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

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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.
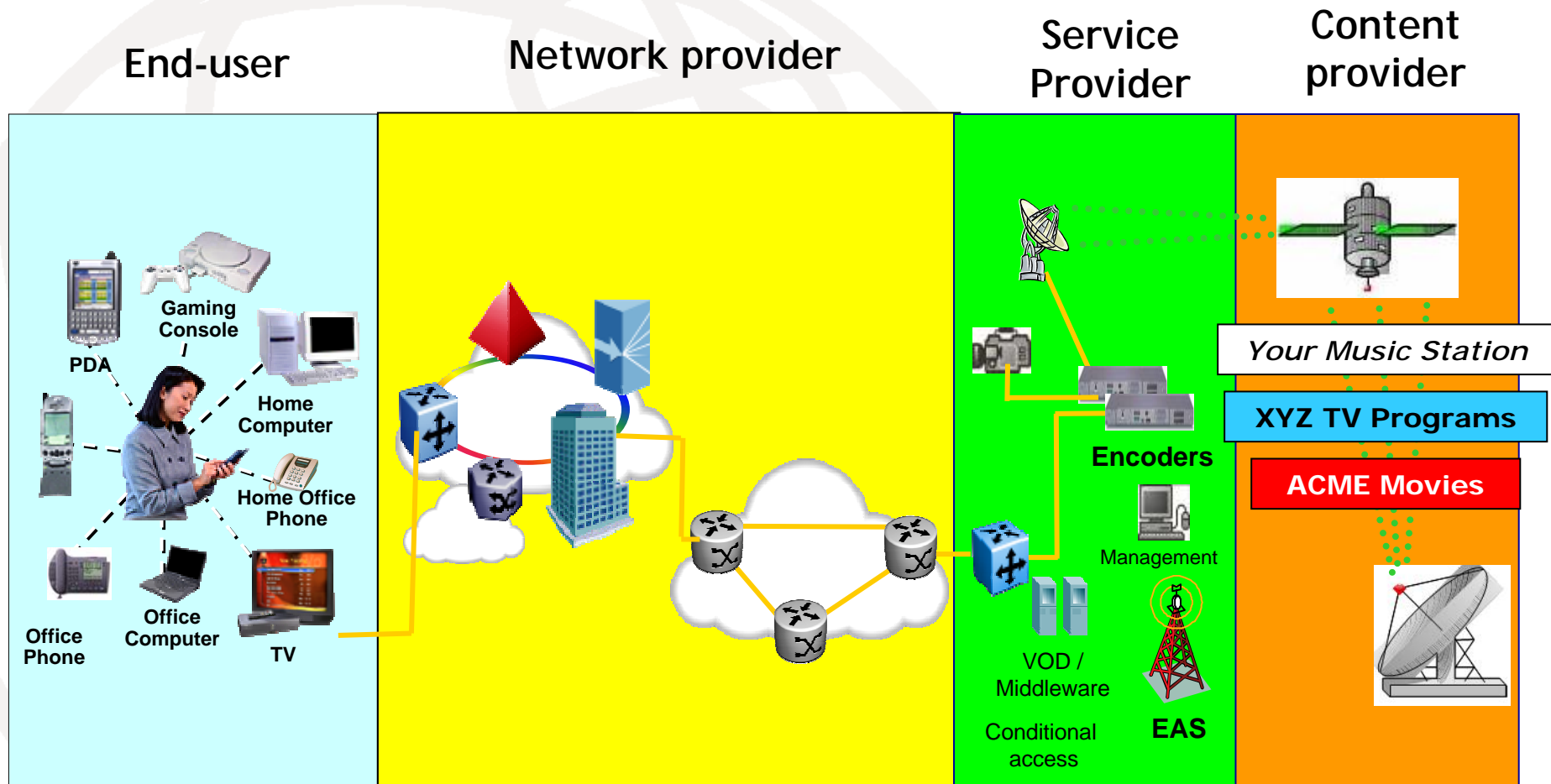
FG IPTV Mission Statement

