

# Amdocs Field Services

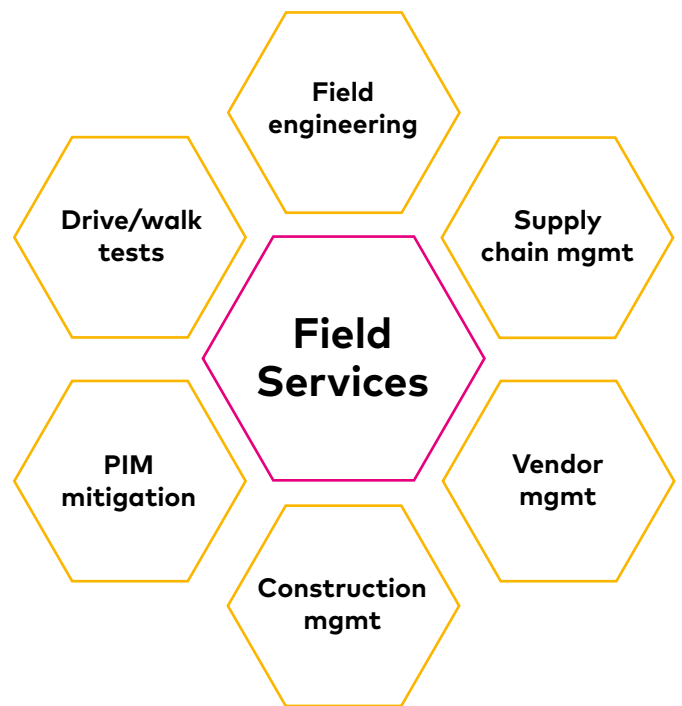


**With the growing demand for data, service providers are under increasing pressure to undertake network transformation projects, spanning activities ranging from installation, commissioning and integration to testing and verification.**

Yet lacking the diverse necessary skillsets and manpower, combined with short project ramp-up times and tight deployment schedules, these players are simply unequipped to undertake such tasks alone.

Amdocs Field Services fills this gap. With an extensive pool of network resources with diversified skills, combined with innovative automation, our end-to-end solution minimizes project ramp-up time and overall deployment timelines. Field-related activities include site surveys, construction, vendor management, commissioning, integration, supply chain management, drive/walk testing and final closeout package preparation.

## Service components



# Field engineering

## Site surveys

Site survey is the initial activity performed before any other onsite activity. Its purpose is to capture all available information before any physical work is performed. It is performed by general contractors (GCs), whose task is to visit site locations after obtaining due access from the service provider.

Information captured by GCs include:

- Site address
- Google Earth location in lat/long
- Civil structure
- Mount
- Antennas
- Floor plans
- Existing equipment in IT closet
- Main distribution panel door open to show the breakers
- GPS pathway and location
- Roof penetration and way to rooftop
- RF measurements for deployed technologies
- Indoor satellite coverage
- Periphery of the sites, etc

## Site integration

During site integration, the hardware is integrated to the network. Hardware/software tests are then performed to guarantee all components are working according to plan.

- Activities include:
- Equipment installation
- Router provisioning
- Site commissioning and integration
- Alarm clearing
- Troubleshooting
- Call/data testing
- Close-out packages

# Supply Chain Management (SCM)

Amdocs Field Services facilitates procurement and delivery of equipment/materials that are to be deployed on the site.

This involves:

- Procurement of consumables
- Equipment rentals
- Pickup of materials from service provider's warehouse
- Shipment to markets
- Warehouse and inventory management
- Delivery of products to site locations
- Returning replaced or faulty equipment to service provider's warehouse

## Vendor management

Field activities require the engagement of multiple vendors for different tasks. The Amdocs Field Services team identifies vendors to be partnered with for each project based on multiple criteria. This process is critical for the success of any project and requires a series of strategic and tactical decisions. The contracts must also be negotiated with vendors to identify the proper SOW and correct pricing.

Vendor selection criteria include:

- Capabilities and competencies
- Market presence
- Years of experience
- Past performance
- Client project references
- Team size
- Quality of work
- Adherence to contract
- Turnaround time
- Safety and insurance compliance
- Cost

Following the project start, vendor management continues with performance monitoring. This involves maintaining scorecards for each vendor, addressing escalations and conflicts between teams, enforcing agreement rules, eliminating underperforming vendors and replacing them with new ones as required.

