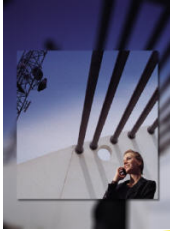


Mobile Systems



UMTS Core Network



The Core Network course covers the R-99 and R-4 network architecture with related node descriptions and explains concepts and services.

OBJECTIVES

- Understand UMTS Core Network..
- procedures
- signaling and traffic
- external network connections
- services
- security
- charging and billing

TARGET GROUP

- People working with GSM/UMTS in..
- service
 - management
 - development

PRECONDITION

The standard level requires general knowledge in mobile systems and telecommunication

UMTS Core Network

Standard - 2 days

Content day1

- ✕ **GSM evolution to R-4**
 - GSM/GPRS/EDGE/UMTS
- ✕ **IP and related protocols** - refresh
 - IPv4, IPv6
 - TCP/UDP
 - DNS
 - QoS
- ✕ **R-4 CN Architecture**
 - G/MSC-server
 - MGW
 - SGSN, GGSN
 - Protocols and signaling gateways
 - New interfaces

✕ Services

- CAMEL
 - SCF, SSF, SRF
 - CAP
- Service nodes
 - LCS
 - MExE
 - USAT
- OSA principles
 - AS, Framework and Network nodes
- VHE

Content day2

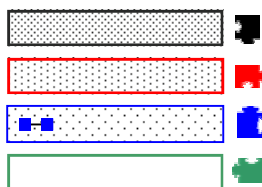
- ✕ **MMS**
 - Relay/Server
 - Interfaces and protocols
- ✕ **Security**
 - procedures
 - privacy
 - integrity
 - authentication
- ✕ **Roaming**
 - GRX
- ✕ **Charging and billing**
 - CS and PS
 - CDR's, CGF
 - CGF and billing systems
 - pre-paid solutions
- ✕ **IMS primer**
 - Features and new nodes

Related Courses: UMTS, IMS

Product

UCN-1:UMTS Core Network (2 days)

UCN-1



"3G systems will provide access, by means of one or more radio links, to a wide range of telecommunication services supported by the fixed telecommunication networks and to other services that are specific to mobile users. A range of mobile terminal types will be encompassed, linking to terrestrial and/or satellite-based networks, and the terminals may be designed for mobile or fixed use." *Federal Communications Commission*

 **Frendus Education**

Strandgatan 2
SE-582 26 Linköping
Sweden

+46 13 125020
www.frendus.se, info@frendus.se

Please call for more information

