SS7 in GSM

Who Should Attend?

This is an advanced signalling course intended for network engineers, network planning and tuning staff, and anyone with network experience who needs deep technical knowledge of SS7.

Course Scope

1. GSM Architecture and Air Interface.
2. Traffic Cases — establishing radio connections, location update, IMSI detach, mobile originating and mobile terminating call set-up, and handover.
3. Signalling System No. 7 - protocol stack.
4. MTP (Message Transfer Part) - MTP 1, MTP 2, MTP 3, and HSSL.
5. ISUP (ISDN User Part).
6. SCCP (Signalling Connection Control Part).
7. BSSAP (Base Station System Application Part) - BSSMAP and DTAP.
8. TCAP (Transaction Capabilities Application Part).
9. MAP (Mobile Application Part).

Course Objectives

This course focuses on signalling between GSM nodes. During the course, participants will learn protocols and signalling procedures on all interfaces within the Base Station System, the organisation of air interface channels and cell parameters, signalling within Switching System (SS No. 7), and the cooperation between SS and BSS during procedures like call set-up and location update.

Prerequisites

None. Basic knowledge of GSM recommended.

Training Structure

Four-day training divided into logical sessions.

Methodology

Instructor-led training.