ERICSSON NETWORK ENGINEER
Plan, Design, and Manage Your Network Builds

Ericsson Network Engineer provides service providers with a centralized graphical information system (GIS) for planning, designing, maintaining, and documenting end-to-end communications networks. Using real-time access to accurate network information, you can automate plan through build operations for faster rollouts and accelerated revenue realization.

With exponential growth in data traffic, you face an urgency to roll out diverse, complex technologies, including fiber to the home (FTTH), mobile backhaul, and IP in the core, transport, and access. A planning and engineering system that can support any network, any technology, and any type of equipment — right down to the individual glass fiber and its connector — is critical. It is the key to knowing where your customers are located, linking them to the network, and efficiently managing the quality of converged services.

Manage multiple network technologies
Built on the Esri® ArcGIS® platform, Ericsson Network Engineer is built to handle any multivendor, multitechnology infrastructure. The sophisticated geodatabase houses all physical network inventory and keeps track of both planned and as-built networks. It overlays network layouts on top of the land base so planners can see equipment, demographics, and customer information in a single view.

One solution for mobile, consumer broadband, and enterprise network needs
The same solution can be used to determine build costs for build versus lease decisions, and to synchronize radio and backhaul plans. It provides a way to automate and standardize designs for rapid FTTH rollout, and enables engineering and construction to collaborate on design changes in real time. With a better way for all to see plant details, locations, and how it all connects, your customers’ needs can be quickly evaluated for serviceability. And with visual geographic patterning, network optimization is simpler and more accurate.

Design with speed and efficiency for faster network rollout
To stay on top of the competition, technologies such as FTTH are being deployed at lightning speed. With outdated tools affording no automation, engineers simply cannot keep up with the pace of work, impeding the speed of network rollout. The integrity of network information in Ericsson Network Engineer, its unique automated design capability, and the ability to coordinate with construction in real time speed plan-to-build time. Changes can be made from the field, without having to modify paper drawings, and redrawing of plant layouts is totally eliminated.

Facilitate network design with one system for outside and inside plant
For outside plant, users can document, place, and edit all types of network spans such as copper, coaxial, and fiber cable; microwave; Wi-Fi hotspots; and all

1. Create and manage your entire physical network in one GIS-based system
2. Use automation to produce standardized designs and speed network rollout
3. Work seamlessly with construction for more efficient network deployment
supporting structures. To oversee inside plant facilities, a graphical editor lets users easily manage available floor space, rack footprints, and equipment-to-rack and card-to-slot relationships. Leveraging a tool for creating and maintaining equipment catalogs, planners can drag-and-drop equipment into new designs, increasing productivity while driving compliance with company design standards.

Improve work order management: planning to build-out
The system’s built-in Work Order Manager is a sophisticated but easy-to-use tool that supports the lifecycle of each network change by managing the transitions, status, and overall workflow. For any network build, removal, or rearrangement, it provides time and material costing, bills of material, work task timing, sequencing and assignment, a way to record field notes, rights-of-way, acceptance criteria, approvals at various project stages, and as-built details of the completed work. Complex version management allows multiple users to simultaneously edit geographical data and enables engineers to store “what-if” scenario results.

Model the business processes that support new services and technologies
The Ericsson Network Engineer extensible data model is the foundation for its flexibility and functionality. Business rules, objects, and reference data enable business process modeling, development of equipment model libraries, and system configurations to support any technology and service. It can be easily configured and integrated into your environment, so you can quickly start to realize maximum benefits from your network resources, save major planning and engineering costs, and improve both operational efficiency and financial reporting.

Cascade data with new efficiency
As a central data repository with the ability to track current, historical, and planned inventory and layouts, Ericsson Network Engineer facilitates data flow between operations support systems (OSSs) and across functional areas. The result is that up-to-date data views are not only accessible to engineers, but also to strategic planning, sales, marketing, procurement, installation and maintenance crews, call-before-you-dig centers, provisioning, service assurance and workforce management. With better collaboration and real-time data sharing you can maximize network resources, achieve operational efficiency, and improve customer satisfaction.

