

2nd Annual

# ENUM and VoIP Peering Forum


Enabling Converged IP and Multimedia Services in the  
New Telecommunications Environment

Berlin, Germany

4th–6th June 2007

**"ENUM has the potential** to revolutionize  
the telecommunications market and  
is a key enabler for convergence"

As the worlds of IT and telecoms draw ever closer now is the time to address the issues of fully migrating to an IP network. DNS registry creation, VoIP, interconnection are just some of the things that will be discussed at this high level forum. The people leading the way are here to push ENUM on further and make IP interconnect a reality for all.

 marcusevans

INCLUDING HALF DAY INTERACTIVE WORKSHOP

## Developing a Successful Business Model for ENUM and Answering the Needs of Heterogeneous Operators

Led by:

**Adrian Georgescu**  
Founder and CEO  
**AG Projects**

## Key Benefits of Attending:

- Understand the potential of ENUM to revolutionize the telecommunications market
- Evaluate the impact of ENUM on VoIP Peering
- Discuss ENUM as a key enabler for convergence
- Examine international services based on ENUM and VoIP
- Explore the regulatory framework for ENUM and VoIP Peering

## Conference Highlights:

- Deutsche Telecom case study on public ENUM
- Regulatory update on ENUM by ComReg Ireland and RTR Austria
- BT's perspective on ENUM and NGN
- O<sub>2</sub>'s perspective on infrastructure ENUM models and the GSMA

To book online go to

[www.metelecoms.com](http://www.metelecoms.com)

## In the Chair:

**Richard Stastny**  
Chairman  
**ENUM Platform Austria**  
Senior Analyst  
**OEFEF**

## List of confirmed speakers:

**Tony Holmes**  
Naming and Addressing Policy and Strategy Manager  
**BT Group Chief Technology Office**  
Chairman  
**ETSI TISPAN WG4**  
Chairman  
**UK ENUM Group**

**Andrzej Bartosiewicz**  
Head of the DNS Division  
**Nask**  
Member  
**International Telecommunication Union (ITU)**

**Kim Fullbrook**  
Core Network Engineering Team  
**O<sub>2</sub> UK**  
Chair of ENUM Ad-Hoc Group  
**GSMA**

**Pieter Nooren**  
Senior Consultant  
**TNO**

**Ondrej Filip**  
Director  
**CZ.Nic, Czech Domain Registry**

**Carsten Schiefner**  
Chair  
**RIPE ENUM Working Group**  
Manager Production Preparation IP – Technologies and Markets  
**Deutsche Telekom**  
Honorary Member of the Executive Board  
**Denic**

**Chan-Ki Park**  
Director, National ENUM Trial Project  
**National Internet Development Agency, Korea**

**Robert Schischka**  
CEO  
**ENUM.AT**

**Rodrigue Ullens**  
Co-Founder  
**Voxbone**

**Richard Stastny**  
Chairman  
**ENUM Platform Austria**  
Senior Analyst  
**OEFEF**

**Xavier Casajoana**  
CEO  
**VozTelecom**

**Richard Shockey**  
CoChair  
**IETF ENUM Working Group**

**Thomas de Haan**  
Policy Coordinator, Directorate-General  
Energy and Telecoms  
**Ministry of Economic Affairs, Netherlands**

**Mike Byrne**  
Chairperson  
**ComReg, Ireland**

**John Horrocks**  
Vice Chairman  
**ETSI TISPAN WG4**

**Wilhelm Wimmreuter**  
Systems Architect  
**Wimmreuter**

## Forthcoming Events

### 4th Annual MENA Mobile Forum 14-16 May 2007, Dubai, UAE

Service providers face tremendous competition and pressure to differentiate through rapid deployment of innovative, high quality services. With proven technology and extensive customer experience operators can manage their existing network environments while capitalizing on new services, next generation networks, continued growth in wireless connectivity, and fixed-mobile convergence. The vision in the telecommunication industry, according to many influential players in MENA and beyond who gathered at our previous MENA Mobile Forum in Dubai, is versatility, adaptability, smart investments in advanced technologies along with sophisticated and high end services. Another valuable point is that MENA mobile Operators must drive non-voice ARPU more effectively. To tap the huge regional growth potential, GCC and North African operators are actively increasing their presence with innovative products and services. In line with this strategy, they plan to move up the value chain by integrating many services including an amalgamation of advanced multimedia services such as entertainment, mobile internet and digital TV.

