

# GSM Operation - Home and Abroad (1hour)

Forming part of mpirical's acclaimed "The Essential Guide to" series, this 1 hour eSeminar introduces the world's most successful mobile phone technology - GSM. Starting with a brief market appraisal, the eSeminar introduces the key components of a GSM network, prior to explaining how calls are established and data transferred. The eSeminar then moves on to describe the basic operation of a GSM network before addressing the concepts of mobility and roaming.

## Who Should Attend

Telecoms Professionals requiring a focused insight into the world's most popular mobile phone technology. Technical Sales & Marketing Teams requiring a succinct overview of GSM.

## Course Outline

Divided into 3 sections, the topics covered will include:

### Section 1: The GSM Network (20 minutes)

The eSeminar begins with a brief review of the GSM market prior to differentiating between the expressions "circuit switched" and "packet switched". Following this, the section then moves on to highlight the key components within a typical GSM network in order to demystify some of the terms and expressions which are in daily use.

- GSM - A market analysis.
- Circuit switching & packet switching.
- The key components of a GSM network.

### Section 2: GSM Basic Operation (20 minutes)

The second section explains how calls are established in GSM, from both a mobile originated and mobile terminated perspective. In addition, data transfer is also examined, showing how GPRS could be used to download a web page onto a mobile.

- Attaching to the network.
- GSM Call Setup - Mobile Originated & Terminated.
- Data Transfer across GPRS.

### Section 3: Mobility and Roaming (20 minutes)

The concluding section explores the fundamental feature of mobility, which is inherent to all cellular networks. Through discussion of the GSM handover process, the section will describe how network connectivity is maintained as the mobile moves location. Further to this, the challenge of roaming is also addressed, describing the procedures which support the ability to use your mobile on the networks of Mobile Service Providers abroad.

- GSM Cell Coverage.
- Handovers.
- Global Roaming Procedures.