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ITU-T IPTV Standards Development: leading the way towards a harmonized IPTV Global Standard

John Visser, P.Eng., Chairman, ITU-T SG 19 / Nortel Acknowledgement: Ghassem Koleyni, IPTV-GSI TSR coordinator

Outline

- Why talk about IPTV?
- What is IPTV?
- IPTV domains and architecture
- The IPTV-GSI
- Concluding Remarks

Why talk about IPTV?

Traditional TV has been a passive experience for the user; NGNs open up new possibilities, enabling active user control and involvement

 Converged ICT is rapidly becoming reality: IPTV is part of this and awareness of the evolving world of "TV" is essential to forward planning for the evolution of the supporting infrastructure

What is IPTV?

IPTV is defined as multimedia services such as television/video/audio/text/ graphics/data delivered over IP-based networks managed to provide the required level of QoS/QoE, security, interactivity and reliability.

IPTV is NOT just Television over IP * It is much more *

IPTV Focus Group

- Established 2006-04; Terminated 2008-01
- TSB Director open consultation meeting with ITU-T Members on IPTV service and its standardization (Geneva, 4-5 April 2006), FG-IPTV was established.

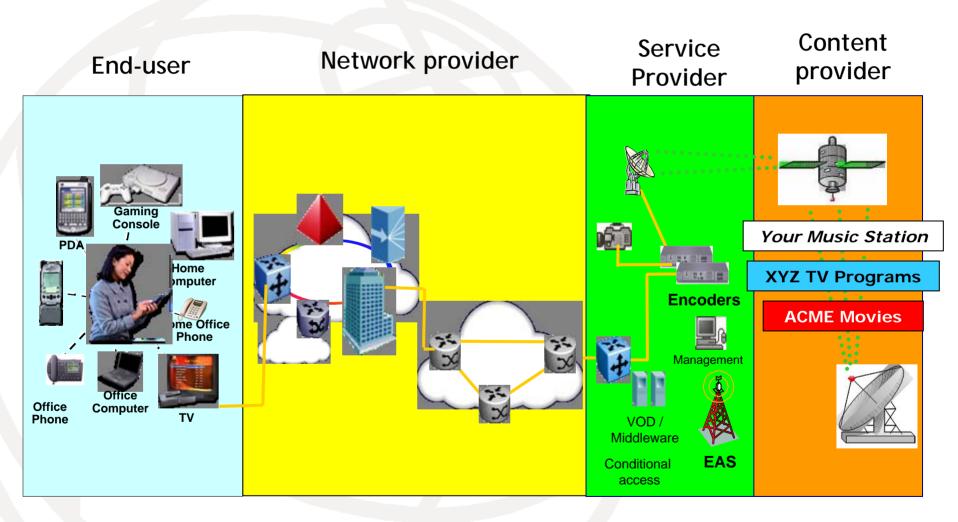
FG IPTV Mission Statement

Coordinate and promote the development of global IPTV standards. The Focus Group will take into account the existing work of the ITU study groups as well as other Standards **Developing Organizations**, Fora and Consortia.

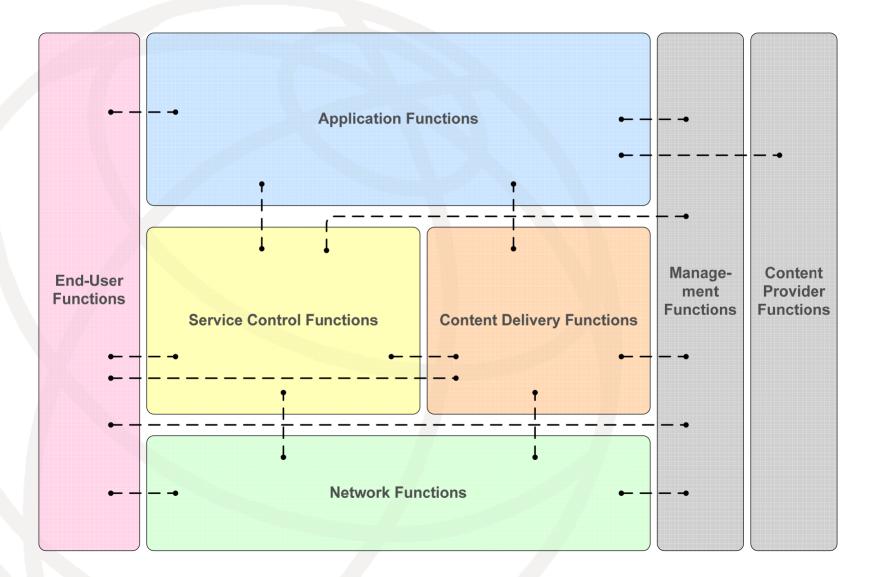
Goals of FG IPTV

- Define IPTV and identify scenarios, requirements and services
- Review and perform gap analysis of existing standards and ongoing work
- Coordinate existing standardization activities
- Harmonize the development of new standards
- Encourage interoperability with existing systems

IPTV Domains



IPTV Functional Architecture



IPTV-GSI Work Areas

- Architecture and Requirements
- QoS, QoE and Performance
- Service Security and Content Protection
- Network and Control



Ref: http://www.itu.int/ITU-T/gsi/iptv/

- End Systems and Interoperability
- Middleware and Application Platforms

Collaboration With Other SDOs

- Liaising with most SDOs involved in development of IPTV related standards
- Used ATIS IIF, DSL Forum and Home Gateway Initiative related documents as input to prepare ITU-T standards
- Good working relationship with DVB project and ETSI TISPAN