Configure the system to meet your needs
Ericsson Network Engineer enables systems administrators to quickly create system configurations without code development. Intelligent wizards are used to assign security levels to users, set system defaults for a common look-and-feel, and specify work order options and rules for consistent workflow.

Enhance system utility with value-add modules
The power and capabilities of Ericsson Network Engineer can be expanded even more with the following five optional modules:

- Design Assistant fills the experience gaps among your engineers by automating many of the most time-consuming tasks in network design. Easy-to-configure wizards allow you to incorporate your guidelines and best-practice process steps for any designer to use in building a new work order. This powerful module helps to ensure that all design work is fast, cost-efficient, and consistent with your corporate policies.

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**ERICSSON NETWORK ENGINEER**

- Core GIS
  - All Physical Plant
  - Work Order Management
  - Esri® ArcGIS®

- Role-Based Tools
  - Automated Design
  - Construction Oversight
  - Field Redlining

- Visualization
  - Geospatial Rendering
  - Network Schematics
  - Web-Based Planning

- Configuration Tools
  - Equipment Modeling
  - Configuration Toolbox
  - Wizard Creation

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**Application Integration**

**Integrated Inventory**

**Mobile Backhaul**

**Consumer Broadband**

**Core, Metro, Access**
Field Tools fosters better communication between engineering and the field by enabling construction management to easily assign and track tasks that field workers can view, modify, and redline when the information is incorrect, or when the network cannot be constructed as planned. These notations can be immediately shared with the engineer who can then recommend and certify changes.

Schematic Assistant evaluates equipment locations and their relationships to generate useful high-level network traces and layouts, as well as detailed diagrams of splice closures, equipment terminations, and duct occupancy. By using the information already contained in Ericsson Network Engineer, it eliminates isolated CAD drawings.

Total Perspective Planning enables non-technical decision makers to see data in revealing geographic patterns that help to quantify market potential, qualify customers for service, analyze fault patterns, and plan for network resiliency. It provides a “mash-up” of information easily viewed via the web that includes infrastructure, equipment room space, capacity, and current-and-planned network, as well as markets, demographics, revenue potential, and more.

Integration Assistant is a key enabler of flowthrough provisioning as it allows Ericsson Network Engineer to interface with any external provisioning and inventory system. By combining physical planning and service provisioning processes, you can achieve substantial improvements in operational efficiency, faster provisioning for new services, and reduced error rates.

Add Ericsson Integrated Inventory for comprehensive inventory management

Ericsson Integrated Inventory provides a pre-integrated solution that marries Ericsson Network Engineer with Granite Inventory to bridge planning and engineering with provisioning and operations. By federating the inside and outside plant physical network design with the logical assignments, it ensures that network additions, removals, and changes are handled in an automated fashion, preventing errors and disruption to service availability. When used in conjunction with Total Perspective Planning, it provides scenario-specific views and queries of the entire network stack, revealing the relationships between locations, equipment, circuits, assignments, services, and customers.

Implement and operate with peace of mind

Ericsson not only provides extensive support during implementation, but also is available to you for ongoing consulting to help you increase the efficiency of your capital outlay. Our world-class network and systems experts are ready to support your investments with services that include network consulting, project management, systems implementation and integration, data migration, custom application development, and expertise on Esri ArcGIS technology.

AT A GLANCE

Ericsson Network Engineer prepares you for converged services by giving you the ability to:

- Plan, design, maintain, document, and manage your end-to-end network from one geospatial environment
- Automate network design and coordinate your work orders for faster, more efficient build cycles
- Accelerate data sharing between systems and functional areas to boost productivity and speed time-to-market.

The Ericsson Plan Build Optimize Suite

The Ericsson Plan Build Optimize suite of OSS solutions helps you make the most out of your capital budget by helping you to leverage your existing network and then add new equipment only when and where it makes sense. You'll have all the tools you need to match capacity to demand, reconfigure and rearrange to optimize the network, and speed network design and roll out to benefit from new market opportunities.