

INFOSYS TELECOM NETWORK PLANNING AND DESIGN SERVICES

As data demands surge and technologies evolve, Communication Service Providers (CSPs) need networks that are faster, smarter, and ready to scale.

Infosys' holistic, end-to-end NPD solutions support both legacy and next-generation telecom infrastructures, empowering CSPs to stay ahead of the curve.



Key Industry Challenges

High turnaround time in completing network designs

High reworks caused by inaccurate data and design errors

High costs driven by unforeseen construction challenges

Records mismatch and inadequate documentation practices

Infosys Telecom Network Planning and Design (NPD) Offering

Feasibility Study



- Economic Feasibility
- Technical Feasibility
- Operational Feasibility
- Schedule Feasibility
- Site Survey
- Feasibility report

Network Planning



- Network Planning for Core, Distribution, Access Layers
- Other Licensed Operator (OLO) finalization
- Detailed planning and schedule report
- Upgradation
- Network Optimization
- Planning for network expansion

Network Design



- Routing end to end network design
- Create HLD (High-Level Design) and LLD (Low-Level Design) design drawings
- Create design work package
- Shortest route prioritization
- Ad-hoc changes in the design
- Updating inventory records after As-Builds by considering Field inputs/changes

Document Digitization Support



- Uploading As-Builds(HLD/LLDs) into inventory systems.
- Create Process flow diagrams
- Create Low level work instructions document (SOPs)
- Centralized documentation

Supporting Digital Levers



Process Mining



Report Automation



Digital Gantt Charts



Predictive Analytics

Benefits

>95% Planning accuracy

>95% Design quality

>99% Standardization and centralization

>90% Network optimization

Improved SLA/KPI

Real-time inventory keep-up

Reduced duplicates and non-value add activities

>99% Legal and regulatory compliance

Technologies Covered

Infosys NPD solution covers the full spectrum of telecom technologies — both wireline and wireless — to support integrated, future-ready network designs.

Wireline Networks

- Fiber/Copper/Hybrid Fiber Coaxial (HFC)
- Ethernet, MPLS, IP-MPLS
- FTTx/GPON

Wireless Networks

- Radio Frequency (RF), 4G, 5G
- Cellular
- MicroWave (MW)

Client Success Stories



10+ years of FTTx (Fiber to the x) Network rollouts and operations for a leading telecom company in the APAC region

- 8.4 Mn home pass delivered.
- Primary Design Partner for 2.2 Mn home fiber deepening program.
- Improved cycle time by over **50%** and reduced costs by **40%**
- Won '**Supplier of the Year**' award for three consecutive years.



20+ years of NPD for a leading telecom company in the USA

- Delivered over **10K Plan and Build designs** across Transport, Data IP, and DSL access networks.
- Implemented end-to-end **Workflow Management tool** and automation for Plan, Design and Construct
- Achieved over **70%** cost reduction through a **100%** right-shored Network Design Factory operating model.



6+ years of NPD for a leading telecom company in Europe

- **End-to-end management** of CIO and CTO organizations for IT delivery and network technology services.
- Acted as **Managing Agent for Construction Partners** across network rollout and operations.
- Served as **Managing Agent** for the client's strategic platform and services, driving efficiency, innovation, and a **20% reduction in Total Cost of Ownership (TCO)**.
- Delivered network design to **modernize and optimize** the cost of FTTP (Fiber to the Premises) networks.
- Optimized processes and automated field engineering apps, delivering **10-20% Operational Efficiency Improvement (OEI)**.

Why Infosys



20+
Years of Industry
Experience



Global
Top Tier
Clients



350+
Telecom
Experts



2000+
Network
Engineers

Contact Information

Got networks to plan and scale? Let's map it out together. Reach out for a quick connect or a deep dive. Your future-ready network starts here.

For more information, contact infosysbpm@infosys.com

Infosys
Navigate your next

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