Regional and national bodies and related SDOs benefit immensely from contributing to ITU-T and having their work incorporated into globally recognized and accepted standards

Major Achievements

 Agreed functional architecture covering non-NGN and NGN (IMS and non-IMS) based platforms, QoE/QoS and performance monitoring

- Facilitates alignment of SDOs and ITU-T
- In depth discussion on home network architecture and other related issues
 - Captured requirements covering home network, metadata, middleware, public interest, security, unicast and multi-cast

Meetings

Five meetings planned for 2008, four have already taken place:

- 15-22 January 2008, Seoul
- 30 April 7 May, Geneva
- 23-27 June 2008, Geneva
- 1-5 September 2008, Geneva
- Significant number of participants and contributions per meeting
- Future meetings:
 - 1-5 December 2008, TBD

Deliverables

Global IPTV standards on:

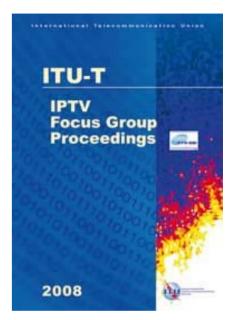
- Architecture
- Services requirements
- QoS/QoE, traffic management mechanisms, performance monitoring
- Security aspects
- End systems and home networking
- Middleware, applications & content platforms

IPTV Focus Group Proceedings

IPTV FG Proceedings are available for free download:

www.itu.int/publ/T-PROC -IPTVFG-2008/en

(14.3 MBytes compressed)



IPTV-GSI documents available:

www.itu.int/ITU-T/meetingdocs/index.asp

 Use index in left pane to select IPTV-GSI, then select documents in right pane (TIES account required)

Concluding remarks

- IPTV devices meeting global standards benefit operators and end-users
- ITU-T is the unique place where global IPTV standards can be created
- ITU-T IPTV standardization success is from addressing all IPTV related aspects and having all experts at the same time and in the same place

ITU-T standards compliant products are key to global interoperability

Thank you for your attention!

John Visser, P.Eng.

ITU-T: Chairman, SG 19 Mobile telecommunication networks

Nortel: CTO Office -International Wireless Standards

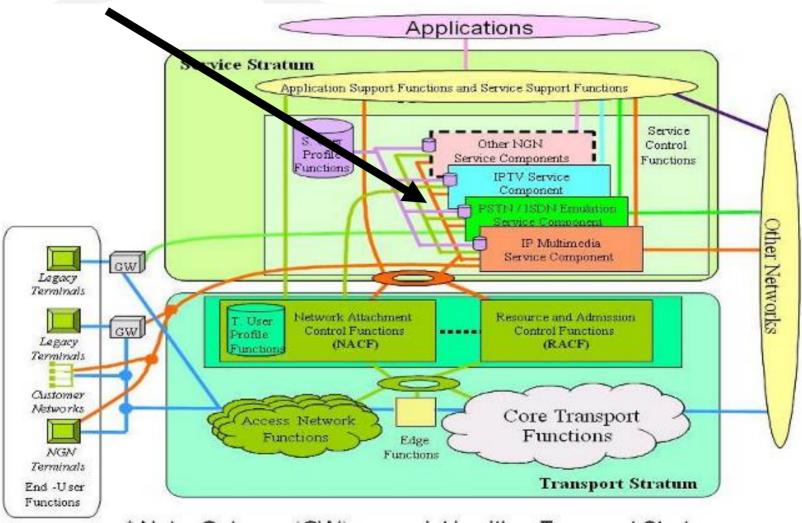
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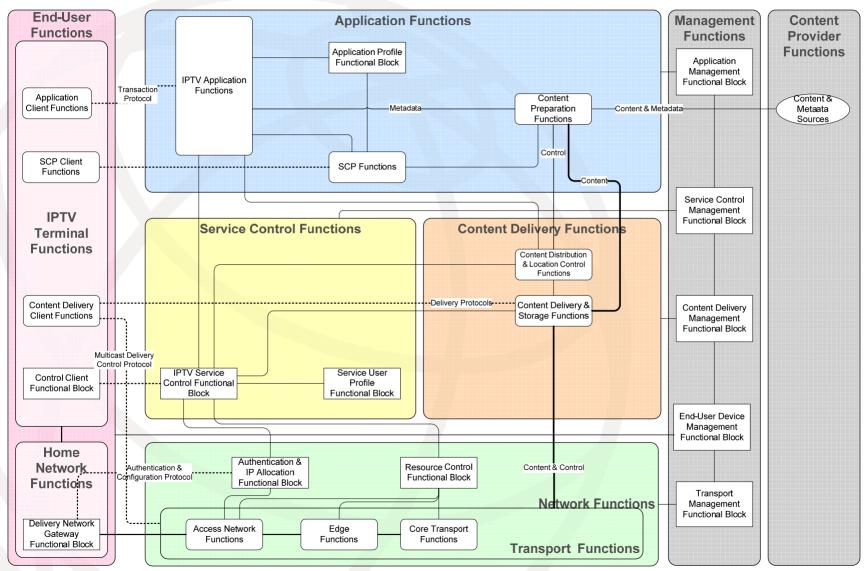
Backup

IPTV as an integral part of NGN



* Note: Gateway (GW) may exist in either Transport Stratum or End User Functions.

Detailed IPTV functional architecture



Hanoi, Vietnam 15-17 September 2008