

## Network Optimization Service

Network optimization service aims at consistently improving and assuring network performance for operators and helping operators achieve the optimal network resource utilization and network performance, reduce customer complaints on network performance issues, improve O&M efficiency and quality, and eventually improve customer satisfaction.

### Challenges

Telecommunications technologies are evolving rapidly, new services and data traffic are multiplying on the mobile network and the network structure changes constantly. Operators are faced by the following challenges:

- Difficulty in improving KPIs on a multi-vendor, multi-technology network, especially for LTE network optimization
- Network performance deterioration results in lower customer satisfaction and more complaints
- Rapid growth of smartphones and the traffic volume of mobile data services posing higher requirements on network performance and bandwidth
- Intense competitions from other operators

### Service Introduction

Huawei network optimization service supports:

- Multiple network technologies, such as GSM, UMTS, and LTE
- NEs in multiple network domains, including the wireless network, core network, IP network, transport network, and microwave network
- Networks of multiple vendors
- Both the mobile network and fixed network

### Mobile Network Performance Management

To monitor, analyze, and manage network performance, capacity, and network parameters over long periods of time. To identify potential network issues in a proactive manner, and to ensure long-term, stable running of the network, meanwhile with performance assurance for key areas and roads. To improve efficiency in network O&M and complaint handling with a unified

performance management platform.

### **Mobile Network Performance Improvement**

Identifies and locates network performance bottlenecks based on in-depth analysis of network resources, capacity, and performance, and optimizes network resources, architecture, and performance based on Huawei's profound experience gained in the process of providing network optimization services for operators all over the world, helping operators quickly improve network performance. As smartphone users are growing continuously, Huawei network performance improvement solution also helps operators cope with the impact of fast-growing data services, maintaining and enhancing their competitive edges.

- **Mobile network performance and resource capacity assessment:** Uses a quantitative assessment system to objectively assess the operator's network by network architecture, device configuration, network resource capacity, network coverage, and network performance, and identifies bottlenecks in the operator's network in a timely manner.
- **Accurate optimization:** Determines the network parameters that need to be optimized based on performance issue scenarios, improving network optimization efficiency and effectiveness, such as VoLTE optimization, CSFB optimization, Throughput optimization and etc.
- **Multi-network synergy:** Improves the interoperability among 2G, 3G, and 4G networks and balances network resources to a maximum extent by taking into consideration the continuity of network coverage and services, network capacity balancing requirement, and service bearer policies.

### **Fixed Network Performance Management**

Monitors, analyzes, and manages network performance and capacity over long periods of time, ensures high network performance and stability, and effectively improves network O&M efficiency. Fixed network performance management covers the mobile backhaul network, IP network, and transport network.

### **Fixed Network Performance Improvement**

Uses a quantitative assessment system to objectively assess the entire fixed network (covering the mobile backhaul network, IP network, and SDH, WDM, or microwave transport network) by network capacity, performance, security, management, and time clock, locates potential network

performance bottlenecks, and improves service and network performance with approaches such as topology optimization, service optimization, performance optimization, and QoS optimization and based on Huawei's profound experience gained in the process of providing network optimization services for operators all over the world, helping operators build an efficient, robust network.

## **Customer Benefits**

- Enables operators to learn the network status and network resource usage, offers professional suggestions on network planning and future investment, and provides data for operators to formulate the optimal network operation policies.
- Locates potential network problems, prevents network performance deterioration, ensures network security and stability, and thereby enables operators to focus on their core business.
- Improves network resource utilization, increasing the return on investment for operators.
- Improves the serviceability of the network.
- Assures high network performance, thus improving customer satisfaction and enhancing the brand image.