

Enabling Secure Service Delivery on Advanced Networks



Informa Telecoms Academy and Gemalto present a unique insight into new & existing services, their markets, & how they can be securely provisioned in advanced networks.

Ongoing and significant changes to the telecoms business environment is leading to more complex service delivery options - with a requirement for rich media content, the capability to host or enable huge numbers of applications, and a greater emphasis on third parties within the service delivery chain.

The overall service mix is important, including voice, internet access, messaging, television, and advanced Value Added Services (VAS).

This programme explains what and how advanced & secure services, applications and content, can and should be planned and implemented as operators evolve their networks to HSPA, LTE, IMS.



At the end of the training you will be able to...

Describe the relevance of services, content and applications provided by operators as they evolve towards advanced networks.

Understand with clarity, the architectures that will be adopted in advanced networks, identifying the role of network elements and interfaces.

Identify the major options for delivering each service, content and application. – in terms of distribution, billing, QoS, DRM and Security.

Understand end-to-end security considerations when deploying services over multiple network technologies, with several infrastructure providers

Who should attend?

Anyone who requires a comprehensive overview of advanced networks, services & their deployment...

- > Content / VAS Managers
- > R & D and Innovation Teams
- > Network IT Professionals
- > Product Marketing
- > Project Managers
- > Core Network Planners
- > Core Network Engineers
- > (U)SIM Manager...

Pre-requisites:

A basic understanding of telecommunications would be an advantage.

This course is held in English

Key topics

Radio & Cellular Systems Explained
Advanced Network Architectures (incl. LTE & 4G)
Service / Content / Application Delivery Frameworks
Market forecasts & trends

Security Issues
Implementation options, and standards
Services / Content / Applications, including IP TV, Web 2.0, IMS, M2M, Mobile TV, NFC



Day 1 & 2	Exercises
<p>Trainees registration and training overview</p> <p>Mobile Network Technologies</p> <ul style="list-style-type: none"> > The Evolution from 2G to 3.5G > Service Drivers, Applications & Market Analysis > 3GPP and 3GPP2 Work Efforts > Standards Status and Technology Trials > Spectrum for Mobile Services > 3G HSPA & LTE - Achieving Spectral Efficiency > Orthogonal Frequency Division Multiplexing (OFDM) > Multiple Antenna Systems and MIMO Principles > Uplink & Downlink Proposals for LTE > Access Network Architecture <p>Core Network Evolution</p> <ul style="list-style-type: none"> > IP in the Core Network > The Evolution from Circuit to Packet Switching > System Architecture Evolution (SAE) > Interfaces and Protocols > Migration Paths to SAE > Service Control and Delivery <p>Technologies for Multi-Service Networks</p> <ul style="list-style-type: none"> > Delivering Telecoms, Internet and Entertainment Services > Telecoms Networks > The Internet – Features and Architecture > Entertainment Networks > Broadband Access > Voice over IP Principles > Quality of Service (QoS) & Billing for Multi-play <p>User Experience: Services, Applications & Terminal / Handsets)</p> <ul style="list-style-type: none"> > Services –categories > Personalised, Location-based, High value services > Content > The Impact of Web 2.0 > Multi-band and multi - system handsets > Devices > Complimentary technologies <p>Service Delivery Systems</p> <ul style="list-style-type: none"> > Systems And Technologies > Value Added Service & Content Provision > Third Party Service Development > The Terminal/Handset > Billing for Services and Content > Messaging Systems: Multimedia Messaging Service... 	<p>Several Case Studies</p>

Day 2 & 3	Exercises
<p>Security in the Network</p> <ul style="list-style-type: none">> Network Security:<ul style="list-style-type: none">• GSM security• 3G Security• IMS• Service Security (Application Layer): Generic Bootstrapping Architecture• Evolution in LTE• Inter-working with WLAN/CDMA/WiMAX• Inter-standard Roaming> Why security is needed at the terminal: Handset security challenges <p>Personal Proximity Services</p> <ul style="list-style-type: none">> Alternative technologies (NFC, Zigbee, Bluetooth...)> Markets, actors landscape, use cases:<ul style="list-style-type: none">• Banks, Financial institutions• Transport Operators• Large Retailers• Poster Advertisers• Mobile Network Operators> Architecture> Security principles <p>Providing Secure Convergent Services</p> <ul style="list-style-type: none">> What is convergence?> Convergent devices> Connected PCs: Mobile Broadband> Network address book, Presence> Femtocells> Mobile-TV, IPTV technologies<ul style="list-style-type: none">• Broadcast, streaming• Conditional Access System (CAS)• Standards• Free-to-air, VOD, parental control> Security concerns <p>Machine-to-Machine (M2M) Services</p> <ul style="list-style-type: none">> Markets, Landscape, actors<ul style="list-style-type: none">• Automotive• Logistics managers• Metering• Video surveillance> Environmental constraints> SIM & subscription management <p>Bringing it all together</p> <ul style="list-style-type: none">> An integrated view> Success Stories> Timelines	<p>Several Case Studies</p>