- 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.
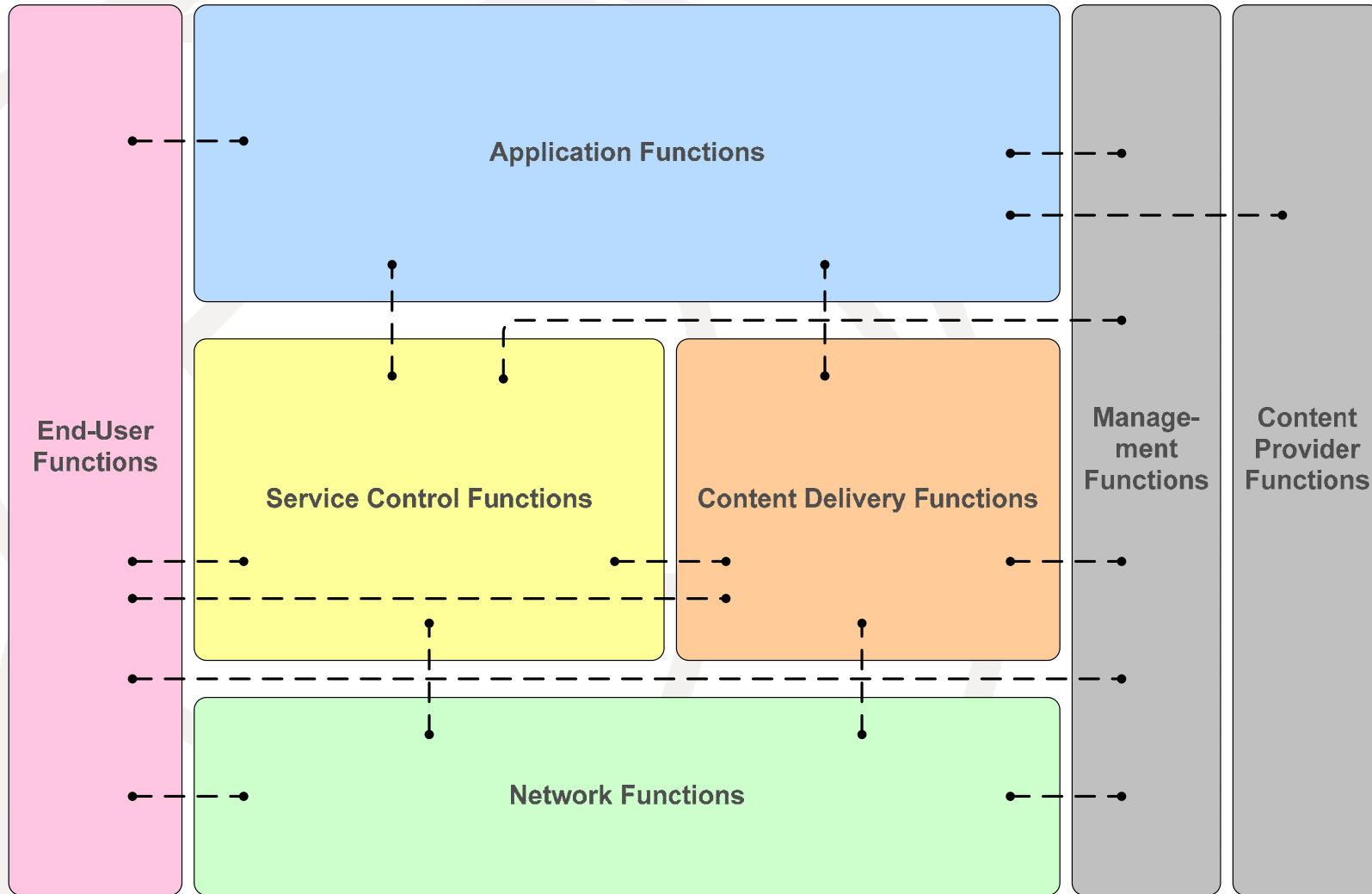
Goals of FG IPTV

- 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

End-user

Network provider

Service Provider

Content provider

Gaming Console

PDA

Home Computer

Home Office Phone

Office Phone

Office Computer

TV

Encoders

Management

VOD / Middleware

Conditional access

EAS

Your Music Station

XYZ TV Programs

ACME Movies

IPTV Functional Architecture

IPTV-GSI Work Areas

- Architecture and Requirements
- QoS, QoE and Performance
- Service Security and Content Protection
- Network and Control
- End Systems and Interoperability
- Middleware and Application Platforms

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

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
  - 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, QoS/QoE, security, unicast and multi-cast

Meetings

- Five meetings planned for 2008, two have already taken place:
  - 15-22 January 2008, Seoul
  - 30 April - 7 May, Geneva
- Significant number of participants and contributions per meeting
- Future meetings:
  - 23-27 June 2008, Geneva
  - 1-5 September 2008, Geneva
  - 1-5 December 2008, Geneva

Deliverables

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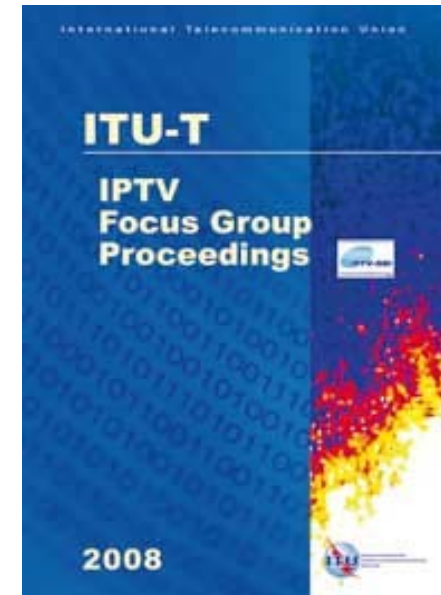 - Middleware, applications & content platforms

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!

