5G RADIO PLANNING AND OPTIMIZATION

- For Experienced Radio Engineers

Background

5G and Internet of Things (IoT) are transforming many industries and will create value for both businesses and their customers.

The course "5G Radio Planning" is the sequel to the Widermind training "5G For Experienced Radio Engineers". The course provides a deep technical walk-through and discussion of the challenges facing 5G radio planners and optimizers and how to go about solving these issues.

The course is based on 3GPP Rel-16. The course will be continuously updated according to the new releases.

Content

Split-bearer in NSA (DL/UL)

LTE anchor selection

UL coverage extension features

Frame structure candidates for 5G TDD

5G Synchronization requirements PCI

Planning

PRACH format selection and cell radius

Root Sequence Index planning and cell

radius Beamforming based on CSI-RS

Beamforming based on SRS DM-RS for

PDSCH/PUSCH

Tracking reference signals

Beam sweeping and proposed patterns

Linkbudget with beamforming

Indoor penetration high frequency bands

Planning of RAN notification areas

Dynamic spectrum sharing LTE/NR

Spectrum migration LTE/3G->NR

Migration from Option 3x to Option 2 + other options

Target audience

The intended target audience is experienced Radio engineers within the Telecom Industry.

Prerequisites

Widermind training "5G For Experienced Radio Engineers"

Training duration

2 days