

Leading European tier 1 modernizes its inventory system to accelerate a massive network upgrade and prepare for 5G

A strategic inventory modernization

About the customer

- Mobile customers: over 25 million
- Fixed broadband customers: over 5 million

This European tier-1 is one of the leading providers of mobile and fixed broadband services in its market. The company continually invests in a superior network and customer experience with one of the largest and most advanced mobile networks in Europe.

The challenge

To maintain a leadership position, management realized that it needed to streamline its operations in order to cut OPEX, and simultaneously develop the capability to expand and modernize its network faster. As a result, the service provider embarked on a strategic OSS transformation program together with Amdocs. The program had the goal of consolidating eight different OSS systems into a single inventory solution.

The solution: Amdocs Inventory Management

The program is comprised of a number of phases. During Phase 1, Amdocs successfully migrated the legacy RAN inventory management system into Amdocs Resource Manager (ARM), which contains physical and logical network inventory data.

The next consolidation phase was the replacement of a critical but ageing bespoke planning system, as well as several other legacy operational support systems.

Amdocs Resource Planner

Amdocs Resource Planner, which is part of Amdocs Inventory Management solution, was a natural solution to replace the bespoke planning system. Resource Planner provides advanced network resource allocation and management for long-running network build projects. Resource Planner has enabled the service provider to maintain its powerful network planning functionality and continue to leverage its investment in highly efficient planning workflows, while benefiting from a new platform.

More legacy inventory systems consolidated

The service provider was able to migrate the functionality and data of an additional four legacy inventory systems into Amdocs Resource Manager as part of phase 2.0, moving the service provider even closer to its strategic goal of a unified inventory solution.

60% acceleration of network rollout and modernization

93% reduction in average design/assign cycle time

Smooth data migration of tens of millions of network objects

A key challenge for the service provider in consolidating its legacy operational systems was the migration of critical operational data. The data migration for this phase of the OSS project was immense. Tens of millions of network objects and thousands of network plans had to be accurately migrated into Resource Manager. This mission was successfully accomplished by Amdocs' Delivery team using unique data migration tools and methodologies have been developed specifically for large, tier 1 data migrations.

Improved planning capacity and capability

The service provider's set of network build project templates are mission-critical for the business. These templates span the complete range of key network build activities, such as creating new 4G Node B's, upgrading existing 3G Node B's, moving MUX traffic, microwave swaps, configuring new circuit hierarchies and much more. Leveraging its access to detailed inventory data across the network, Resource Planner is able to guide engineers quickly through the planning steps. Resource Planner eliminates thousands of hours of manual planning work. Network build is accelerated and the plan error rate is vastly reduced, thereby eliminating hundreds of hours of rework.

Accelerated network build

With the help of Amdocs advanced planning and process automation, the service provider was able to accelerate the introduction of new 4G nodes by 60%. The service provider was also able to accelerate the conversion of its backhaul from ATM to high-capacity IP.

Cutting design/Assign cycle time

One of the key enablers of the acceleration was design/assign automation and a reduction in design/assign cycle time. There are two phases for design/assign: creating the plan, then pushing it to operational context once the work has been completed. With Amdocs inventory management solution, the service provider achieved a net cycle time reduction of 93% for these design/assign processes. This dramatic process acceleration was experienced across all network design activities, including new 4G cell sites, 3G to 4G upgrades, and backhaul upgrades.

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| CHALLENGES | <ul style="list-style-type: none">• Build massive increase in wireless network capacity and coverage without adding staff, and while keeping tight control of costs• In-house planning system with rapidly rising costs and limited functionality |
| SOLUTION | <ul style="list-style-type: none">• Amdocs Resource Manager 10, including Amdocs Resource Planner• Amdocs Network Navigator 10• Amdocs MNGP (Migration Next Generation Platform) |
| SUCCESS | <ul style="list-style-type: none">• Network rollout accelerated by 60% to several thousand Node B's per year.• 93% cycle time reduction for 4G plan creation and execution, for a 15X increase in plan throughput• Inventory and planning processes harmonized• Consolidation of five legacy inventory systems• Successful data migration of tens of millions of network objects• Achieved comprehensive, end-to-end view of entire network• Several unique user interfaces replaced by Amdocs Network Navigator 10, reducing 'swivel chair' syndrome, introducing task automation, and vastly increasing user efficiency |



Configuration automation enables tens of thousands of work orders per month

Another capability provided by Amdocs OSS is its ability to automatically create configuration files from the plans and load them directly into the service provider's network elements. Manual configuration is eliminated. The Amdocs activation system is also fast, cutting several minutes per work order compared to the service provider's previous activation system. This enabled the service provider to push work order volume to tens of thousands per month.

'OSS is now a profit center'

Observing what their operations team had accomplished during this phase of the inventory modernization program, and how it accelerated network rollout, executive management summed it up by commenting, "You are now a profit center rather than a cost center".

Always moving forward

The service provider recently deployed Network Navigator 10, Amdocs' new, advanced inventory user interface, to achieve additional operational efficiency gains. Network Navigator 10 provides the service provider with advanced inventory data search, network views, and guided tasks. In side by side testing, Network Navigator was shown to accelerate user task completion rates by 3x in comparison to legacy user interfaces.

Ready for 5G

The modernized inventory system dramatically accelerated the service provider's 4G rollout and backhaul modernization. It also transformed the inventory ecosystem from a legacy to agile infrastructure that is ready to meet the demands of 5G and hybrid networks.

Key business results

- Consolidated several OSS systems, including migration of tens of millions of network objects
- Replaced key in-house legacy planning system with Amdocs Resource Planner, and migrated thousands of plans to the new system
- Enabled massive network rollout and backhaul modernization in record time
- OSS group repositioned from cost center to profit center
- Inventory ecosystem is ready for 5G deployment