
NETWORLD2020

5G-PPP INFO DAY

Brussels, 28.05.2014

Thomas Heyn

Digital Communications Unit

Fraunhofer-Institut für Integrierte Schaltungen IIS



within www.wireless-cluster.org

Current and Future Research in 4G/5G Testbeds

1. Erlangen/Nuremberg Testbed

- LTE Broadcast (eMBMS) & Evolutions for 5G
 - QoS, interoperability broadcast / broadband
 - Strong Sat/Terr broadcast background
DVB, DAB, DRM
- mmWave Fronthauling / Backhauling
 - 10 Gbps microwave link for E-Band
- Satellite Backhauling
 - For fixed, nomadic, mobile hotspots, e.g. trains, ships
 - Link design (DVB-S2X) incl. channel modeling, convergence layer, tracking antennas
- Antennas
 - For nomadic and mobile applications (tracking)
- 5G prototyping, live testing



Erlangen Testbed
700 / 2600 MHz



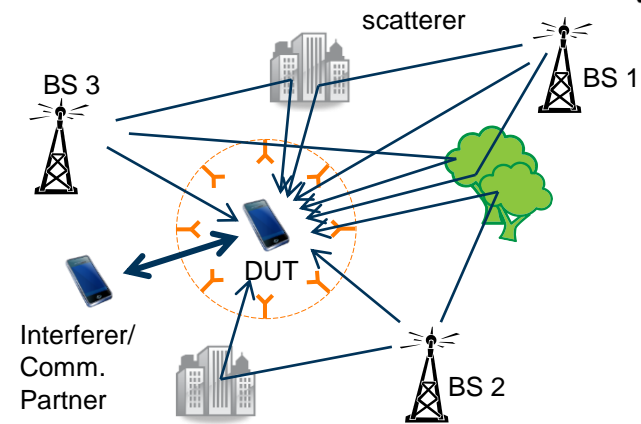
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2. Facility for Over-the-air Research and Testing (FORTE) & Virtual Road (VISTA) – Ilmenau -Germany



Universal Over-The-Air test environment

- 2G-5G / Satcom / MIMO system- / performance-evaluation
- For mobile radio transceivers up to 3 / 6 GHz
- Incl. effects like:
 - Array/beam forming Antennas
 - channel impairments
 - co-existence, interference
 - Multi base stations



2D/3D Scenario

Emulation



Further Information on Fraunhofer IIS

- 5G-PPP online brokerage
- <http://www.iis.fraunhofer.de/en.html>
- www.wireless-cluster.org

