3rd Annual i3Forum Conference

The Future is All IP

May 17, 2012
Chicago

Service Workgroup Overview

Piero Irrera, Director Wholesale Carrier Services

Vodafone Germany

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Service WG: key past deliverables
Several flavours of IPX

- Understanding the several flavours of IPX, May 2011
  - GSMA-IPX specifications to enable end-to-end QoS, SLAs, cascading, security and convergence
  - several solutions marketed as IPX answer different requirement and address a portion of the current market needs
  - only few fully address and are compliant with the GSMA-IPX specifications, until now mostly focused on on-net voice
  - need of IPX interconnections including end-to-end QoS, SLAs

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Service WG: key past deliverables
Routing and Addressing

- Routing and Addressing services for International Interconnection over IP, May 2010
  - need for a standard Routing and Addressing approach that answers all the technical, business and regulatory requirements

- Global SPID Specifications Release, May 2011
  - i3 Forum recommends Global SPID
  - i3 Forum's ambition to provide information and support about what is considered by the carriers' community as important requirements for a Global SPID

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Service WG: recent activities
Video communications over IP, May 2012

• **Use-cases**
  - one-to-one
  - one-to-many
  - any-to-any (esp. business video conferencing, HDVC)

• **Different backgrounds and different business models**
  - MNO: minute-based
  - Business SP: flat/per MB/minute, sell/customize/integrate eq.
  - Hardware/software suppliers: sell equipment/software (+service)
  - OTT: advertisement; collect and sell information

• **Positioning in the video-communications value-chain**
  - Transport
  - Service aware interconnection and interoperability
  - Presence and policy management

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Service WG: recent activities
Multi-service IP interconnection, May 2012

- Network access types for multi-service
  IP interconnection
  - Dedicated private link
  - Virtual private dedicated link
  - Virtual private ‚over the Internet' link (IP-MPLS, IPsec)
  - Public Internet
  - Multi-service exchange

- Each access type has its pros/cons. To comply with GSMA-IPX requirements (end-to-end QoS, SLAs, cascading, security), IPX Provider has to rely on
  - Dedicated private link
  - Virtual private dedicated link

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Service WG: recent activities
IPX-Interconnection (NNI)

- How GSMA requirements can be fulfilled by i3forum's ready-to-use solutions?

- Definitions and scope of IPX services
  - On-net, off-net, multi-hop off-net, break-out
  - Service-unaware IPX-Transport service (optional)
  - IPX-Voice service

- Commercial settlement models for IPX Transport and IPX Voice service

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Service WG: recent activities
Impact of LTE
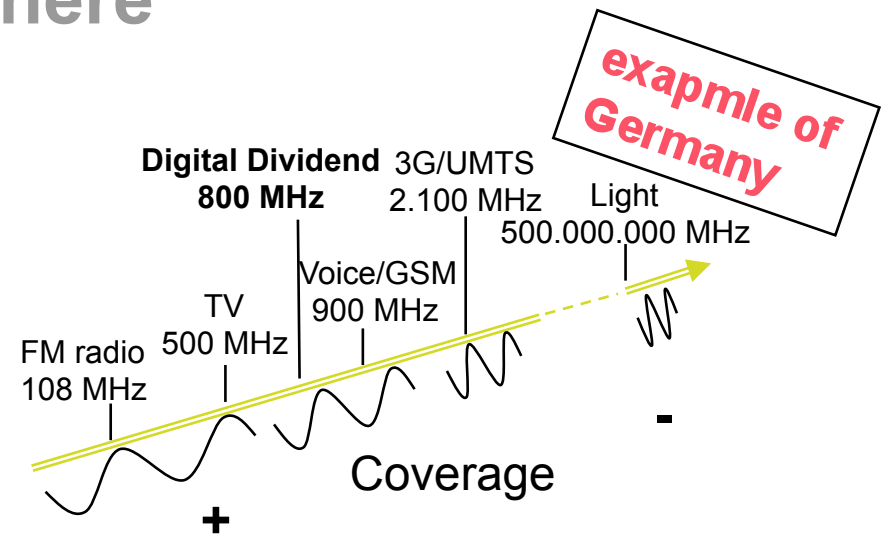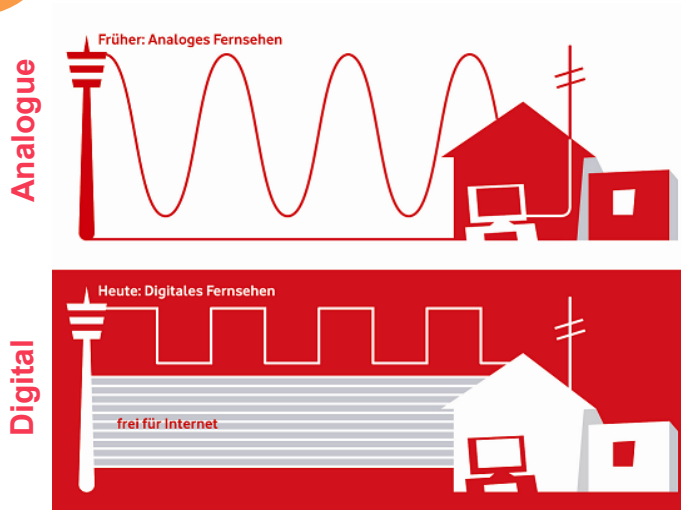
- LTE reality influenced by technology and regulatory backgound

- Services under LTE
  - existing fixed broadband services go mobile + special broadband-consuming mobility-services, e.g. RCS-e (Joyn)
  - frequency bands in different countries, LTE Roaming

- Business models for LTE interconnection
  - driven by new services, e.g. RCS-e interworking and charging principles

- Open Ends
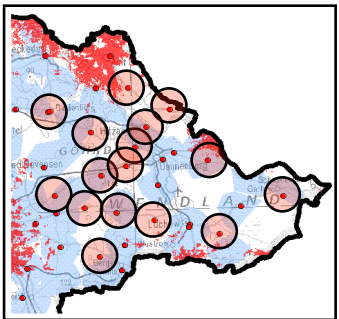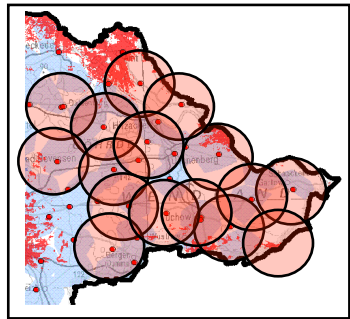 - Different frequency bands in different countries, LTE Roaming

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Thank You

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LTE: New spectrum makes broadband available everywhere

exapmle of Germany

Analogue — Früher: Analoges Fernsehen

Digital — Heute: Digitales Fernsehen — frei für Internet

FM radio 108 MHz

TV 500 MHz

Digital Dividend 800 MHz

Voice/GSM 900 MHz

3G/UMTS 2.100 MHz

Light 500.000.000 MHz

Coverage

+

−

Maximum coverage in rural areas and buildings with 800 MHz spectrum

UMTS 2.100 > LTE 800

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