V1.500

EGPRS
Design Details & System Engineering

Course Duration:

- 2 days

Course Description:

- This course addresses the needs of engineers and technicians who are already experienced in GPRS and have a good understanding of EDGE.
- Focus of this course is put on all relevant aspects of EDGE as expansion of GPRS. Special emphasis is given to the physical layer details and to the extensions of EDGE in the RLC/MAC-protocol.

As in all our courses we integrated several interactive exercises for a perfect learning experience.

Pre-Requesites:

- Very good understanding of GPRS networks, protocols, operation and parameters. Previous knowledge of all GPRS-details from our training course “GPRS from A - Z” is required. In addition, we advise our course “GPRS – Signaling & Protocol Analysis” to be taken in upfront.
- Previous design and/or testing experience with GPRS/EGPRS-networks and/or mobile stations is favorable.

Course Target:

- The student will be enabled to understand all relevant details of EGPRS within the RAN and the mobile station.
- The student is enabled to develop, test and operate EGPRS hard- and software.

Some of your questions that will be answered:

- How does blind detection work?
- What are the implications of using 3π / 8-Offset 8-PSK-modulation?
- What is tail biting and how does it work?
- What are the differences and pros/cons between ARQ I and ARQ II?
- How exactly do MCS-1 to MCS-9 work?
- Under what circumstances can MCS-1 to MCS-9 be used?
- What are the extensions in the RLC/MAC-layer for EGPRS?
- What adaptations are required on the network side to provide for EGPRS?
- How does EGPRS compare to 1xRTT, 3xRTT and UMTS?

Who should attend this class?

- Everybody who needs to design EGPRS mobile stations and network equipment.
- Operators who need a detailed understanding of EGPRS.
- Test engineers who need to integrate EGPRS equipment and mobile stations.

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Solutions for the Practical Exercises

List of Acronyms