s·E·a

Network coverage visible. Quality measurable.
Precise solutions for

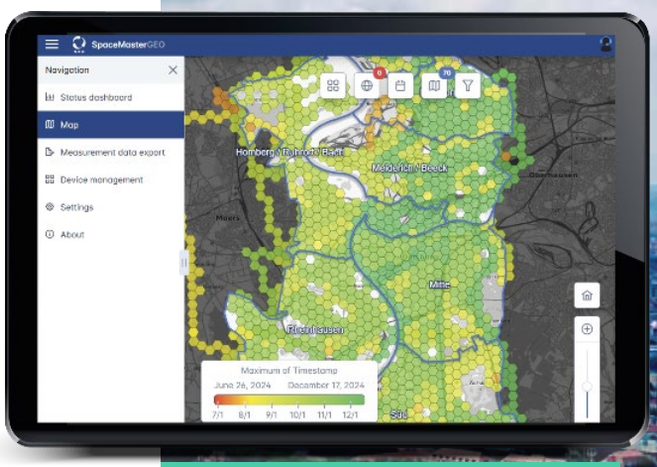
Mobile network providers
Regulatory authorities
Private 5G network operators

Measuring systems and analysis tools for reliable data for network planning, optimization and performance verification
– precise, cross-technology and visually evaluable –

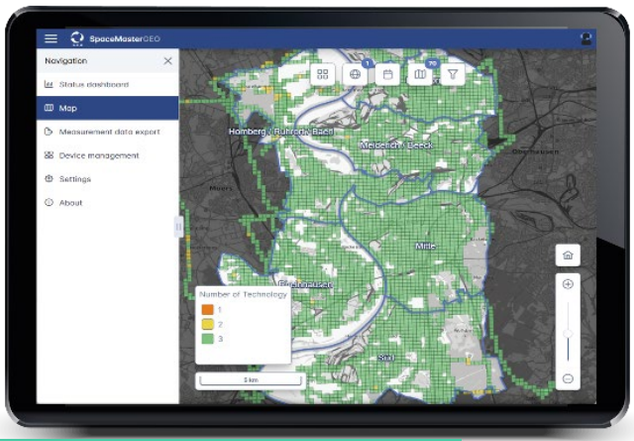
Scan me for more

Key Benefits

- Analyse full coverage:
  Proof of real signal strength per technology & band
- Continuous network quality measurement:
  KPIs such as RSRP, SINR, latency & cell handovers
- Objective evaluation of location planning:
  Data-based decision support for expansion
- Easy visualization & export:
  Maps, heat maps, raw data & reports



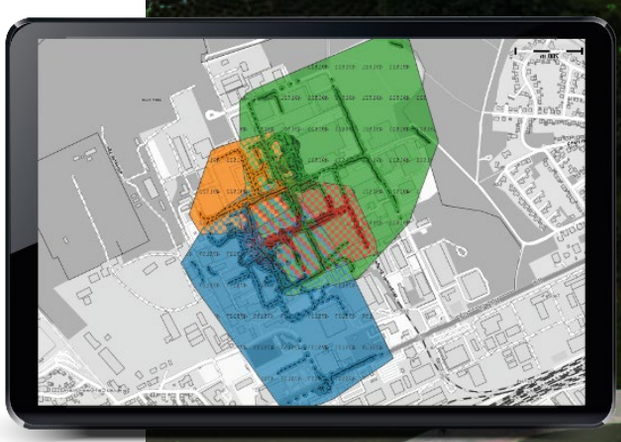
Signal strength: How well is an area supplied (per provider, technology)?



Available technologies in a region

Expansion of radio cells in frontier areas

- Transparent visualization of the network structure thanks to surface images
- Detect overlap: Detection of redundant coverage areas – essential for reliability.
- Avoiding inadequate coverage: Ensuring that the entire expansion area is reliably covered.
- Minimize oversupply: Avoid unnecessary radiation beyond the target area – to protect against electromagnetic pollution and unwanted external access.
- In border regions, drive tests with precise measurement prevent unwanted network over-radiation into neighboring countries, protect against roaming costs and support regulatory authorities in ensuring compliance with national coverage limits.



Private 5G networks: visualization of radio cells, expansion and overlap

What differentiates S.E.A.‘s solution from other surveying solutions

- Quality evaluation of mobile network coverage through comprehensive, complete, second-by-second measurements that allow seamless coverage in a drive test at a suitable driving speed.
- The data collected is in a simple, machine-readable form and belongs to you.
- No specially trained personnel required.
- We have the technology, the SIM cards, the know-how and experienced experts.
- As a service, we also offer test drives with our own vehicles and personnel.
- Simultaneous measurement of broadband coverage from 2G to 5G, NB-IoT/LTE-M of all network providers.
- Analysis of upload and download speeds, latency.
- Coverage area of public Wi-Fi hotspots
- For users who want to measure themselves and need equipment, we offer individual service packages.

Measuring instruments – data acquisition with hardware and software

- SIM-based measurement with registration in the network with multichannel system for the mobile radio standards 2G/3G/4G/5G/NB-IoT/LTE-M
- Recording of cell parameters such as Cell-ID, neighboring cells, signal strength, bands, etc.
- Live output of the 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

- Visualization of the reception situation and propagation
- Functions for cell search and determination
- Comprehensive data search & geo-filter (radius, polygon)
- Display of the current / archived measurement drive with local maps
- Configurable reporting for requests for information from mobile network operators, for example
- Easy system configuration & quality control

Indoor measurements are also possible.

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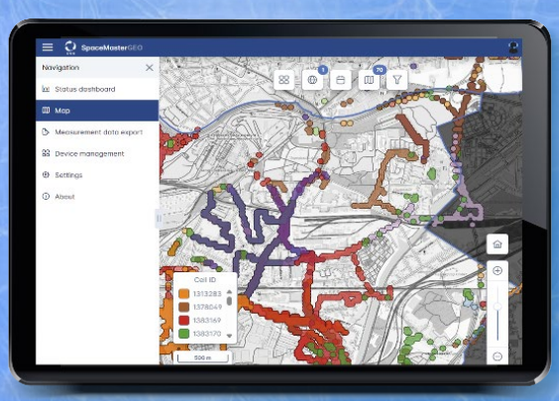
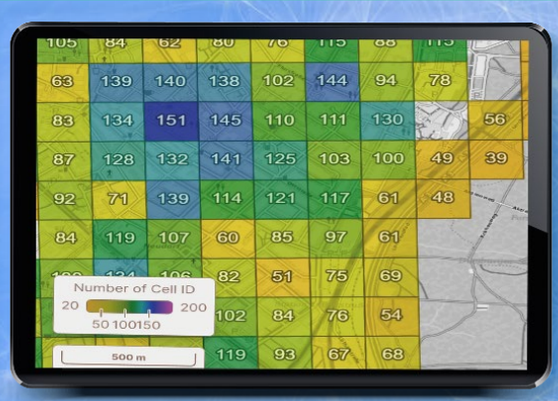
What advantages does mobile radio measurement offer you?

- Data basis for network quality and expansion
- Optimization of existing networks
- Planning of new locations
- Quality assurance during operation
- Technology mix & bandwidth analysis
- Verification of expansion obligations
- Proof of frequency use
- Area coverage verification
- Documentation for citizen complaints



e.g.
visualization of individual measurement points, representation of individual radio cells, cell sizes and cell handover

Comprehensive analysis, filter and export functions, as well as visualization options. Individually configurable



e.g.:
Number of radio cells in an area –
Can be subdivided by network provider, technology, and bands used.

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