### Marketing and Sales Strategies in (Converging) Telecoms 14-16 May 2007, UK, London

The Marketing and Sales Strategies in (Converging) Telecoms conference will address the key challenges facing the evolving telecom industry in developing new and more effective marketing strategies. It will provide a forum where telecom operators and service providers can discuss their sales, marketing, distribution, CRM and pricing strategies. It will offer the opportunity for telecom companies to learn of cutting-edge strategies to enable them to increase revenues, reduce customer churn and adapt to the converging landscape. This unmissable event will hear from senior speakers of Incumbent Telcos who will present case studies on their convergence stories and provide strategies for success.

### Successful MVNO Business Strategies 2007 21-23 May 2007, Barcelona, Spain

In mature telecoms markets the presence of MVNOs has become commonplace. The MVNO Market has seen a lot of new players emerge and try to find their niche in the very competitive mobile telecommunications market. **marcus evans** 2nd Annual Successful MVNO Business Strategies event will discuss the business opportunities that exist in the MVNO market after the initial hype surrounding this sector has died down and explore the strategies that have made market players successful in the current telecommunications environment. The conference will also explore the MVNO roadmap evaluating which markets have the best opportunities for MVNOs and how regulatory differences can affect entry into a new market.

### Strategic Telecoms Pricing and Services Bundling Forum 2007 4-6 June 2007, Washington US

The Inaugural **marcus evans** Strategic Pricing and Services Bundling Forum event in North America will discuss strategies for North American telecommunications marketing professionals to help them identify optimal entry pricing for new products and services, plan effective responses to competitive action and expand profit horizons through customer segmentation, price management and strategic pricing for increasingly sophisticated fixed and mobile value added services. Wrong pricing decisions can create barriers to growth with long term consequences for operators, learning how to effectively implement the appropriate pricing technique is an appropriate tool which can be used to drive revenue growth and increase your competitive advantage. As Professor E. Raymond Corey of Harvard Business School famously wrote in 1962, "Pricing is the moment of truth - all of marketing comes to focus in the pricing decision." But more than forty years on, the majority even of the largest businesses have no effective pricing discipline. This can be an expensive problem. This conference will address pricing issues across a broad spectrum and bring together experts from mobile and fixed operators as well as expert consultants and analysts. This conference will unite pricing specialists and provide an unprecedented opportunity for networking and information exchange. We will be examining not just retail pricing but wholesale pricing as well.

### Open Source Platforms and Applications in Telecoms 2007 13-15 June London, UK

**marcus evans** Open Source Platforms and Applications in Telecoms 2007 is one of Europe's premier open source conferences for the telecommunications industry. This conference will explore the open source and commercial off the shelf (COTS) ecosystem revolution currently taking place in telecoms industry and examine the opportunities that exist here for telecommunications carriers and service providers to accelerate deployment of the next generation infrastructure and services. This conference will also discuss the adoption of open specifications by operators, service providers and end users and explore the challenges they face.

For further information on any of the above events please get in touch with **Sumreen Rizvi** on [sumreen@marcusevansuk.com](mailto:sumreen@marcusevansuk.com)

Day 1

4th June 2007

### HALF DAY INTERACTIVE WORKSHOP

#### Developing a Successful Business Model for ENUM and Answering the Needs of Heterogeneous Operators

Led by:

**Adrian Georgescu**  
Founder and CEO  
**AG Projects**

- 14.00 **Welcome Address and Introduction**
- 14.20 **Reducing Operational Costs: Migrating from SS7/IN to SIP/ENUM**
- 15.00 **Evolution of Billing Systems: Flat fee per Service Type, Bill and Keep against per Minute Charging**
- 15.40 Coffee and Networking
- 16.00 **Increasing Revenues: Increase IP-to-IP coverage through VoIP Peering, Expand Services beyond VoIP to Video, Presence, Interactive TV and FMC**
- 16.40 **Fixed to Mobile Convergence: Combine Fixed Line and Mobile Services into a Single Application and a Converged Bill**
- 17.20 Closing Remarks and end of Workshop

#### About your Workshop Leader

Adrian Georgescu is Founder and CEO of AG Projects. Based in the Netherlands, AG Projects is a leading European company supplying service providers with turnkey SIP infrastructure systems. Adrian is an advocate of IETF standards, member of OpenSER management board, founder and co-chair of the Dutch ISOC SIP Special Interest Group. Prior to starting of his own company, Adrian had accumulated experience with Tomrad Communications, Esprit Telecom, GTS, Ebone and KPNQwest. Adrian's expertise is the design of high-availability infrastructures, addressing and numbering systems, signaling protocols, provisioning and mediation systems, implementation of disaster recovery plans. Adrian has received in 1996 a degree in Electrical Engineering from Faculty of Electrotechnics at the Polytechnic University of Bucharest, Romania.

