



IMS – Separating Fact from Fiction

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Agenda

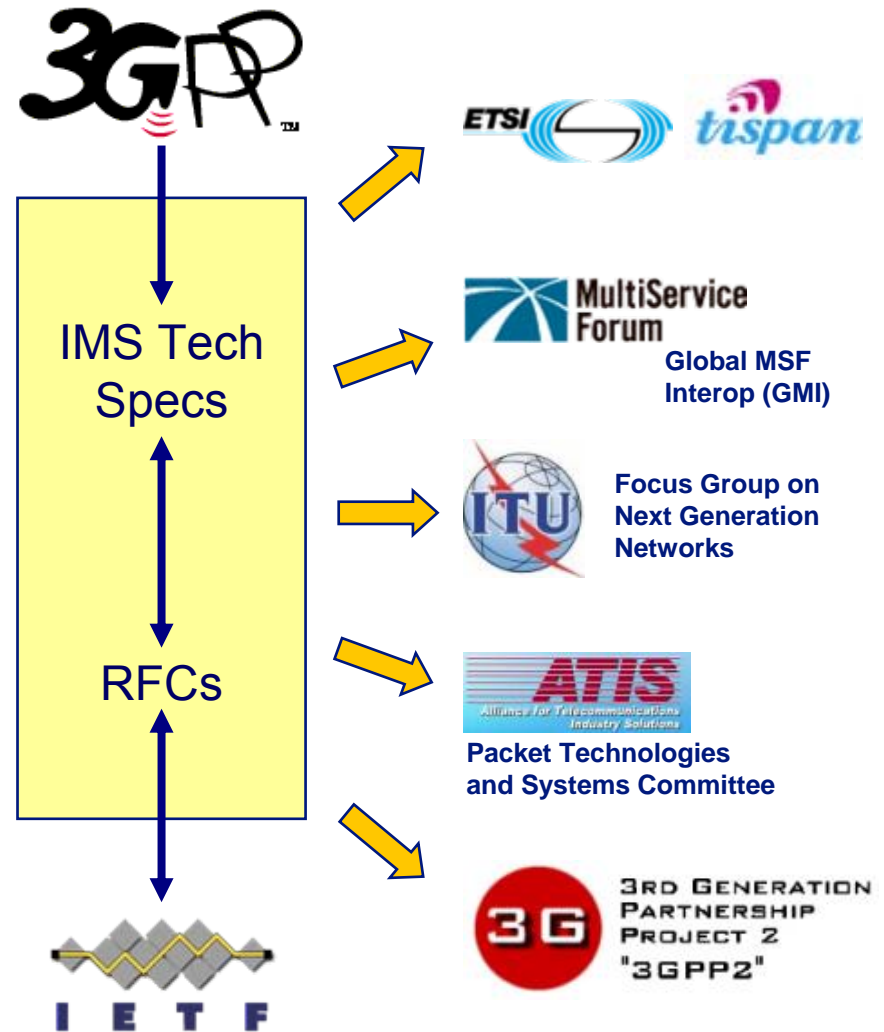
- Brief IMS Introduction
- The Promises of IMS
- Trends
- Migration Challenges
- Summary



IP Multimedia Subsystem (IMS) Overview

- ✈ Evolution of NGN standards
 - “Pure IP” vision with gateways at edge
 - Initially developed by 3GPP for packet-based 3G Mobile
 - Close IETF partnership
 - Other groups adopting, enhancing and driving interoperability testing
 - Fragmentation risk

- ✈ Will be the dominant framework for the delivery of wireline and wireless carrier-hosted services
 - Industry momentum



Worlds Colliding

➤ Communications convergence

- Technology
- Networks
- Devices
- Social Trends



The IMS Promise

Widely accepted model from late-90's softswitch architectures (e.g. IPCC)

Important extension of concepts in other recent architectures (e.g. MSF R2)

Significant innovation building on HLR concept

Major innovation, truly new to IMS

Separation of call control and media/signaling via H.248 / SIGTRAN

Separation of features (application servers) from call control via SIP and SCIM

Separation of subscriber database (HSS) from service logic via Diameter

Common service logic for all access mechanisms, with subscriber portability

- Network efficiency – move TDM to edge
 - Leverage commoditization with best-of-breed approach

- Rapid service development
- Open up to third-party developers

- Rapid service development
- Unified subscriber management reduces opex

- True fixed/mobile service convergence
 - Single service delivery platform for hybrid networks

Technology Trends

- Rapid Web development
- XML, HTTP, Java, SIP, Flash, ...
- Open source
- Broad base of skilled developers available
- Custom hardware becoming obsolete
 - Ubiquitous IP / Ethernet (T1s not required)
 - High-power general purpose processors
 - Industry-standard systems (e.g. ATCA)



Next Generation Subscribers

Today's Subscribers

Buy CDs/DVDs or pay for legal downloads



Next Generation Subscribers

Download via peer-to-peer
(Content should be free, right?)

