

**Use Case:**  
**End-to-End 2G/3G/4G RAN health indicator with NORTH-I™**



**Summary**

An MNO was experiencing Radio Access Network (RAN) quality issues with problem resolution times exceeding its business and customer experience objectives. Threshold based methods were not able to discriminate between long-term degradations or spikes.

**Actor**

Global Mobile Network Operator.

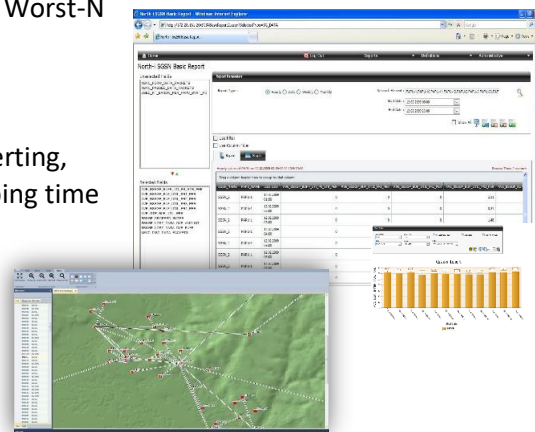
**Situation**

The operator was challenged to radically improve its level of service but with fewer resources available to accomplish this urgent business need. Proactive network health monitoring was not feasible as setting static thresholds for RAN performance from multiple vendors gave ambiguous performance metrics. When the operator undertook the project to replace its entire radio access and core mobile network infrastructure with new vendor equipment, it also took the opportunity to upgrade its legacy network performance management system to NORTH-I™.

**Solution and Benefit**

With the TTG Int. LTD’s NORTH-I, the mobile operator was able to carry out scheduled based proactive observation of network monitoring and utilization on an hourly, daily, weekly, and/or monthly basis giving an insight. This was achieved through:

- Uniquely designed performance alarms,
- scheduled performance monitoring and Worst-N reports,
- integrated performance monitoring
- fault and configuration management,
- automated and schedule basis reports and alerting,
- flexible, out-of-the-box KPIs and reports, curbing time to roll out the project
- advanced, automated correlation, analysis,
- integrated GIS capabilities for topology view.



**By NORTH-I You Can**

Implement of a centralized performance monitoring system: NORTH-I™ enables to collect and analyze data from multiple vendors and technologies assisting the operator gain a more comprehensive view of the network and identify capacity bottlenecks in real-time.

Monitor network utilization regularly: By **proactively** monitoring the utilization of the network on a regular basis, the operator can identify capacity issues before they become major problems and take steps to address them.

Use data analytics and trend analysis: By analyzing data from the network and identifying trends, the operator can identify potential capacity issues and take **preventative** measures avoiding problems before they happen.

Enhance training and knowledge sharing: Ensuring that all team members have a strong understanding of the network and how to use the management tools can improve **efficiency** and reduce resolution times.

Use off-the-shelf reports and alarms and KPI's: By using pre-defined reports and alarms, the operator can promptly start analyzing the, increasing **productivity**.

**Overall**, implementing a centralized performance monitoring system armed with data analytics and trend analysis helps the operator improve network capacity while meeting the growing demand for mobile data services.

