for all existing technologies: UMTS, LTE and WiFi. We provide planning services that guarantee optimal coverage and estimated costs per site. The planning process includes RF engineering, propagation analysis and model tuning.

Design and Implementation of Transmission Networks (including MW-Links and optical solutions)

We provide installation, commissioning and integration of MW-PDH, SDH and optical equipment, including:

- Site survey and line-of-sight design
- Installation planning and supervision
- Equipment installation, commissioning and integration (I&C)

Equipment Installation and Commissioning

Mer Group Telecom Division is certified by all major vendors for installation and commissioning.

Our engineering teams install all network elements - core platforms, RAN, antennas, transmission lines and more, including:

- Site survey and installation planning
- Equipment installation, commissioning and integration
- Antenna systems installation and testing
- BTS and BSC integration and ATP
- Core implementation: MSS, MGW, RNC, HLR, etc.
- Preparation and execution of acceptance testing

Network Optimization and Maintenance

We provide ongoing optimization and maintenance of networks covering a broad range of services that monitor and fine-tune system performance:

- Drive testing and post-processing
- Frequency planning based on statistics and drive testing
- Providing and performing engineering change orders, including antenna tilts, height change and parameters revision

Our 24/7 rapid response help-desk is staffed with highly qualified personnel, ready to assist you whenever necessary.
One of the biggest concerns facing mobile operators in the coming years is meeting the growth potential of mobile penetration in developing regions and in rural areas.

“Rural” is characterized by the absence of road or electricity grid access as well as sparse and low-income population. The main challenge in reaching uncovered communities is overcoming an unfavorable cost-benefit equation.

Mer Group Telecom Division has met these challenges head-on and has developed cutting-edge solutions, helping MNOs and Universal Service Funds (USF) worldwide to increase their mobile coverage while keeping down both CAPEX and OPEX.

Our low-cost and rapid deployed solution includes:

- A light cellular tower
- “All-in-the-Box” construction – reducing installation costs by up to 50% and deployment time by 70%
- Hybrid energy solution avoiding generator usage and pricey fuel costs
- Wireless communication components adapted for each site:
  - Micro BTS solution with low-power consumption
  - Cellular wireless repeater for network extension (requires line-of-sight with existing BTS)
  - VSAT infrastructure (where no line-of-sight exists with BTS)
- Full rural site integration with MNO's core
The evolution of the mobile device from a simple mobile telephone into a hand-held computer or smartphone has changed the way we interact with the world and the people around us. We are watching movies on-the-go, sending instant messages and constantly using social media. This evolution has had a dramatic effect on the amount of data we consume and poses an on-going challenge for operators.

Mer Group Telecom Division has tackled this challenge with our ALL-IN-ONE In-Building Wireless Solution. The Distributed Antenna System (DAS) solution integrates:

- Advanced RF
- Multiplexing
- Optical technologies
- Passive and active elements

Our advantage:
- Field proven
- Simplified design
- Lower TCO
- Short ROI
- Future proof - 4G/LTE ready
- Agnostic patented multi-technology, multi-operator: Optical Time Division Multiplexing by Locking Lasers (OTDMLL)

Mer Group Telecom Division offers network and facility operators a turnkey solution which includes:

- Tailor-made solution fitting the customer's unique network requirements
- Commissioning, implementing and integrating active and passive equipment
- Optimization of existing resources, thus enabling the best possible service and maintenance
- Advanced Quality Assurance and control procedures

Mer Group Telecom Division has gained a reputation as a market leader in telecom integration. The company's DAS solutions are implemented in numerous high-rise buildings, major shopping malls, and stadiums throughout Latin America, Africa, Europe and Asia.

A diverse range of solutions and applications for indoor and outdoor urban network coverage
TOWERS

Cost effective and fully customizable world-class Telecom tower manufacturing
Self-Supporting Towers

Mer manufactures self-supporting three and four-legged, tubular and angular towers and accessories, all hot-dip galvanized. Mer's towers are modular in design with optimal geometry for minimal wind resistance. They are suitable to any specified antenna type and load, and adjustable to any height from 12m to 150m.

