

Macro Cell Services

COMMScope®

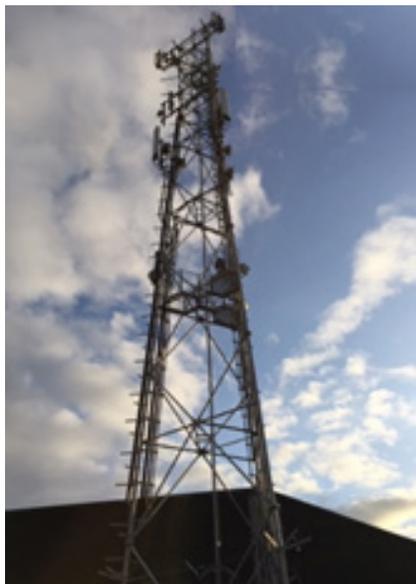
A comprehensive services portfolio for cellular coverage deployment and expansion

Professional Services Data Sheet

More bandwidth. Less latency. Seamless experience. Everywhere.

The growth in subscriber demand for high-quality data and voice mobile communication services is non-stop. Mobile Network Operators (MNOs) and Neutral Hosts (NHs) need to provide the best possible coverage and capacity and keep their networks up to date with the latest available technologies to succeed in a challenging market. And they need to do it in a cost-effective manner that helps accelerate the returns from their investment. OEM vendors supplying their turnkey solutions to MNOs and NHs also need an expert partner to rely on for deployments.

Easier said than done. Deploying, expanding and optimising a 4G/5G network demand a tremendous amount of coordination, effort and resources. Therefore, operators need to ensure their network deployment investment is well applied to deliver a high-performance network while optimising time to market, and OEM vendors need to make sure they deliver high-quality solutions flawlessly and on time. That's where CommScope Professional Services can help.



End-to-end Macro Cell Services from CommScope

For many years, market-leading operators and mobile equipment OEM vendors have considered CommScope the ideal partner to help them deploy and expand their networks in urban, rural, in-fill and difficult areas.

Through a highly efficient coordination and high-quality deliverables designed to require less maintenance and reworks once in operation, CommScope's Macro Cell Services help operators optimise both their CapEx and OpEx.

By combining the expertise of a highly skilled 4G/5G engineering and project management team; a proven set of tools, processes and methodologies; and a seasoned partner ecosystem, CommScope's turnkey services portfolio includes:

Project management

- Project Management Office
 - Dedicated Project Manager
 - Planning and coordination of all project activities and resources
 - Weekly highlight reporting
 - Weekly customer meetings/calls
 - Regular onsite visit/surveys
 - Escalation point
- Environment, Health and Safety (EHS) Management to ISO14001 and ISO45001
- Quality Control and Management to ISO9001



RF design

- Radio planning using RANPLAN
- Terrain, land usage, foliage and buildings
- SINR, path loss, signal level, RSSI, device effective throughput, best server, overlap area, system dominance
- Full 3D ray-tracing propagation engine
- Live coverage testing

Site acquisition

- Site survey and multi-skilled visits
- Production of general arrangement drawings
- Prepare and submit planning applications
- Facilitate the agreement of heads of terms (HOTs) with landlords
- Prepare and lodge planning appeal if required
- Electronic Communications Code support

Site design

- Site configuration selection
- Electrical design
- Structural design and analysis
- Transmission design
- Detailed design drawings
- Design report
- Baseline project plan
- Bill of materials
- Pre-construction health and safety plan
- Internal design validation panel review prior to submission

Site construction

- Supply of CommScope materials
- Transport and logistics
- Civil works
- Site deployment, including the use of heavy machinery
- Equipment installation
- Installation and testing of passive and active components
- Transmission installation
- Onsite antenna and rigging install
- Providing power installation where applicable
- Grounding
- Cooling installation and testing
- VSWR (voltage standing wave ratio), PIM (passive intermodulation) and fibre testing
- CPHSP (construction phase health and safety plan)
- Health and safety and quality audits
- Site cleanup and waste disposal

Pre-integration handover

- Full handover pack
- Reports including all testing
- Confirmed bill of materials
- As-built drawings
- IP address testing
- Alarm testing
- Electrical test certification—National Inspection Council for Electrical Installation Contracting (NICEIC), 18th edition
- Cooling commissioning report
- RF testing



Equipment install, commissioning and integration

- Lifting coordination
- Radio installation¹, including at height
- Remote electrical tilt (RET) install and configuration
- Fibre install, power install, hybrid install
- Baseband installation
- DC power/direct current distribution unit (DCDU)
- Commissioning of equipment, trouble resolution, fault finding
- Handover pack (HOP) data gathering, call testing

Post-integration handover

- Performance testing and reporting—walk plots, speed tests
- As-built drawings—including operator equipment
- Field optimisation

¹ Turnkey delivery does not include the supply of 4G/5G radios

MNOs, NHs and OEM vendors can rely on CommScope for a subset of the activities described above, or for a full end-to-end delivery. CommScope's scale and decades-long experience enable it to act as prime integrator—allowing operators to have a single point of contact for all project-related activities and escalations, thus enabling valuable resources on their organisation to focus their energy and time on their core activities: operating their networks at full performance and making sure they deliver an excellent subscriber experience.

With thousands of site deployments, upgrades, expansions and optimisations per year under a strict quality management system (QMS) scheme, a consistently safe and recognised EHS performance over the years, and a unique expertise on CommScope's Outdoor Wireless Network solutions, CommScope has the end-to-end capabilities operators and OEM vendors require for their macro cell network projects.

You name your project: macro cells, metro cells, indoor wireless or interim cell sites. Contact your CommScope account manager or visit our [Wireless Professional Services](#) page today to see how we can help.

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