

ANRITSU TECH DAY | 5G NETWORK FIELD TESTING



Join Qnetworks and Anritsu in Stockholm 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. If you have any questions regarding the event, please contact Martin Rawet, Qnetworks ICT strategist.

Date: Tuesday | 12 September 2023 | 9:00 - 15:30

Location: Qnetworks | Fryksdalsbacken 12, 3 tr., Farsta, Stockholm

Target Audience: Network Operators | Regulators | I&M Contractors

TIME	TOPIC	PRESENTER
9:00 - 9:15	Welcome & Registration	
9:15 - 9:30	<p>Session One Ensuring Performance of 5G Network with Accurate Field Measurements</p> <p>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.</p> <p>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.</p>	 <p>Johan Wallblad Field Application Engineer, Anritsu</p>
10:30 - 10:45	Coffee Break	
10:45 - 11:45	<p>Session Two From 5G Fronthaul to Network Core: Efficient Testing of Today's Wired Networks</p> <p>Global telecommunication traffic is increasing, driven by mobile traffic (especially 5G) and high bandwidth contents like Internet TV, video streaming and teleconferences. To support the traffic increase, telecom networks, especially the ones interconnecting data centers, need to upgrade their speeds from 10Gb/s to 100G, 200G and even 400G, supported by new generations of transceivers.</p> <p>This session will present the solutions Anritsu offers for testing and validating the KPIs of the new generation of networks and equipment, in an environment where legacy technologies are still in use.</p>	 <p>Andrew Cole Field Application Engineer, Anritsu</p>

<p>11:45 - 12:15</p>	<p>Session Three Performing Indoor and Outdoor Network Coverage Mapping</p> <p>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.</p> <p>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.</p>	 <p>Johan Wallblad Field Application Engineer, Anritsu</p>
<p>12:15 - 13:15</p>	<p>Lunch</p>	
<p>13:15 - 13:45</p>	<p>Session Four Isolating Interference in 5G and Examination of Passive Intermodulation Causes</p> <p>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.</p> <p>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.</p> <p>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).</p> <p>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.</p>	 <p>Johan Wallblad Field Application Engineer, Anritsu</p>
<p>13:45 - 15:00</p>	<p>Live Demonstrations and Networking</p> <p>Using Anritsu's MS2090A and MT1040A.</p>	
<p>15:00 - 15:30</p>	<p>Closing Speech</p> <p>Demo units available for test</p>	