

# International Roaming from A to Z

Extensive training on international roaming



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## Introduction

Rabión Consultancy and Connect2Roam have put together a new and extensive training on International Roaming, which takes employees that need to learn the roaming business through the complete portfolio of roaming services and processes, the implementation and the commercials.

The course offers an optimal combination of theory and practice. On the one hand side you are provided with extensive knowledge on the technique and the business of roaming and on the other hand we bring this into practice via for instance traffic cases and negotiation examples.

This course is ideal for those who want to get up to speed with roaming developments and want to become expert in roaming.

The training material covers International Roaming from A to Z and can also be used to dive deeper into specific areas of interest, rather than following the complete program. This could be useful e.g. for those who are already familiar with some of the areas of international roaming. In this way we can customize the training material to your specific needs.

Our Consultants have worked at roaming departments at various operators. We can therefore provide you we real life example cases and understand the challenges that roaming departments face.

# Topics for Training 'Roaming from A to Z'

## 1. What is roaming?

- Definition
- Inbound and Outbound roaming
- Mobile Communication Basics (GSM, GPRS, UMTS, LTE)
- Identifiers in the network (IMSI, MSISDN, SS7 point codes, Global Title)

## 2. How does roaming work?

- Location update process
- Signaling Basics, Signaling solutions for Roaming
- Outgoing calls
- Incoming calls
- SMS
- GRX and IPX
- MMS
- Inter operator Billing and TAP
  - Data Clearing
  - Financial clearing
- Retail Billing
  - Who pays for what (a.o. incoming calls/SMS/MMS)
  - TAP uplift
- NGN /IMS

## 3. Roaming organization

- Departments and responsibilities

## 4. Roaming processes part 1: Choosing roaming relationships

- Criteria for roll out of roaming relations
  - IOT cost
  - IOT revenue
  - Traffic relations
  - Footprint; yours and your competitors' (taking into account your end users)
  - Alliances

## 5. Roaming processes part 2: Realizing roaming relationships

- Contract negotiation phase/Coordination phase
- Network Implementation

- HLR
- SCCP connection
- Billing implementation
- Testing (IREG, TADIG)

## 6. Roaming processes part 3: Roaming enablers

- Data clearing house
- Financial Clearing House
- Signaling provider
- RAEX
- Roaming administration database

## 7. Roaming processes part 4: Roaming documents

- AA12/AA13, AA14, IR21, AA19

## 8. The Business Case for Roaming

- Contribution margin on Inbound & Outbound
- Outgoing traffic, Incoming traffic, Interconnect, SMS, Data

## 9. Pricing for Roaming

- Wholesale IOT's
- Roaming Regulation in the EU
  - Objectives of European Commission
  - Implementation phases
  - Effects on IOT's and non-EU countries
- Retail Roaming Pricing: IOT+, One Rate, Bundles, Data roaming

## 10. Value Drivers

- On Inbound & Outbound
- How to optimize the P&L
- Capturing Inbound Roaming
  - Radio network (sites, db level, network access levels, etcetera)
  - GLR (Gateway Location Register)
  - Services (CAMEL, CLIP, 3G, Short codes)
  - Visitor roaming promotions
    - Air miles
    - Prizes
  - Anti-SoR

## **11. Roaming Negotiations**

- Preparation, Strategies
- Deal structures
- Input towards traffic steering
- Monitoring
- Settlement
- Auction platforms

## **12. Additional roaming services**

- USSD call back roaming
- Customized Applications for Mobile Enhanced Logic (CAMEL)
  - Prepaid roaming
  - Postpaid roaming
  - CAMEL Phases
- GPRS roaming
- 3G roaming
- SMS Interworking
- MMS Interworking
- International roaming for MVNO

## **13. Roaming Value Added Services (VAS)**

- Virtual Home Environment
  - Prefix correction
  - Short code implementation
  - CLI
- Optimal routing, home routing
- Voicemail tromboning

## **14. Revenue Assurance**

- Fraud and Misuse
- NRTRDE (Fraud Prevention)
- Assurance and reconciliation

## **15. Steering of Roaming (SoR)**

- OTA
- Signaling
- MSC block, HLR Block
- SIM applets

## **16. Open connectivity Roaming**

- Roaming broker, Roaming Hub, Roaming sponsor or "piggy back" solutions

## **17. Measuring Quality**

- GSMA Global Roaming Quality (GRQ)
- How quality can be measured
- Roaming Dashboard

## **18. Cases**

- Traffic and Billing cases 'Voice'
- Traffic and Billing case 'SMS'
- Traffic and Billing case 'PS Data'
- Case 'LTE, VoIP and Roaming'
- Case 'Roaming Negotiations'