

Mobile radio network surveying for cities and municipalities

S.E.A. Your partner for precise mobile network measurement & analysis.

Real measurement data for reliable results.

- Hardware and software for capturing and analyzing
- 2G-5G mobile and Wi-Fi
- Mobile network survey and analysis
- Customized reports



Our services for you!

Precise mobile network and Wi-Fi analysis -

hardware & software

- Recording and analysing all network operators, technologies and frequencies
- Surveying of cities and municipalities up to entire federal states, 5G campus networks
- Conducting entire measurement campaigns (drive tests) or supporting you in conducting your own measurements
- Processing of measurement data
- Indoor surveying



Reliability through real measurement data!

Clearly presented statistics and visualizations for:

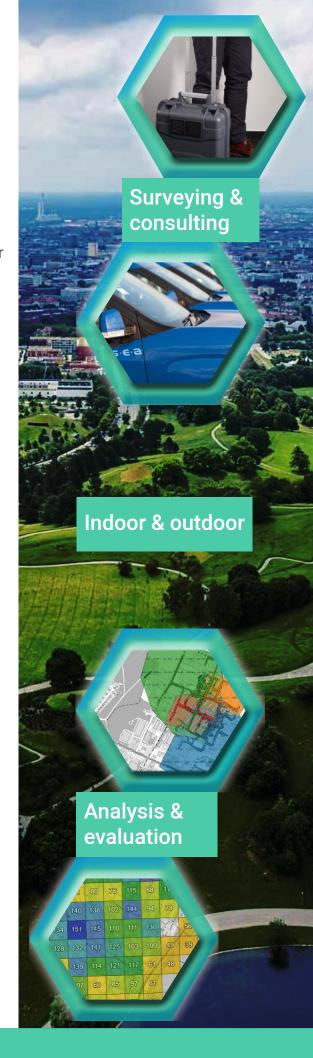
- Statistical information for decision-makers / management
- · Documents for marketing & PR reports
- Technical details for technicians and engineers for troubleshooting and analysis



Visualisation and measurement:

How well is an area covered (per provider, technology)?

- Number of radio cells in an area
- Signal strength
- Available technologies in a region
- Private 5G networks: representation of radio cells, expansion and overlap





What distinguishes S.E.A.'s solution from other surveying solutions?

- Comprehensive, second-by-second mobile network measurements for seamless data collection during drive tests at realistic driving speeds.
- The recorded data belongs to you, delivered in an easy-to-use, machine-readable format
- No specially trained personnel required.
- We provide the technology, SIM cards, expertise, and skilled staff.
- We also offer drive testing as a service, using our own vehicles and trained staff.
- Measurement of broadband coverage from 2G to 5G, including LTE-M and NB-IoT, across all network operators simultaneously.
- Analysis of upload/download speeds and latency.
- Analysis of the coverage area of public Wi-Fi hotspots
- Customized service packages for users needing equipment to perform their own measurements.

Measuring instruments – data acquisition with hardware and software

- SIM-based measurement with network registration using a multichannel system for the mobile radio standards 2G/3G/4G/5G/NB-IoT/LTE-M
- Recording of cell parameters such as Cell-ID, neighbouring cells, signal strength, bands, etc.
- Live output of current GPS position and cell parameters
- Stationary or mobile operation with power supply, battery or car adapter
- Fully automatic measurement operation, auto data upload

SpaceMaster Streaming Client & SpaceMaster GEO - Analysis & Evaluation

- Visualisation of the reception situation and propagation
- Functions for searching and determining the radio cells
- Comprehensive data search & geo-filter (radius, polygon)
- Visualization of current and archived drive test data on local maps
- Configurable reporting for purposes such as providing information to mobile network operators
- User-friendly system configuration and quality monitoring



mobile &

stationary

Example: Indoor measurement





What advantages do mobile radio measurements offer you?

- Identify gaps in mobile coverage, find out availability of mobile service providers.
- Improvement of emergency management
- Qualified data for applying for funding for network expansion
- · Bandwidth measurement for broadband coverage to increase
- · Attractiveness for companies, investors, residents and tourists.

