Service Management
Service Management helps operators ensure excellent quality of end user services running over multi-vendor, multi-technology networks. In an increasingly competitive market, quality of service is becoming more important than ever.
Evolved Service Management Approach

- Multi-vendor Multi-technology network governance
- Proactive service monitoring
- Assist in launch of new services

End to End Service Visualization

Radio → Transmission → Core

Complex Multi-Vendor Multi-Technology Environment
**Product Overview**

**Why is Service Management needed?**

- 75 percent of operators don’t have a service operations center in place. This means they are driven by network KPIs, making it very difficult to assure quality on data and voice services.
- However, 77 percent of operators believe that Service Quality is more important than ever and a key priority investment.
- 67 percent of operators believe they lack the expertise to manage and assure service quality.

**Service Management focuses on Service Assurance**

Tackling issues before customers actually experience bad service is complex, but more critical than ever to enable operators to maintain their promise of delivering superior services to their customers. By monitoring the quality of the services customers use, operators are better able to fix issues quickly and keep service performance high. Monitoring service quality requires a Service Operations Center (SOC) that can provide end-to-end-service visibility, transforming network centric KPIs to service centric Key Quality Indicators (KQIs) and managing the quality of voice, data and over-the-top (OTT) services. Service management using a SOC creates a holistic view of the service lifecycle, revealing its impact on the customer experience and optimizing each service to meet the operator’s business goals.

**Operator’s Benefits**

**Service quality improvement**
- 11.5% improvement in LTE throughput
- 2.5% data service accessibility improvement

**Revenue enhancement/protection**
- 4.5% data service usage improvement
- Up to 20% increased availability in individual cells

**OPEX reduction**
- 20% fewer subscriber complaints
- 75% fewer customer claims due to major faults

**Value Proposition**
- End-to-end visualization of services across multi-vendor multi-technology networks
- Stay in control of the customer experience in real time
- Improve service usage and service experience
- Reduce customer complaints/claims and churn
**Choice of Delivery Models**

Nokia offers two delivery methods for service management. The first is a BOT (Build-Operate-Transfer) approach for operators who want to build their own Service Management Centre but require the expertise to achieve this.

Nokia will build the Service Management Centre (SMC), including required infrastructure, integrate the tools and processes and will operate the SMC on the operator’s premises for an agreed time. This delivery model provides operators with a faster time to market and transfers the competence and people.

The second is a Managed SMC for operators attracted to outsourcing and are open to remote service operations from the Nokia Global Delivery Center (GDC). Operators are charged a monthly fee, with no capital expenditure required to purchase Service Management tools, which are all provided from the GDC.
## Use Cases

<table>
<thead>
<tr>
<th>Multi-vendor Multi-technology</th>
<th>2G</th>
<th>3G</th>
<th>4G</th>
<th>Fixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>End-to-End Service View (QoE, KQI)</td>
<td>Near Real-time Proactive Monitoring</td>
<td>Service Problem Prioritization</td>
<td>Three Click Root Cause Analysis</td>
<td>Identify service problems w/o Alarms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vast array of services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice Services</td>
</tr>
<tr>
<td>MBB Services</td>
</tr>
<tr>
<td>MBBoLTE Services</td>
</tr>
<tr>
<td>VoLTE Services</td>
</tr>
<tr>
<td>OTT Application Services</td>
</tr>
<tr>
<td>IPTV Services</td>
</tr>
</tbody>
</table>
About Nokia
Nokia is a global leader in the technologies that connect people and things.Powered by the innovation of Bell Labs and Nokia Technologies, the company is at the forefront of creating and licensing the technologies that are increasingly at the heart of our connected lives.

With state-of-the-art software, hardware and services for any type of network, Nokia is uniquely positioned to help communication service providers, governments, and large enterprises deliver on the promise of 5G, the Cloud and the Internet of Things. http://nokia.com

Nokia is a registered trademark of Nokia Corporation. Other product and company names mentioned herein may be trademarks or trade names of their respective owners.

© 2016 Nokia