#### About AG Projects

AG Projects specializes in serving companies like cable operators and Internet service providers. We provide simple solutions for their complex problems. Our focus is the delivery of SIP infrastructure that complements fiber to the home deployments, triple-play and converged fixed/mobile communication services. Delivery includes the analysis of requirements, tailoring of solutions to meet the requirements, project management, training and support activities.

5th June 2007

# Booking Line

Tel: +44 (0) 20 3002 3277

Fax: +44 (0)20 3002 3016

www.metelecoms.com

08.30 Registration and Morning Coffee

09.00 Chairman's Opening Address

**Richard Stastny**

Chairman

**ENUM Platform Austria**

Senior Analyst

**OEFEG**

## THE PROGRESS OF CURRENT PUBLIC AND PRIVATE ENUM IMPLEMENTATION

09.10 **Introduction of ENUM Capabilities and Market Overview**

- Discussing ENUM as a bridge between new and classic technologies
- Overview on current implementations and trials
- Private and public infrastructure ENUM
- ENUM business models: registries, registrars, users, operators, incumbents
- ENUM use cases

**Richard Stastny**

Chairman

**ENUM Platform Austria**

Senior Analyst

**OEFEG**09.50 **Operator Perspective****Public ENUM: Overview on the Status of ENUM Projects Being Conducted in Different Countries**

- Reasons behind public ENUM deployment
- Discussing the business case for public ENUM
- Adoption of public ENUM throughout Europe and worldwide
- Assessing regulatory issues

**Carsten Schiefner**

Chair

**RIPE ENUM Working Group**

Manager Production Preparation IP – Technologies and Markets

**Deutsche Telekom**

Honorary Member of the Executive Board

**Denic**

10.30 Morning Coffee and Networking

## ENUM REGULATION IN IRELAND

11.00 **ENUM from a Regulator Perspective**

- Are regulators stimulating or limiting the evolution of ENUM?
- Is there a need for national regulators to opt-in for ENUM?
- ENUM and privacy
- Control of ENUM databases: how ENUM registries can undermine the role of national regulators?
- Regulation in an NGN environment and the role of ENUM

**Mike Byrne**

Chairperson

**ComReg, Ireland**

## ENUM AND NUMBER PORTABILITY

11.40 **Looking at ENUM in the Context of Number Portability and 112/999 Emergency Caller Location**

- Using ENUM to resolve the challenges of number portability within the NGN environment
- Discussing ENUM as a solution for number portability
- Addressing the future of E.164/ENUM numbering
- Using ENUM as a tool for cost optimization
- Latest updates on caller location for 112/999 based on ENUM

**Andrzej Bartosiewicz**

Head of the DNS Division

**Nask**

Member

**International Telecommunication Union (ITU)**

## INFRASTRUCTURE ENUM FOCUS: DRIVERS AND BUSINESS MODELS

12.20 **Infrastructure ENUM Update**

- Assessing "infrastructure" as the current driving force for ENUM
- Infrastructure ENUM: the federation approach
- Infrastructure ENUM: The GSMA Approach
- Exploring IP backbone platform ENUM
- ENUM done right: complying with the RFCs and what to configure on DNS servers

**John Horrocks**

Vice Chairman

**ETSI TISPAN WG4**

13.00 Luncheon

14.00 Coffee and Networking Time

14.20 **Operator Perspective****Infrastructure ENUM Models: the GSMA Way to ENUM Implementation**

- Assessing the peering federation model
- Delivering new revenue opportunities for service providers, while significantly reducing the costs of interconnection
- Ensuring end-to-end quality of service
- Enabling rich multi-media end to end IP communication
- Placing an emphasis on identity, security and privacy features

