

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

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| <ul style="list-style-type: none"> > BIP & CAT-TP Standards > GPRS/UMTS > UDP/IP > Toolkit | <ul style="list-style-type: none"> > SDU/PDU > Segmentation > CAT-TP security layer > Push mechanism |
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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