



Center for High-Frequency Technologies and Applications

Performance Evaluation

Dr. ir. Dries Vande Ginste
Technology Developer

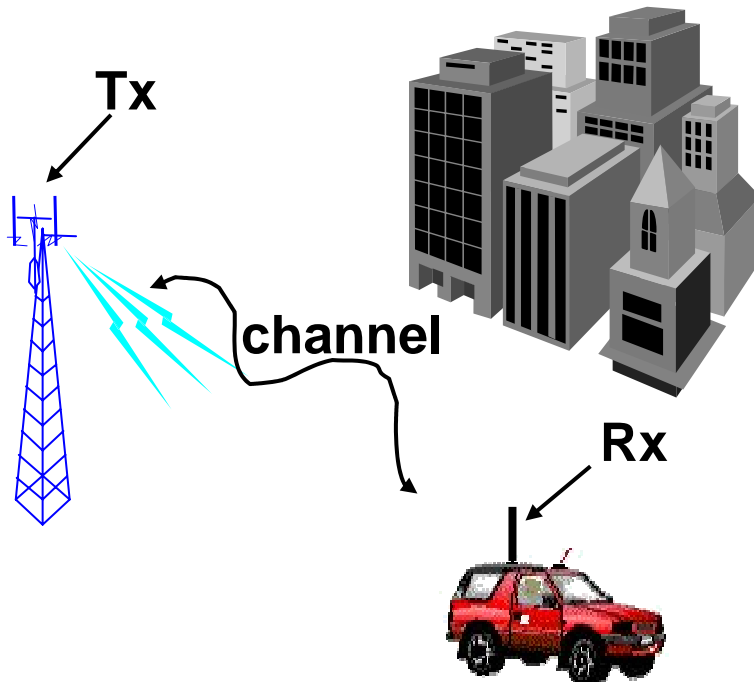
- Characterization and practical measurement of "last mile" broadband connections and high-speed wireless connectivity
 - **Broadband Wireless Access (BWA)**
 - **WiMax: alternative to cable and DSL**
 - **DVB-H: Digital Video Broadcasting-Handheld**
 - **WiFi, Zigbee for industrial environments**



- Coverage prediction: indoor/outdoor measurements and simulations

Measurement car equipped with antenna, spectrum analyser, GPS, ...

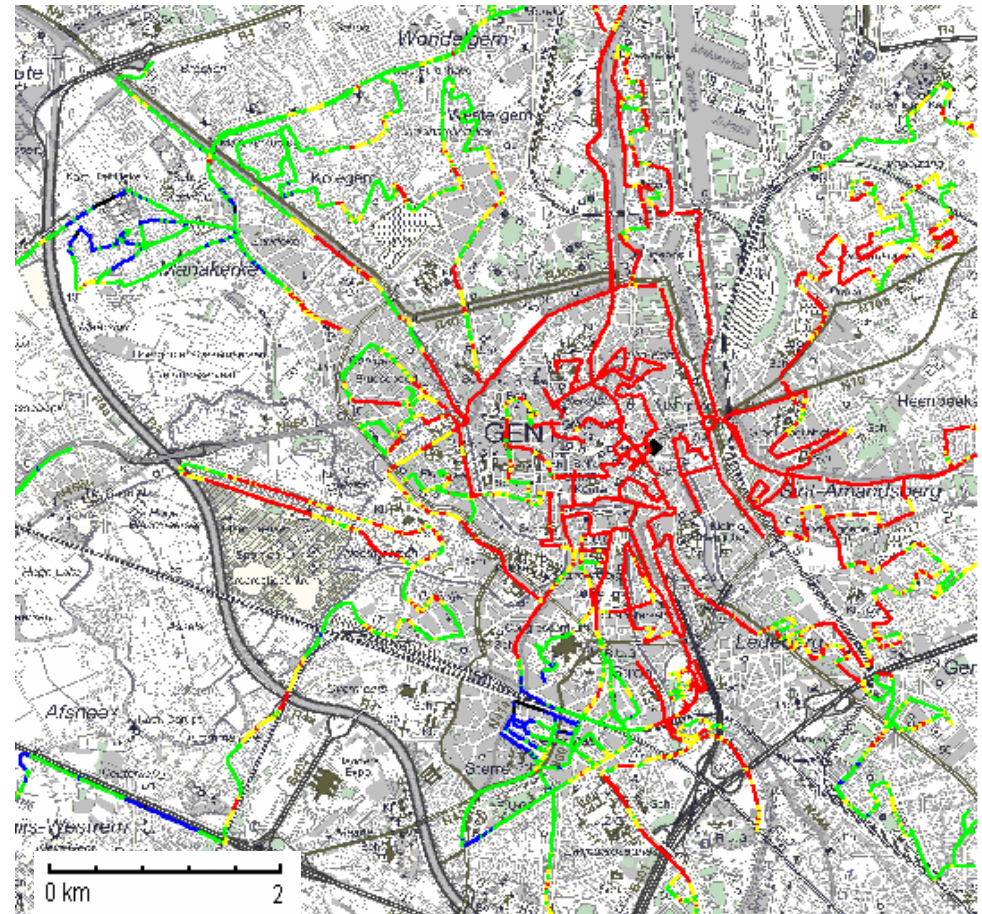
environment



- Example: Coverage of DVB-H signal (602 MHz) in Ghent

- *Broadcasting antenna located at top of Belgacom Tower (60 m)*
- *Measurements performed with spectrum analyser*

- 64.5 dB μ V/m – portable outdoor
- 69.5 dB μ V/m – mobile car receiver
- 80.5 dB μ V/m – portable indoor
- 84.5 dB μ V/m – mobile inside car



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