**Kim Fullbrook**

Core Network Engineering Team

**O<sub>2</sub> UK**

Chair of ENUM Ad-Hoc Group

**GSMA**15.00 **Infrastructure ENUM Case Study: Critical factors for Success**

- An overview of what happened so far: different types of ENUM(s)
- Lessons learned from trail to launch and introducing I-ENUM
- Setting a timeline for the spread of ENUM in Europe
- Infrastructure-ENUM and user-ENUM compared

**Robert Schischka**

CEO

**ENUM.AT**

15.40 Afternoon Tea

## A CRITICAL REGULATORY OVERVIEW FOR ENUM AND VOIP PEERING

16.00 **Regulatory Issues and Public Private Partnership**

- Where does ENUM fit in Telecom regulation?
- How governments and regulators can facilitate private sector led initiatives while safeguarding basic public policy interests?
- Looking at ways forward in public private partnership
- Determining the adoption of public ENUM through Europe

**Thomas de Haan**

Policy Coordinator, Directorate-General Energy and Telecoms

**Ministry of Economic Affairs, Netherlands**16.40 **ENUM in Korea and Neighboring Countries**

- Wrapping up the trials: the history so far
- User and infra ENUM scenarios in 2007
- Considerations of VoIP clearing house based on ENUM
- The vision ahead for true convergence of services

**Chan-Ki Park**

Director, National ENUM Trial Project

**National Internet Development Agency, Korea**

17.20 End of Day Two

08.30 Registration and Morning Coffee

09.00 Chairman's Opening Address

## FULFILLING THE VOIP PEERING PROMISE

09.10 VoIP Operator Case Study

**Business and Regulatory Impacts on Numbering in end-to-end VoIP Interconnections**

- Evaluating different peering business models
- Understanding the implication of VoIP numbering in Europe
- Assessing the impact on interconnection agreements when ENUM is applied

**Rodrigue Ullens**

Co-Founder

Voxbone

09.50 VoIP Operator Case Study

**Fulfilling the VoIP Peering Promise and Creating Value for the End User**

- Understanding how VozTelecom is creating value for the end user through VoIP peering
- Enhancing the user experience by reducing the cost of the end-user service
- Reducing time to market and producing capital expenditure
- The role of strategic partnering for success in the VoIP peering environment

**Xavier Casajoana**

CEO

VozTelecom

10.30 Morning Coffee and Networking

11.00 **ENUM as the Technology to Fill the Gap Between Separated VoIP Islands in the VoIP Market**

- Bridging VoIP islands through VoIP peering
- ENUM as a protocol and set of functionalities to interconnect VoIP and other communication services directly over IP networks
- Solving the problems related to VoIP interconnect
- Discussing VoIP and net neutrality

**Wilhelm Wimmreuter**

Systems Architect

Wimmreuter

11.40 Regional Case Study

**Open and Closed Models for ENUM and VoIP Interconnect in the Netherlands**

- ENUM and VoIP interconnect: exploring the evolving business environment
- Open and closed models for ENUM-based VoIP interconnect
- Feedback from the industry: results of a survey among operators, regulators and vendors
- Looking for the match between stakeholders' interests and ENUM implementation models
- Investigating the way forward: the evolution of today's pilots to large-scale ENUM-based VoIP interconnect

**Pieter Nooren**

Senior Consultant

TNO

12.20 Luncheon

13.20 Coffee and Networking Time

## EVALUATING ENUM IN THE NGN ENVIRONMENT

13.40 Operator Perspective

**ENUM and the Future NGN Architecture**

- ENUM vs IMS TISPAN/3GPP
- ENUM as a tool to implement SIP clients
- Implementing ENUM within SIP networks as part of the overall IP deployments efforts
- Discussing ENUM as a tool to enable convergence

**Tony Holmes**

Naming and Addressing Policy and Strategy Manager

BT Group Chief Technology Office

Chairman

ETSI TISPAN WG4

Chairman

UK ENUM Group

## STANDARDIZATION DEVELOPMENTS

14.20 **Standards Developments: An Update on the Work Being Conducted by the IETF ENUM Working Group**

- An introduction to the status of work in the IETF ENUM WG
- The direction and evolution of ENUM DNS based architecture
- Looking ahead to the future and the ongoing work with encouraging the exchange of technical information within the global ENUM community

