

# Compact network management

## Real-time monitoring of safety- and mission-critical networks

In the market sectors of public safety and public transport, it is vital to remediate crisis situations as quickly as possible. Yet when using commercial-grade infrastructure-monitoring solutions, it is difficult to understand how current network KPIs are negatively affecting the experienced service quality for operators in the control rooms. Our compact network management solution, Compact-NMS, provides an independent real-time network-measurement engine featuring a modern graphical interface. It clearly visualises the impact of current network performance on each application and enables rapid reaction when the network isn't meeting the application's quality requirements.

### Key features

#### Real-time monitoring of individual mission-critical services

Compact-NMS measures network performance for each mission-critical service separately. By simulating application traffic, it provides very accurate measurements that enable technical operations teams to understand if the current network performance is negatively affecting the experience of the operators.

#### Enhanced situational awareness with brownout detection

Compact-NMS provides a comprehensive measurement methodology that enables full situational awareness. For example, it not only monitors the overall availability of the network, but also identifies network brownout events. This empowers technical operations teams to start investigating brownouts before they propagate into a more serious outage.

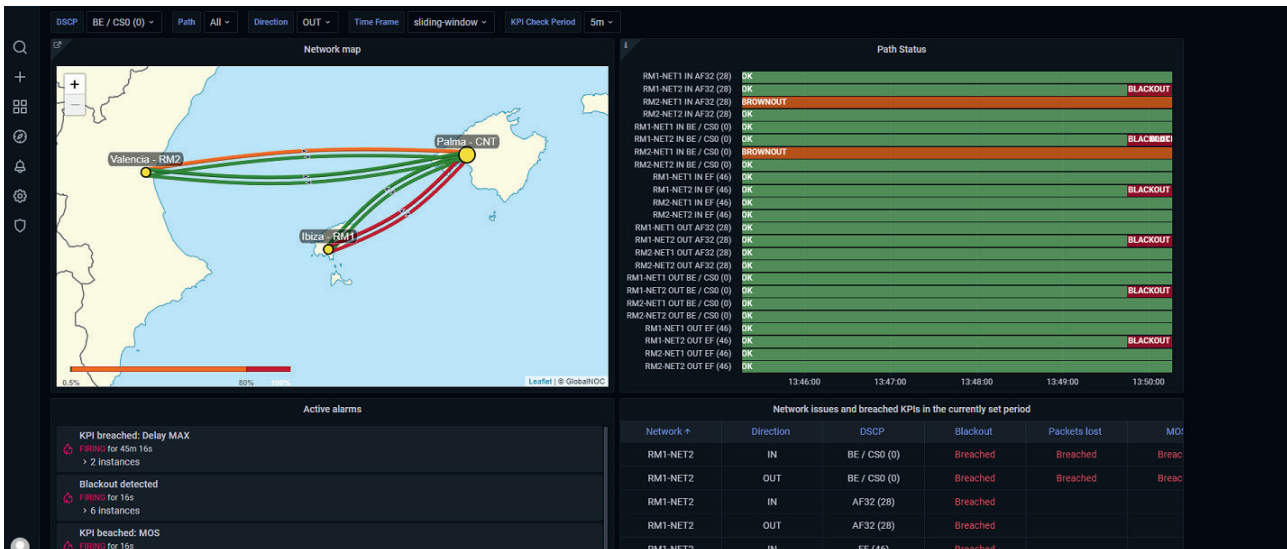
#### MOS analysis for mission-critical voice applications

To assess how network performance is impacting mission-critical voice applications, Compact-NMS instantly integrates end-users' mean opinion score (MOS) measurements into its analysis, providing immediate feedback on the current voice audio quality.



### Compact-NMS at a glance

- Real-time application and network performance monitoring for safety- and mission-critical environments
- Continuous measurement and visualisation enable rapid identification and root-cause analysis of performance issues
- Compact and easy to deploy on commercial off-the-shelf hardware with no changes to existing infrastructure



NetBroker Visualiser – example of the main dashboard

## Benefits

### Eliminate blind spots in situational awareness

The low-resolution, ad hoc monitoring provided by network devices and infrastructure providers is not sufficient for mission-critical services. Compact-NMS monitors network performance continuously and provides the results almost in real time, enabling operators to eliminate blind spots in their situational awareness.

### Identify the root cause of issues rapidly

Compact-NMS empowers technical operations teams to promptly identify whether performance problems are caused by the application itself, by the organisation’s local area network (LAN), or by the infrastructure

provider’s wide area network (WAN). This capability not only helps to find and fix problems quickly – it also provides solid evidence of whether the provided networks are meeting their service level agreements.

### Enhance monitoring with minimal cost and risk

Compact-NMS is a software-based solution that performs well on commercial off-the-shelf (COTS) hardware and is also supported by a variety of Frequentis hardware. This means it can be installed easily on existing infrastructure without impacting the current network configuration – a major advantage in safety- and mission-critical domains, where every infrastructure change requires extensive testing to mitigate risks.

## Technical specifications

Network size	Supports networks of all sizes from very small to very large
Supported network technologies	All networks (IP/MPLS, VSAT, TDM, Microwave, etc.)
Performance measurements	Continuous measurements with down to millisecond-level intervals
Configuration granularity	Payload size, packet interval, measurement period
Graphical interface	NetBroker Visualiser – a modern, user-friendly GUI
Hosting hardware platform	Commercial off-the-shelf servers and selected Frequentis hardware

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