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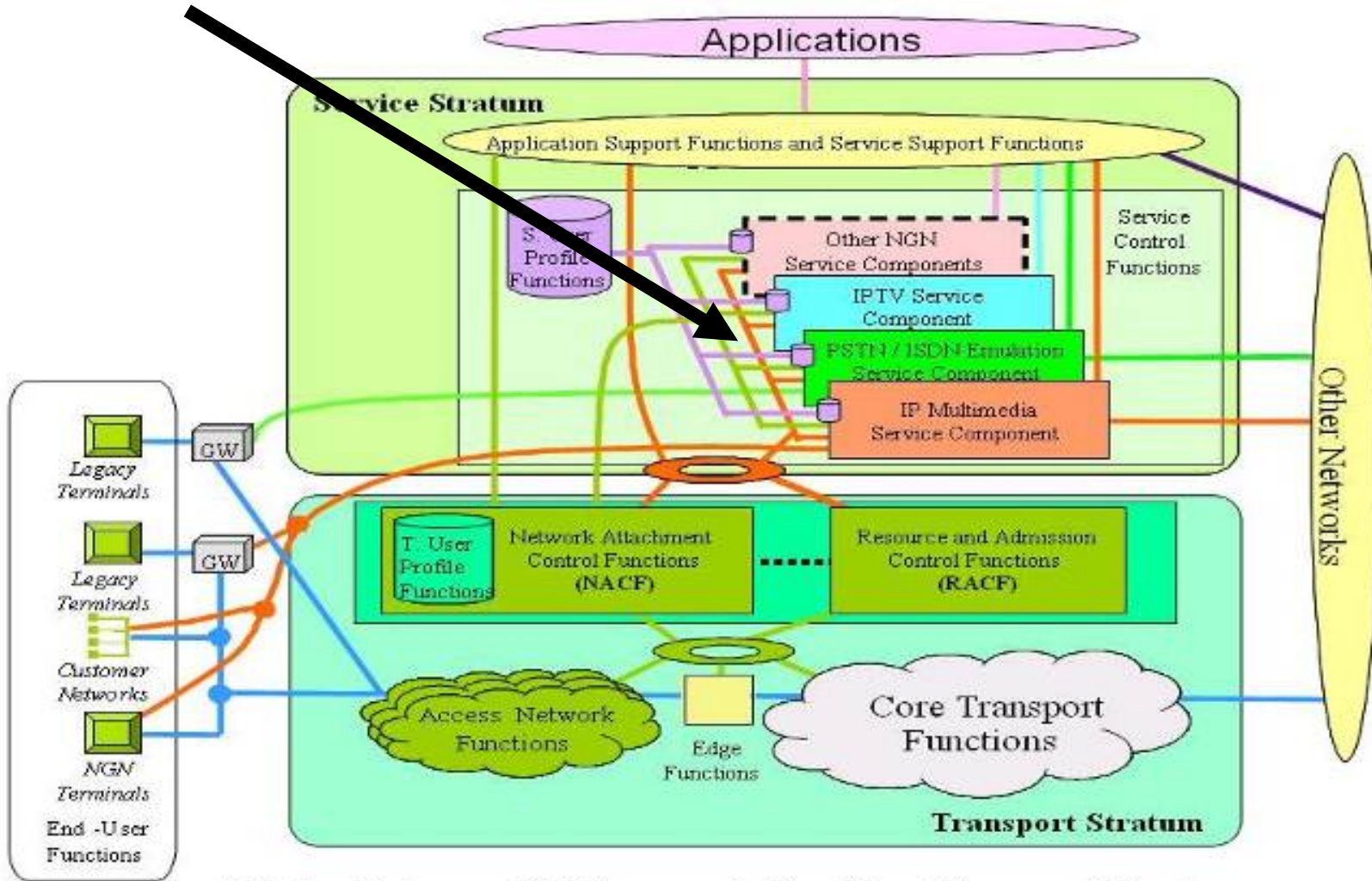 Development

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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