**Richard Shockey**

CoChair

IETF ENUM Working Group

15.00 Afternoon Tea

## NATIONAL ENUM IMPLEMENTATION

15.20 **Launching an ENUM Infrastructure on a Commercial Level: Results from Implementation in the Czech Republic**

- Setting a vision: taking full advantage of all benefits offered by Internet telephony
- Ensuring higher availability and reliability and simplifying the ENUM domain registrar process from testing to implementation
- The challenges of moving to full commercial operation
- ENUM and the operator: critical adoption factors

**Ondrej Filip**

Chief Executive Officer

CZ.Nic, Czech Domain Registry

## INFRASTRUCTURE ENUM

16.00 Panel Discussion

**Examining the Drivers to Implement Infrastructure ENUM for Different Types of Operators: Incumbent, Mobile, Cable and VoIP**

- Defining the infrastructure ENUM business case for different telecoms players
- Examining the drivers for initial implementation of infrastructure ENUM
- Cost issues consideration for different business models
- Looking at ENUM as an enabler for new services

*The panel will be joined by key speakers from both days*

16.40 Closing Comments from the Chair and End of Conference

## Complimentary accommodation booking service

Should you require accommodation whilst attending a **marcus evans** conference, please do not hesitate to contact our accommodation agent First Option who will be more than happy to make a reservation for you. Please quote the name of the **marcus evans** conference you are attending. Freephone within UK: 0870 1914717  
Tel outside UK: +44 (0) 161 601 4038, Fax: +44 (0) 161 968 9310  
Email: marcusevanshotels@first-option.co.uk  
www.first-option.co.uk/marcusevans/

## Booking line

Tel: +44 (0)20 3002 3277

Fax: +44 (0)20 3002 3016

www.metelecoms.com

Venue confirmation will be forwarded to you one month prior to the conference

**IMPORTANT - Please do not remove or obscure the above label. It contains vital information**

Code: A B C D F X UK-AM2472

Name .....

Position .....

Organisation .....

Address .....

Postcode ..... Tel .....

Fax ..... Email .....

**AUTHORISATION** Signatory must be authorised to sign on behalf of contracting organisation

Name ..... Position .....

Signature ..... Date .....

This booking is invalid without a signature

**TO BOOK ONLINE GO TO WWW.METELECOMS.COM****Pay in UK Sterling**

- CONFERENCE + WORKSHOP @ £1898.00 + SERVICE CHARGE + VAT = £2730.10
- CONFERENCE FEE @ £1448.00 + SERVICE CHARGE + VAT = £2082.80

**Pay in Euro**

- CONFERENCE + WORKSHOP @ €2960.00 + SERVICE CHARGE + VAT = €4257.70
- CONFERENCE FEE @ €2232.00 + SERVICE CHARGE + VAT = €3210.50

VAT will be charged at 16%. A 24% service charge will be added to all conference fees prior to the event and is inclusive of programme materials, luncheon and refreshments.

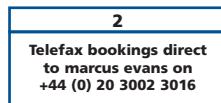
**METHODS OF PAYMENTS**

Cheque - made payable to **marcus evans** Conferences Ltd - VAT NO. DE812969676  
 Bank Transfer - **marcus evans**, Barclays Bank Plc, PO Box 544,  
 54 Lombard Street, London EC3V 9EX - Sort Code : 20 00 00  
 A/C NO : 70427683, quoting delegate name(s) / invoice number and UK-AM2472 as reference.  
 Credit Card - Please debit my MASTERCARD / VISA / EUROCARD / AMEX / DINERS CARD  
 Payment is required within 5 working days

Card Holder's Name .....

Card No. ....

Signature ..... Valid From ..... Expiry date .....

