



# ariesoGEO – Bolt On GSM

(ARI0051)

## Course Outline

## ariesoGEO – Bolt On – GSM

### Detailed Course Outline

This one day course is designed for engineers who already have knowledge of ariesoGEO on a different technology, i.e. UMTS. The course enables engineers who are now responsible for GSM planning, optimization or monitoring, to get familiar with the GSM specifics of ariesoGEO. It assumes a currently level of ariesoGEO knowledge and as such, more time is specifically allocated to specific demonstrations and student activities relating to the GSM aspects of ariesoGEO. The course is designed to run on your live GSM ariesoGEO system. In so doing, individual students will boost their knowledge of ariesoGEO in relation to GSM operation.

### Pre-requisites

This is an additional course that assumes attendees have a working knowledge of the ariesoGEO platform and have attended a User course of a different technology. This course is commonly run in conjunction with the ariesoGEO User UMTS class. This course does not cover how to operate and setup ariesoGEO. This course will introduce the student to the GSM analyses available in ariesoGEO.

### **Section 1: RF Analyses – Network and Cell**

- Investigation of GSM Best Server
- Analysis of network to show Receive Quality levels in uplink and downlink
- Analysis of Traffic Channel (TCH) Statistics
- Investigation of Traffic and Broadcast Frequency overlaps
- Footprint analyses based on individual cells
- Simulating Antenna Changes
- Defining Missing Neighbours
- Cross Feeder Investigation

### **Section 2: Detailed Call Analysis**

- Service Group definitions within GEO
- Plotting GSM blocked, dropped and call locations
- Detailed explanation of Spider and Layer 3 drill-down analyses
- Filtering calls by specific Layer 3 Messages
- How to analyze call usage on all and individual users
- Call failure reason investigation for individuals and geographical areas
- Mobility classification

### **Section 3: Analyzing Data Throughput Performance**

- How to identify the busy hour
- Analysis of what end-user experience KPIs can be extracted to identify which cells need attention
- How to analyze Cell performance and monitor KPIs
- How to benchmark the performance of individual or groups of devices
- Detailed analysis of individual subscribers and their experience of the network
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### **Section 4: Subscriber and Device Group Analysis**

- How custom lists of subscribers or devices can be created
- How to utilize custom lists in analyses
- Device performance investigation
- Analyzing individual Subscribers performance

### **Section 5: Grid Calculator**

- Demonstrate how ariesoGEO can be used to create complex performance KPIs analysis
- Make use of the Grid Calculator to locate and optimize RF problem areas
- Measure the impact of the optimization plans in RF and footprint performance KPI

