

# Operator in Middle East



## Project Goals

To challenge the mobile network expansion plan regarding impact and cost efficiency



## NETWORKS Approach

- Gather information on Radio Access Network (RAN)
- Collect NMS historical performance data of RAN network
- Study and analyze targeted user experience parameters
- Apply an automated processing and deep dive functionality
- GIS based tool with comprehensive reporting functions



## Client Benefits

- Sustain user experience-act before user QoE is affected
- Comprehensive overview of network capacity status.
- Plan a cost-efficient future network extensions
- Potential for benchmarking

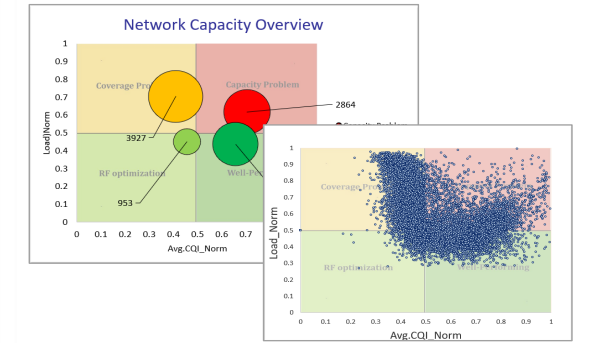
# Mobile Access Capacity Analysis – evaluating load and forecasting future traffic

## Automated analysis of RAN network Load

- The RAN network performance counters, defined thresholds, and cell configuration are all collected.
- Automated examination of the entire RAN network, looking at each cell's load status.
- Comprehensive and multi-levels report including all cells with detailed information regarding the load status.
- Examined cells are ranked in detail based on their load status

```
Date;Cell;DL_average_throughput_Mbps;DL_user_perceived_rate_Mbps;Downlink_PRR_
17.01.2017 00:00:00;1_L_18_20_1;4.43;75.26;0.05;1.95;3.34;1;0.03;0.22;3.34;0.0
17.01.2017 01:00:00;1_L_18_20_1;0.83;29.3;0.05;1.66;0.44;1;0.03;0.08;0.44;0.05
17.01.2017 02:00:00;1_L_18_20_1;5.53;100.31;0.05;1.04;4.95;1;0.03;0.35;4.95;0.
17.01.2017 03:00:00;1_L_18_20_1;19.9;24.43;0.05;1.57;0.67;1;0.03;0.33;0.67;0.0
17.01.2017 04:00:00;1_L_18_20_1;20.77;24.73;0.05;2.02;0.62;1;0.03;0.34;0.62;0.
17.01.2017 05:00:00;1_L_18_20_1;20.45;25.37;0.05;1.58;0.61;1;0.03;0.35;0.61;0.
17.01.2017 06:00:00;1_L_18_20_1;1.12;18.55;0.05;0.87;0.44;1;0.03;0.09;0.44;0.0
17.01.2017 07:00:00;1_L_18_20_1;1.88;0.05;0.8;1;0.03;0.13;0.8;0.05;0.88;0.0
```

Cell's performance counters



Network capacity overview