



International Telecommunication Union

The IPTV standardization activities in China

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**The group leader of the international standards activities
on IPTV**

Content

- **IPTV Standardization requirement in China**
- **China IPTV Standards organization**
 - **IPTV special group**
- **China IPTV Standards plan**
- **China IPTV Standards approved**
- **China IPTV Standards under study**

Standardization requirement in China

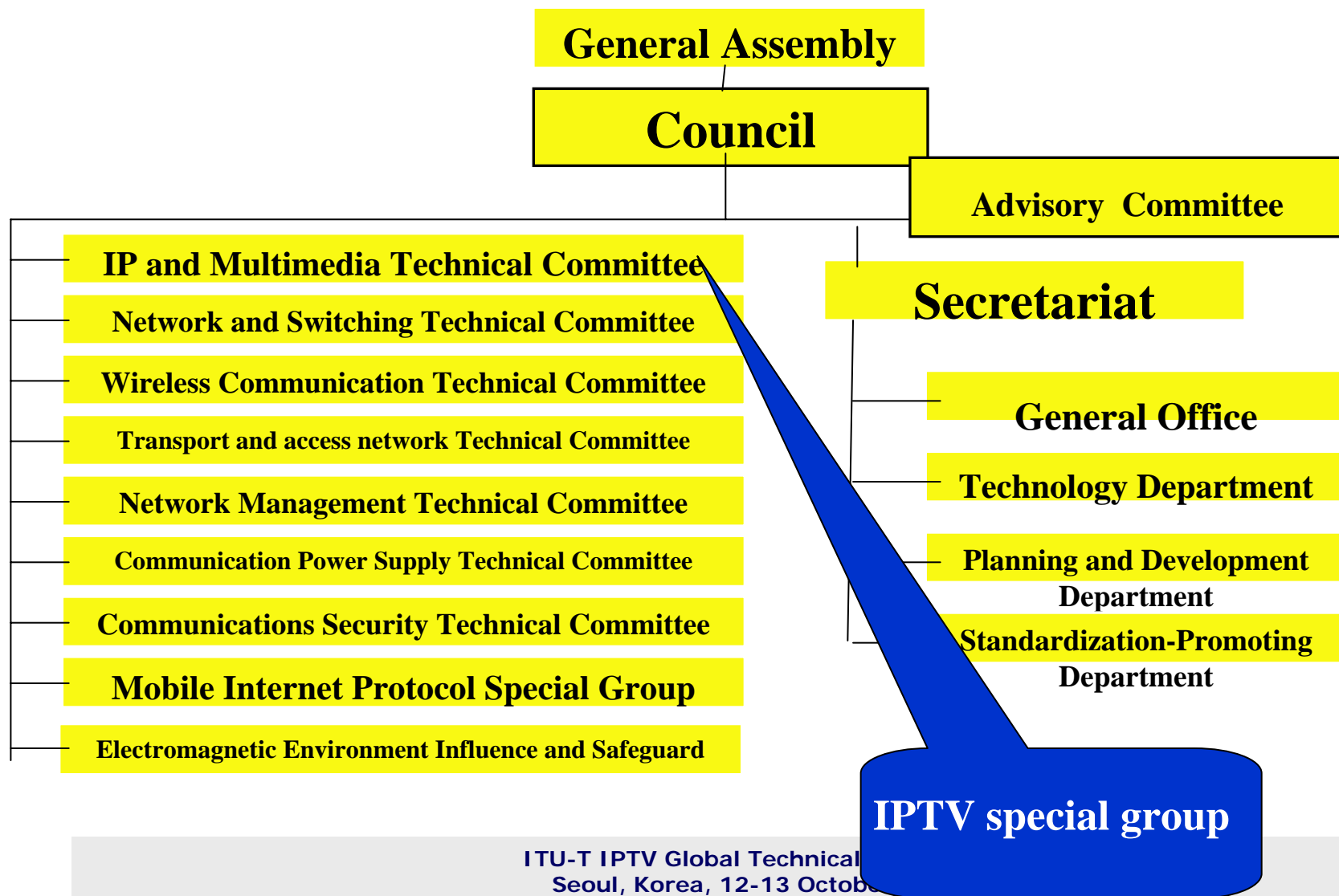
- o The IPTV service is a hot service in China
- o Both the telecommunication and broadcasting operators are interested in it
- o Some trials and commercial systems are launched by using one vendor' system
- o No standards are available for the market
 - To define the requirement and architecture
 - To define the interoperability requirement
 - To study the potential security issue

China IPTV Standards organization

o CCSA

- China communication standards Association
- 9 Technical committees
- 180 members
 - Operators
 - Institutes
 - Manufactures
 - Universities

