Understanding BIP (Bearer Independent Protocol)
The fastest way to communicate with your SIM card

Over-the-Air access to USIM cards has relied on the low-bandwidth SMS channel for several years. With the standardised BIP protocol, faster data exchanges can be made to access card content.

This training course will give you an overview of the BIP and CAT-TP standards, and how this new high speed packet protocol will help download applications & remotely manage your card content more efficiently.

At the end of the training you will

- Have a clear understanding of the new capacity of data exchange using BIP & CAT-TP standards
- Understand the BIP & CAT-TP implementation in the Gemalto cards
- Have examples of data communication between a server and a card

Who should attend

- SIM managers
- R&D Managers
- Project Managers
- IT Managers
- Development Staff

Pre-requisites:

- GSM SIM cards
- Toolkit mechanism
- Over The Air mechanism & security

This course is held in English

Key topics

- BIP & CAT-TP Standards
- GPRS/UMTS
- UDP/IP
- Toolkit

- SDU/PDU
- Segmentation
- CAT-TP security layer
- Push mechanism
Course Schedule

Schedule

Introduction
> What is BIP & CAT-TP?
> Card Standards dedicated to BIP
> Key benefits for network operators

The BIP communication
> Proactive commands and events
> BIP buffers
> Open & close channel
> Send & receive data

CAT-TP
> CAT-TP messages
> Opening a CAT-TP session
> What is the segmentation
> Sequence and acknowledgement number
> Re-transmission and time-out mechanisms
> Window management

Secured packet
> How to secure your CAT-TP messages

The PUSH mechanism + RAM + RFM
> The Push mechanism to open a BIP channel from the platform
> The available commands for RAM & RFM

Configuration
> How to configure the EF GPRS

Performances
> BIP performances vs SMS

Mobiles
> Available mobiles on the market