MER Towers are cost-effective and provide the following advantages:

- Low wind load and drag coefficient
- Efficient weight-to-strength
- Smaller base span and cost-efficient foundation
- Speedy construction with less manpower

Guyed Towers

Mer’s guyed towers are triangular, latticed, hot-dip galvanized with tubular, solid-rod and angular members. They are designed for light to medium loads and most suited to cellular sites, TV and AM/FM radio stations. The towers are equipped with ladders, platforms and safety devices and can reach heights of 20m to 150m.

Monopoles

Mer Group Telecom Division manufactures and supplies hot-dip galvanized tubular/multisided tapered monopoles of up to 60m height. These are adapted to challenging locations, small sites and can be used to provide environmental and esthetic solutions.

Rooftop Solutions

Mer Group Telecom Division solutions for rooftops include:

- Wall and roof mounts for antennas
- Non-penetrating structures and supports
- Self-supported mini-tower or guyed mast steel structures

Decorative Environmental Solutions

Mer Group Telecom Division offers customized decorative environmental tower solutions, including:

- Lighting poles
- Tree-like monopoles (palm tree, pine tree etc.)
Mer Group Telecom Division provides end-to-end broadband solutions to leading enterprises in the telecom, cable TV MSO, DTT operators, ISP, defense, business and governmental sectors as well as to oil, gas and power companies.

Our turnkey solutions cover the entire lifecycle of the project: design, route management, quality assurance, project management, procurement, system integration, installation, commissioning and ongoing maintenance and support.

To customers planning to provide advanced multi-play services, we offer flexible and cost effective FTTx network solutions based on various access technologies. These solutions enable the delivery of multiple applications on a single optic fiber, including high-speed Internet, TV channels, VoIP, IPTV, Wi-Fi services and more.

As a broadband system integrator, with vast experience in a wide range of applications, we offer a full suite of solutions to operators looking to expand cellular coverage, offer Smart City applications and homeland security services. In addition, we enable power distribution companies to expand their offering with new services (such as smart metering, internet access and cellular rural coverage) by providing fiber optic infrastructures alongside electric networks.

Robust and scalable broadband solutions for smart future-proof communication applications
Mer Group Telecom Division specializes in end-to-end design and implementation of nationwide, large-scale, complex fiber optic infrastructure projects. We offer advanced turnkey solutions to implement fiber-optic backbones, metro networks, site build and Fiber to the Home systems.

**Innovative Engineering**

We believe that communications network integration is much more than just installing equipment, it involves innovative engineering and creative thinking. We pride ourselves in bringing our customers tailor-made solutions that meet their specific needs and requirements.

**System Design**

We provide system design, planning and documentation via CAD drawings and GIS, detailed reports and network budget loss calculations with multi-layer architecture. Each project is assigned a highly skilled engineering design team.

**Network Implementation**

As a leading system integrator implementing complex fiber-optic nationwide installations, our teams are using advanced field equipment including micro-trenchers, horizontal directional drilling, blowing and pulling machines, overhead lines stringing machines, advanced fusion splicing tools, and measuring equipment.

Our solutions include a range of high-quality products and accessories such as fiber-optic cabling, optical closures, and optical patch panels, thus ensuring that each project's specifications are met, even in the most demanding environment.

**Smart City Infrastructure**

A smart city is one that is effectively interconnected via a networked infrastructure to optimize the efficiency of various services and improve the sustainability, security and redundancy of the network. At Mer Group Telecom Division, we deliver robust, secure, turnkey fiber optic infrastructure for sustainable Smart Cities.

Extensive know-how and proven experience that spans tens of thousands of kilometers in fiber optic projects.
Global Foot-Print

ABOUT MER GROUP
Established in 1948, the MER Group maintains a diversified portfolio of over a dozen subsidiaries focusing on three main sectors – telecom, security and cleantech – while investing in other areas including satellite communications, biotechnology and materials science. Publicly traded since 1992 (TASE: CMER), MER Group has a substantial global footprint with approximately 40 offices around the world employing close to 1,400 people. For more information visit www.mer-group.com

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