



# ariesoGEO User GSM

(ARI0011)

## Course Outline

## ariesoGEO User - GSM

### Detailed Course Outline

This two day course enables engineers, who are responsible for the activities related to GSM planning, optimization or monitoring, to get familiar with the ariesoGEO interface and its key features. It includes interactive demonstrations, as well as multiple student activities which allow the attendee to explore ariesoGEO. The course is designed to run on your live GSM ariesoGEO system. In so doing, individual students gain experience of the ariesoGEO product, as well as specific knowledge of how it operates on their system.

### Pre-requisites

This class is aimed at network engineers who work on optimizing and troubleshooting GSM networks. Knowledge of GSM networks, optimization and troubleshooting is pre-requisite knowledge for attending this course.

### **Section 1: ariesoGEO Capabilities**

- Overview of Arieso Platform - insight, performance, analytics and SON
- What information radio planners and optimizers need
- How ariesoGEO captures data and what information is available to end user
- How GEO analyses and displays data
- How GEO can analyze handset model penetration and performance
- How GEO geographically positions users, including use of devices with GPS

### **Section 2: Product Architecture and Operation**

- GEO platform architecture
- Local GEO support available to users
- Introduction to the GEO user interface
- Demonstration of GEO's core functions
- Introduction to filtering, and the importance of, for obtaining the required results
- Defining geographical areas using bounding box and polygons
- Overview of analyses categories

### **Section 3: Network Topology and System Pre-Checks**

- Investigating Data Loading
- Investigation of Loading Errors

### **Section 4: Correlation Module**

- Network Alarm Monitoring and Investigation
- Network Configuration Checking

### **Section 5: 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 6: 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 7: 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

### ***Section 8: Subscriber and Device Group Analysis***

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

### ***Section 9: 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

### ***Section 10: Creating Reports and Exports***

- We introduce templates and report facilities and when these are used
- Discussion of benefits and interworking with MapInfo and Google Earth
- How to create one off and scheduled reports
- Use of GeoWeb for report viewing and VIP monitoring
- Exporting analyses results to other formats

### ***Section 11: Changing and Applying Colour Schemes***

- Changing the Colour Schemes used in ariesoGEO
- Applying colour to Tables
- Applying specific colours to Points Analysis

