INACON GmbH

GPRS
Signaling & Protocol Analysis
Vol. 1: RAN and Mobile Station (Release 5)

Course Duration:

▸ 3 days

Course Description:

▸ This course addresses the needs of engineers and technicians who are already experienced in GPRS.

▸ This first part of the course focuses on the aspects of GPRS as seen from the perspective of the mobile station and within the Radio Access Network (RAN).

▸ The course has been updated to Release 5.

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

Pre-Requisites:

▸ Very good understanding of GSM networks, protocols, operation and parameters. If required, we advise our course "GSM – Signaling & Protocol Analysis" to be taken in upfront.

▸ Previous knowledge of GPRS is essential. If required, we advise our course "GPRS from A-Z" to be taken in upfront.

▸ Previous experience with GPRS network and / or mobile station operation is optional but favorable.

Course Target:

▸ The student will be enabled to understand all relevant details of GPRS-procedures within the RAN and the mobile station.

▸ The student is enabled to analyze recording files taken on the Air- and Abis-Interface.

Some of your questions that will be answered:

- How can I evaluate GPRS trace files on the various new interfaces (Gb, Gn, Gp) and on the Abis-Interface?
- What is the meaning of the various new parameters, counters and timers in GPRS protocols like, PAN_DEC, PAN_MAX, N3104, T3192, T3168, Gamma, Alpha, ... ?
- What is the meaning of the various new messages that have been defined for GPRS?
- How can I decode hexadecimal GPRS mobility and session management messages on the Abis-Interface?
- How can I optimize the operation of our GPRS network?
- Which statistical information can be retrieved by means of protocol testers to judge our network performance?
- In case of errors: How can I distinguish conformance problems of the mobile station from RAN issues?
- What meaning, relationship and consequences do parameters like BS_PCC_CHANS, BS_PRACH_BLKS, BS_PBCCH_BLKS, BS_PAG_BLKS_RES have?

Who should attend this class?

- Everybody who needs to optimize GPRS networks.
- Design Engineers of GPRS network equipment and GPRS mobile stations.
- Network Planners who need to build joined GSM / GPRS networks.
- Field engineers who have to analyze GPRS recording files.
- Test engineers who need to interpret GPRS recording files in the lab.

"This course is so exciting because it combines all the relevant theoretical material about GPRS with practical exercises and real life examples. Definitely, this course is a must for everybody who shall operate and optimize GPRS networks!"

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dio Link Control / Medium Access Control (RLC / MAC)

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    BVCIs in Intra Domain Connections

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se Station System GPRS Protocol (BSSGP)

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Non-Transparent Signaling related to the management of the Gb-Interface
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