

Explore INACON

Tackle Your Network Issues in a

Bootcamp

Mastering the UTRAN
and U_u Interface

Unrivalled practical learning...

INA CON
Knowing the difference...



Objectives

At the end of the Bootcamp you will:

- Increase your job efficiency
- Have the ability to trouble shoot UTRAN drops
- Become expert of your measurement equipment
- Be able to analyze Protocol traces
- Determine the root cause of abnormal releases
- Understand interworking problems on I_{ub} and I_u/I_{ur}
- Identify Pilot Pollution situations
- Resolve bad covered and interfered areas
- Know about Missing Neighbor severity

Who should attend:

- UTRAN Field Technicians and Engineers
- Optimization Personnel

Pre-requisites:

This course requires participants to have a good knowledge of the GSM/GPRS and UMTS network as well an electronic or computer background

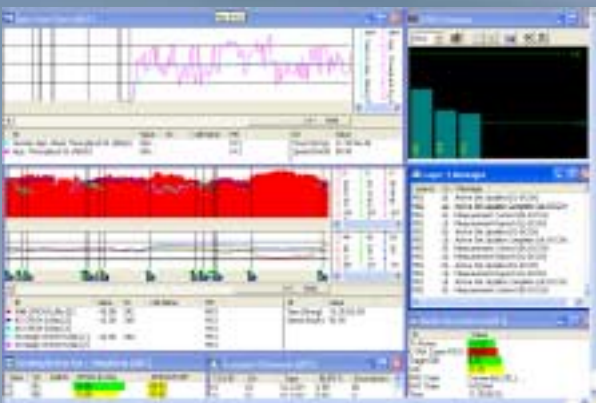
Key Topics

- Call Trace on I_{ub} by using CRNC- & NodeB Comm. Context IDs + Binding Id & SUGR + VPI/VCI&CID
- Drop Call Filtering upon I_u -ReleaseRequest
- SCCP Signaling allow Call-tracing based on Local Reference Numbers
- RANAP Protocol with SAI and Initial UE Message
- RNSAP on I_{ur} for Macro Diversity
- Soft handover events 1a, 1b, 1c
- Hard handover event 2d → 3a
- RRC and I_{ub} & I_u User Plane Call Tracing for CS/PS
- Idle Mode Behavior of UE

Delivery:

- Notebooks with pre-installed Protocol Tracer
- Instructor led lecturing with Real Life Trace Analysis
- Practical Hands-on exercises with solutions

Duration: 3 Days



Course Contents

Subject	Practice
<p>The idle Mode of the UE</p> <ul style="list-style-type: none"> • Measurement Parameters • The Cell Selection Criterion for UTRA FDD • Cell Reselection behavior • Inter RAT Cell Reselection <p>TEMS Overview</p> <ul style="list-style-type: none"> • Introduction to WCDMA Drive testing • Soft handover in TEMS • SHO parameter setup <p>Typical Failure Cases logged with TEMS</p> <ul style="list-style-type: none"> • Dropped Call • Blocked Call • CM_SERV_REJECT • Missing Neighbor • No Dominant Pilot situation • PS Throughput Dips • Sudden Change to Idle Mode <p>Call Trace Details – MTC example</p> <ul style="list-style-type: none"> • RRC Connection Establishment: DCCH VPI+CID • NAS Messaging between UE and CORE • User Plane Establishment: DTCH VPI+CID • RRC Connection (abnormal) Release • RRC Signaling Bearers on DCCH • NBAP Signaling based on Comm. Context Ids • I_u RANAP and SCCP Signaling 	<p>PN Scanner Configuration Standard Setup in TEMS</p> <p>TEMS Log file Debugging</p> <p>Drop Analysis Pilot Pollution investigation Ec/No Quality and SHO e1a, e1b and e1c parameter</p> <p>CS and PS Call Flow Investigation on I_{u-ps} & I_{u-cs}</p> <p>Examination of Layer 3 NAS Messaging</p> <p>K1297 Setup and config</p> <p>Permanent UE Id tracing</p> <p>Mapping of NBAP Binding Id and ALCAP SUGR</p> <p>Call Tracing on I_{ub} & I_u User and Control Plane AAL2 VPI/VCI+CID</p> <p>Filter for IuReleaseRequest</p>

Related Courses:

**UMTS Signaling
&
Protocol Analysis
(UTRAN & UE)**

**UMTS Design
Details
&
System Engineering**

**UMTS Network
Optimization
&
Trouble Shooting**