CCSA structure



IPTV Special Group

- It is established under the IP and Multimedia TC in CCSA on 8th Oct. 2005
- Members
 - Institute
 - CATR, MII
 - Operators
 - China Telecom
 - China Netcom
 - Manufactures
 - ZTE
 - Huawei Technology
 - UT Starcom
 - ShangHai Bell Alcatel
 - FengHuo Technology
 - SCNB



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IPTV Special Group

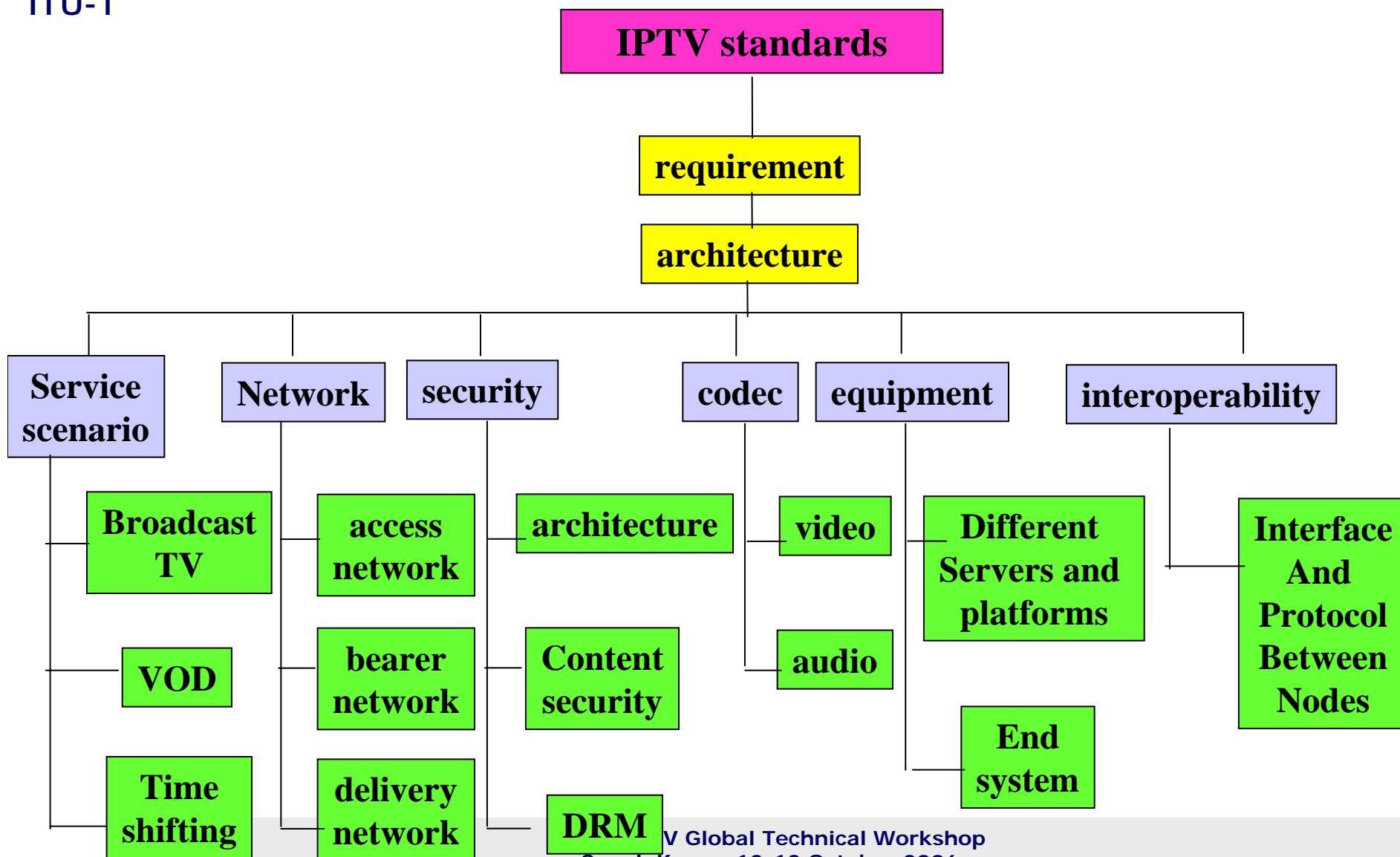
○ 2006-5-10

- **IPTV international contributions sub-group is established under IPTV special working group**
- **In charge of collaborations with international standards**

○ 2006-5-19

- **IPTV Coordination working group under CCSA**
- **In charge of coordination with other TCs in CCSA**

