



EWG-OTA jointly with EWG-RA - Meeting in Graz

Sept. 12 - 14, 2017, Graz, Austria

Presentation of Temporary Documents

Four TDs were presented.

Two of presented TDs determined the channel rank, or its suitability for Massive MIMO, from measurements or simulations. In TD 5019, Brno University of Technology, used a VNA for measurements at 60 GHz for creating 4x4 or 6x6 virtual arrays on a few indoor locations. University of Bristol, in TD 5045, simulated by ray-tracing at 3.5 GHz, testing modelling approaches for the stochastic time-variant behaviour of the channel rank.

The European Research Centre JRC at Ispra (TD 5046), presented measurements of shadowing by buildings at 26 and 40 GHz. Distance-sampling intervals were 4 m on 4 outdoor locations around a small group of buildings with about 30 measurements per location for each of three base station heights.

AIT presented in TD 5031 (lossy) compression of the multipath situation by the use of Discrete Prolate Spheroidal Sequences. Therefore, less bandwidth is required of the interfacing for frequently updating channel faders for strongly dynamic channels. A disadvantage is the computing power that is needed at the receiving end (channel fader) for reconstructing the impulse responses. However, AIT demonstrate that a rather affordable SDR, be it with a powerful FPGA on board, can do it on the fly.

Standardisation issues

Moray Rumney gave an informal update on the standardisation in 3GPP on OTA test method development.

Discussion on EWG OTA topics

STSMs:

- no EWG-specific proposals mentioned

Tutorial on OTA during the 6th meeting in January 2018, Nicosia, Cyprus

- TBD

Work shop on OTA for 5G during the 7th meeting, tentatively in May 2018

- TBD