

# Anritsu Tech Day | 5G Network Field Testing

## Overview

Join Anritsu and Orbis in Vantaa for our 5G Network Field Testing Tech Day - a full day of education, networking and live demonstrations. The event will focus on addressing the challenges Network Operators, Regulators and I&M Contractors face in their day-to-day work. Please note that the 5G Network Field Testing Tech Day is an in-person event.

## Tech Day Details

**Date:** 12 March 2024

**Time:** 9:00 - 16:00

**Location:** [Orbis HQ](#) — Vanha Kaarelantie 9, Vantaa

## Agenda

**9:00 - 9:15**    **Welcome & Introduction**

**9:15 - 10:50**    **Session One | Ensuring Performance of 5G Network with Accurate Field Measurements**  
[Johan Wallblad, Field Application Engineer, Anritsu](#)

As 5G networks are being widely deployed around the world, the cellular network operators, their subcontractors, and the National Regulator Authorities need to ensure that the networks are functioning well by measuring certain RF metrics in the field. This session will be focused on detailing and explaining the various key RF measurements that need to be done to qualify how good a 5G network is. To illustrate how a 5G cell behaves, various Anritsu measurement tools, like the spectrum analyzer, the real time spectrum analyzer, and the 5G demodulation software capabilities, will be demonstrated.

**10:50 - 11:05**    **Coffee Break**

**11:05 - 11:45**    **Session Two | Performing Indoor and Outdoor Network Coverage Mapping**  
[Johan Wallblad, Field Application Engineer, Anritsu](#)

Once networks are being deployed, cellular network operators always need to verify how good the outdoor or indoor level reception of their network is either by performing some drive tests or manual testing in buildings. There are different kinds of tools to make these measurements. One of these tools is a spectrum analyzer which can demodulate 5G carriers for instance and can be remotely controlled to measure and store these metrics which could then be post-processed on a map.

This session will illustrate a solution called NEON associated with Anritsu Spectrum Analyzers MS2090A and MS2080A. NEON allows both an indoor measurement session inside a building across all floors even when a geolocation with GNSS is impossible and outdoor measurements being collected by car rather than through long pedestrian walks. 2D and 3D maps can then be displayed on a computer for further processing and reporting.

**11:45 - 12:15**    **Live Demonstrations**

**12:15 - 13:15**    **Lunch**

# Anritsu Tech Day | 5G Network Field Testing

**13:15 - 14:00**    **Session Three | Isolating Interference in 5G**

[Johan Wallblad, Field Application Engineer, Anritsu](#)

One of the main difficulties with TDD networks is the ability to isolate a potential interference frequency in a 5G frame to locate it in the field. The network can't be stopped to let this interference appearing alone in the spectrum band which normally affects the uplink part. Due to the TDD particularity, in case an interference exists, it makes it more difficult for 5G subscribers to connect to the network with their devices.

An Interference Hunting technique will be proposed during this session based on the latest generation of handheld spectrum analyzers. It will highlight how to operate with the unit to put in evidence if any unwanted carrier affects the UL part of a TDD frame.

**14:00 - 14:15**    **Coffee Break**

**14:15 - 15:00**    **Session Four | Examination of Passive Intermodulation Causes**

[Johan Wallblad, Field Application Engineer, Anritsu](#)

For FDD networks, another RF phenomenon could disturb the networks when they are aging or not well maintained over time: the Passive Intermodulation (aka. PIM).

During this session, we will explain the potential causes of these interferences and how these can be fixed in the field by using a dedicated test instrument called the PIM Master.

**15:00 - 15:30**    **Live Demonstrations and Q&A**

**15:30 - 16:00**    **Closing Speech**