IPTV standards plan



6 specifications were approved

- **Service requirements**
- **Architecture**
- **The technical requirement of STB**
- **The Interface requirement between STB and service platform**
- **The Interface requirement between service platform and content platform**
- **The requirement on the access network**

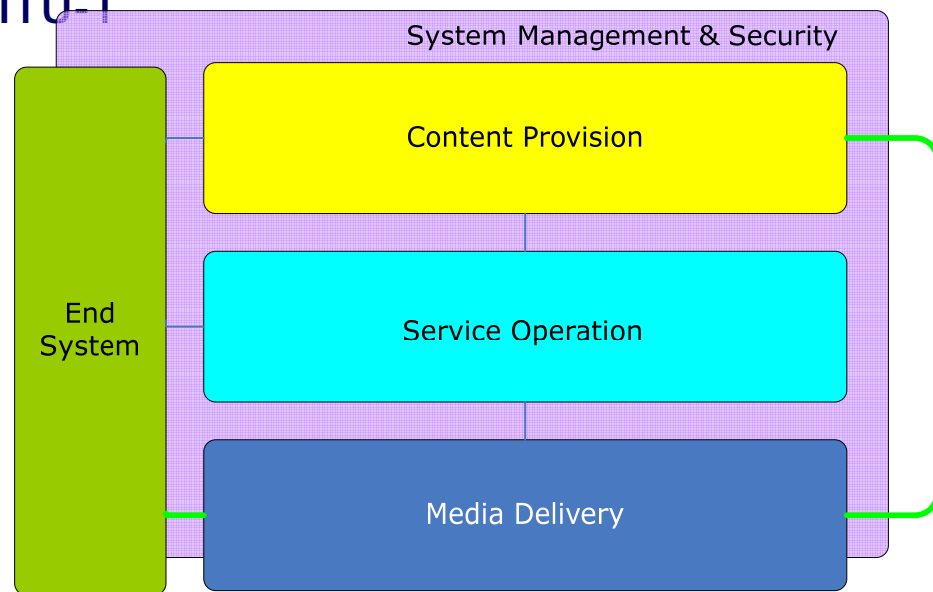
IPTV Service requirements

- **Definition**
 - **IPTV is a QoS guaranteed and secure audio/video service service. These services are displayed or played on the different terminals. The bearer network is IP.**
- **Service**
 - **Basic service**
 - Broadcasting TV
 - VoD
 - **Extended service**
 - Time shifting TV
 - PVR
 - **Application service**
 - Information
 - Gaming
 - E-Commerce
 - Tele-education
 - Retrieving
 - Communication
 - Service management



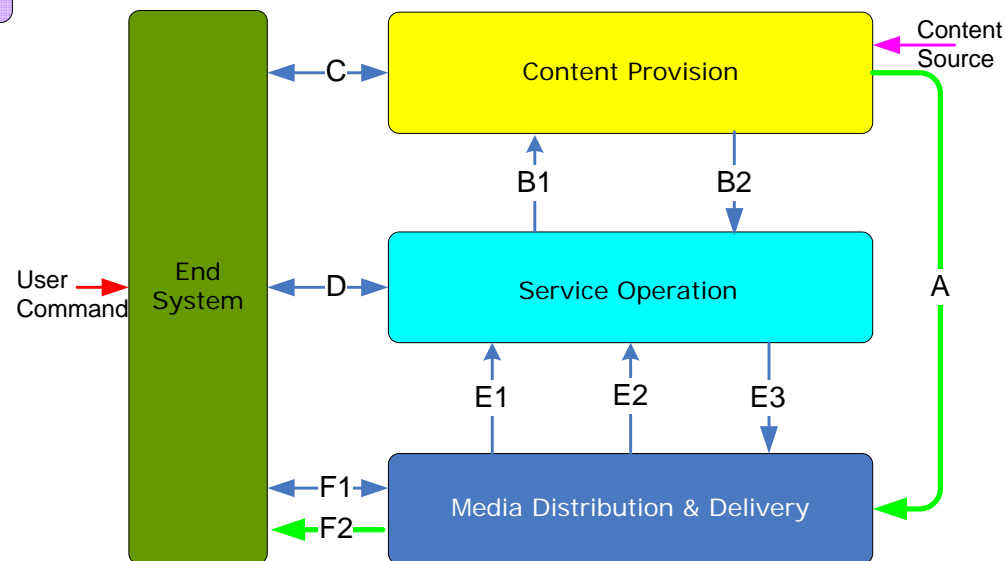
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IPTV architecture



Functional architecture

Information flow



The specifications under study

- The technical requirement on bearer network
- The media delivery part architecture
 - CDN
 - P2P
- Security architecture
 - Content security
 - DRM
- Codec
- Middleware
- Network management



Thank you for your attention