INACON GmbH

Location Based Services – Technology and System Operation

Course Duration:

2 Days

Course Description:

▸ This course addresses the needs of network operators who want to implement and offer Location Based Services in their network.

▸ This course provides detailed information for design engineers of location based service equipment.

▸ The course also covers the needs of those who are involved in the development and implementation of applications on top of location based services.

Pre-Requisites:

▸ Good understanding of GSM, GPRS and UMTS networks and overall mobile system operation.

Course Target:

▸ The student will obtain a thorough understanding of the different location techniques like E-OTD, U-TDOA or A-GPS in GSM, GPRS and UMTS-networks and the potential accuracy which can be achieved.

▸ The course provides detailed information about the implementation issues of the different LCS-technologies in today's 3GSM-networks.

▸ The student will develop an in-depth understanding of the signal and information flow in a 3GSM-network, which supports location based services.

▸ The course provides detailed information to 3rd party application developers who require an understanding of the implications of location technologies in mobile networks.

Some of your questions that will be answered:

➔ Which methods can be used to determine the subscribers geographic location?

➔ Which services can be provided to the subscriber?

➔ What are the accuracy requirements for the provided service?

➔ Which changes are required in the network to provided location based services?

➔ Which additional resources must be provided in the network?

➔ Which additional network elements are needed?

➔ What is the "hearability problem" with OTDOA in UMTS?

➔ What is the difference between OTDOA and OTDOA-IPDL?

➔ Why is it necessary to provide assistance data to the mobile station for the GPS positioning method?

➔ What is the difference between mobile station based and mobile station assisted positioning methods?

➔ Why is it mandatory to synchronize the LMUs for U-TDOA?

➔ What is the accuracy required by the US FCC mandate?

➔ What is the legislative situation of location based services in Europe?

Who should attend this class ?

➔ Network Operators who want to provide location based services to the subscribers.

➔ Engineers who have to implement location based services.

➔ Application developers and 3rd party providers who want to offer location bases services.

INACON GmbH

Table of Contents:

Introduction to Location Based Services

Mobile Station Positioning for Location Based Services

Signaling Protocols and Selected Procedures