## Construction management

Construction and installation-related activities are managed by Amdocs construction project managers (CPMs). They include:

- General contractor scheduling
- Equipment and material delivery scheduling
- Scope management

- COP data collection
- Quality assurance
- Safety compliance
- Cost control

The role of the CPM is to oversee day-to-day operations and ensure delivery is completed on time. They schedule site visits, co-ordinate with clients, contractors and landlords, and assist in overcoming hurdles. They're also responsible for checking the quality of installations and ensuring safety compliance at site locations. Throughout, they continuously monitor construction costs at each site with the aim of increasing the efficiency of GC teams without compromising quality and safety.

## PIM Hunting and Mitigation

The increased amount of spectrum in new frequency bands due to increasing numbers of high-speed data networks often leads to passive intermodulation (PIM), which impacts coverage and increases dropped call rates.

Amdocs' PIM Hunting and Mitigation service rapidly identifies and mitigates all forms of PIM interference. This is achieved through a comprehensive process that comprises PIM tools, guidelines, mitigation and analysis. Amdocs provides an onsite team consisting of project managers, field engineers and multiple tower crews, backed by a remote team of RAN engineers, who are available 24/7 to assist with PIM testing and site evaluation throughout the entire process.

Meanwhile, the Amdocs Network Workflow Management tool is used to track and provide reports on all work, ensuring everything remains on track and within budget. Once the work is complete, our team provides reports detailing the actions taken and validating site performance.

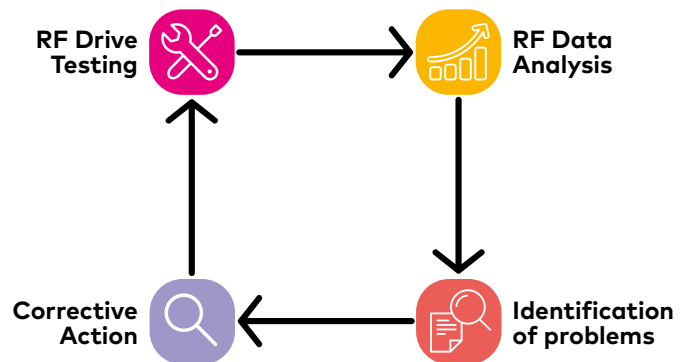
# Drive testing/walk testing

Drive/walk testing involves radio network coverage and performance data collection of wireless networks. The test emulates end-user experience in different scenarios when mobile or stationary, and captures site radio conditions in the tested locations. The data is collected in log files and analyzed to optimize the coverage and performance of wireless networks.

## Drive/walk test scenarios

- Single site verification
- Site clusters
- Benchmarking
- 911 testing
- Customer complaints
- Ookla data speed testing
- Event venue testing
- Walk tests of airports, stadiums, and large venue

# Drive testing life cycle



## Key benefits

- **Faster deployments:** skilled field resources provide centralized and efficient coordination of resources that offer diverse skill sets to improve both ramp-up time and employee retention
- **Enhanced vendor management:** ensures efficient utilization of vendor resources across projects, provides qualification and performance management and drives faster on-boarding
- **Compliance:** health and safety monitoring ensures compliance and standard consistency across projects

## Why Amdocs

Amdocs has a proven track record supporting projects throughout all phases of network rollout and acceptance – including but not limited to RAN, transport and core design, provisioning and troubleshooting services, pre/post launch optimization, provisioning, triage and so on – for multi-vendor, multi-technology heterogeneous networks.

With an experienced network provisioning team staffed by professionals in the area of transport and core, as well as Advanced Technical Support engineers, our strength lies in adapting to our customers' needs and requirements, while orchestrating various support teams/vendors to ensure timely delivery.

As a preferred vendor for Tier-1 and Tier-2 service providers across the globe, our vast complex configuration integration experience and holistic approach to network management ensures you deliver faster, within budget and with the highest levels of quality.

Partner with us to benefit from our proven tools, processes and time-tested methods, as well as customized services for all major network equipment providers and technologies, so you can be confident in your ability to meet your customer experience goals.

For more information on our deployment services, visit [Amdocs Mobile Network Services](#).