Standard ringtones do the job just fine



Willing to pay \$3.25 for a 30 second ringtone*

Use a landline



Use a cellphone and Skype (voice should be free too, right?)

Cellular value = voice



Cellular = text & picture messaging (happy to pay for SMS), gaming

Focus on one conversation at a time



Multiple simultaneous chats via IM, SMS, video, email, (& voice?)

* Source: NPD Group

What Does IMS Mean for the Consumer?



Innovative services merging voice, video, data with guaranteed quality



More choices about *how, when* and *where* to communicate

Seamless roaming between devices, networks and carriers

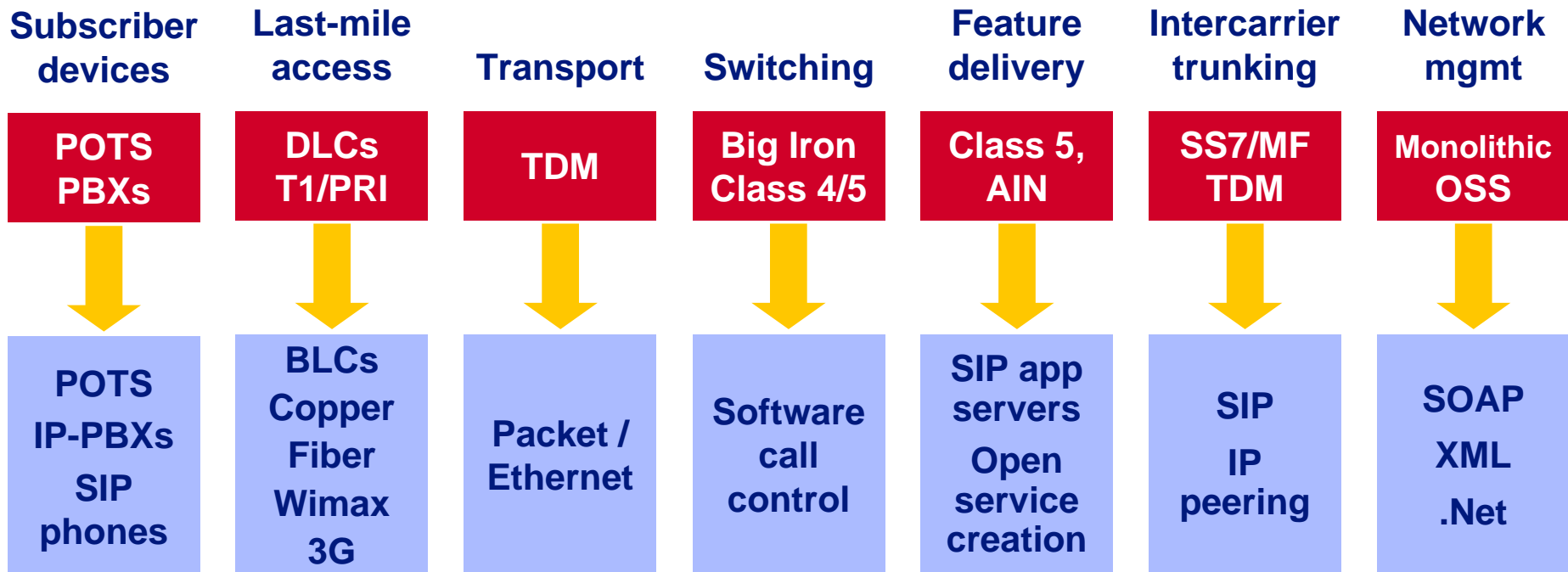


▶ **Totally integrated digital lifestyle for the iPod generation**

Convergence of Social and Technology Trends

- ✈ Cannot predict what users will want \Rightarrow technology must support rapid service creation
- ✈ The IP Multimedia Subsystem (IMS) is the industry's most complete blueprint to date for enabling
 - Rapid service development on top of carrier-grade telephony
 - SIP/XML service creation interfaces
 - Separation of features from call control
 - Open subscriber directory (HSS) interface
 - Common capabilities shared across multiple applications
 - Unified service core, agnostic of access technology
 - Bridge the gulf between wireline, Wifi/Wimax, cellular, ...
 - Design services for people, not specific networks / devices

The Technical Challenge: Network Migration



 A Multimedia-Enhanced Telephony Architecture (META) enables ***step-wise migration*** to IMS

- New services seamlessly over SIP and legacy access networks
- Proven feature & interface equivalence

Summary

➤ Fiction

- IMS is just “the next thing”
- IMS is here today (totally)

➤ Fact

- The future is hard to predict
- IMS is the network of the future
- The migration challenges are not trivial
- MetaSwitch can help you get there! 😊