**TWO WAYS TO REGISTER****Terms & Conditions:**

- Fees are inclusive of programme materials and refreshments.
- Payment terms: Following completion and return of the registration form, full payment is required within 5 days from receipt of invoice. PLEASE NOTE: payment must be received prior to the conference date. A receipt will be issued on payment. Due to limited conference space, we advise early registration to avoid disappointment. A 50% cancellation fee will be charged under the terms outlined below. We reserve the right to refuse admission if payment is not received on time. Unless otherwise stated on the booking form, payment must be made in pounds sterling.
- Cancellation/substitution: Provided the total fee has been paid, substitutions at no extra charge up to 14 days before the event are allowed. Substitutions between 14 days and the date of the event will be allowed subject to an administration fee of equal to 10% of the total fee that is to be transferred. Otherwise all bookings carry a 50% cancellation liability immediately after a signed sales contract has been received by **marcus evans** (as defined above). Cancellations must be received in writing by mail or fax six (6) weeks before the conference is to be held in order to obtain a full credit for any future **marcus evans** conference. Thereafter, the full conference fee is payable and is non refundable. The service charge is completely non-refundable and non-creditable. Payment terms are five days and payment must be made prior to the start of the conference. Non-payment or non-attendance does not constitute cancellation. By signing this contract, the client agrees that in case of dispute or cancellation of this contract that **marcus evans** will not be able to mitigate its losses for any less than 50% of the total contract value. If, for any reason, **marcus evans** decides to cancel or postpone this conference, **marcus evans** is not responsible for covering airfare, hotel, or other travel costs incurred by clients. The conference fee will not be refunded, but can be credited to a future conference. Event programme content is subject to change without notice.
- Copyright etc: All intellectual property rights in all materials produced or distributed by **marcus evans** in connection with this event is expressly reserved and any unauthorised duplication, publication or distribution is prohibited.
- Data Protection: Client confirms that it has requested and consented to **marcus evans** retaining client information on **marcus evans** group companies database to be used by **marcus evans** groups companies and passed to selected third parties, to assist in communicating products and services which may be of interest to the client. If the client wishes to stop receiving such information please inform **marcus evans** local office or email [gleavep@marcusevansuk.com](mailto:gleavep@marcusevansuk.com). For training and security purposes telephone calls may be recorded.
- Important note: While every reasonable effort will be made to adhere to the advertised package, **marcus evans** reserves the right to change event dates, sites or location or omit event features, or merge the event with another event, as it deems necessary without penalty and in such situations no refunds, part refunds or alternative offers shall be made. In the event that **marcus evans** permanently cancels the event for any reason whatsoever, (including, but not limited to any force majeure occurrence) and provided that the event is not postponed to a later date nor is merged with another event, the Client shall receive a credit note for the amount that the Client has paid to such permanently cancelled event, valid for up to one year to be used at another **marcus evans** event. No refunds, part refunds or alternative offers shall be made.
- Governing law: This Agreement shall be governed and construed in accordance with the law of England and the parties submit to the exclusive jurisdiction of the English Courts in London. However **marcus evans** only is entitled to waive this right and submit to the jurisdiction of the courts in which the Client's office is located.

**marcus evans** ENUM and VoIP Peering Forum will examine ENUM capabilities in present telecommunications network architecture and how it will migrate to the IMS based architecture of the future.

The evolution of telecommunications has proceeded from a monolithic telephony service to what today is known as Internet. ENUM carries the promise of a new step in this development by bringing the Internet technology into the PSTN networks. It can be said that ENUM weaves traditional phone numbers and the Internet for VoIP, under the ENUM standard, which allows VoIP to use the DNS for signalling. ENUM also enables operator directory services and number portability.

With trials being successfully run in almost every country, ENUM is now about to move into worldwide deployment. All telcos have recognized ENUM's potential to reduce operating costs and the possibilities it brings to offer new services. This must attend event will examine this new opportunity for telecommunications market players and Internet registries and its market potential. Also, with VoIP peering becoming an ever more approachable option, industry experts will present case studies and developments in this exciting area.

For further information on this conference and special discounts please contact **Sumreen Rizvi** on +44 (0) 20 3002 3277 or email [sumreen@marcusevansuk.com](mailto:sumreen@marcusevansuk.com)

**Who should attend this conference?****Operators of all kinds**

- Fixed Line Operators
- Mobile Operators
- Cable Operators
- ISPs
- VoIP vendors
- Consultants and Analysts
- Associations
- VoIP Service Providers

**To be represented by**

- Heads of Interconnection
- Chief Technology Officers / Technical Directors / Networks Directors
- Technology Strategy
- Network Engineering/Design/Development
- Heads of IP Multimedia/Services
- Product Development
- Access Network Development
- Broadband Services
- Voice Development Managers
- Product Managers, IP Telephony
- Project Directors/ Managers VoIP/ Next Next Generation Networks
- Switching and Networks Services
- Technology Developments and Standards
- Regulation