

ETSI NGN Work: TISPAN Status



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ETSI: European Telecommunications Standards Institute

- ❑ **Based in Sophia Antipolis, France, Provides standardization of Information and Communication Technologies (ICT) within the European Union**
- ❑ **Active in standards management and development in areas of Telecommunications, Information Technology, and Broadcasting**
- ❑ **653 Members from 59 countries contribute to world-wide standardization efforts**

TISPAN Genesis

TISPAN:

Telecommunication and Internet Converged
Services and Protocols for Advanced Networking

Emerged from the combination, in September 2003, of :

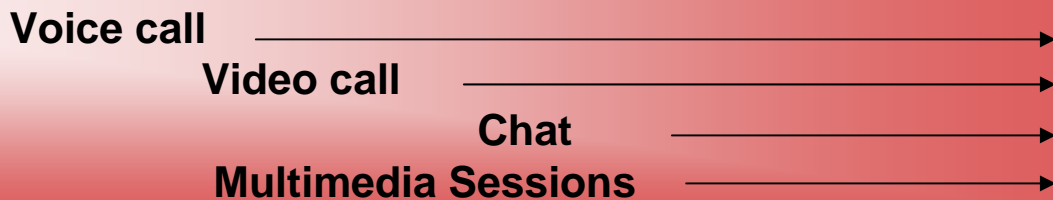
- ❑ **SPAN:** formed as a Technical Body from the joining of SPS (Services, Protocols & Switching) and NA (Network Aspects), responsible for standardization of EURO-ISDN.
- ❑ **TIPHON:** formed in 1997 as an ETSI Project to study VoIP and subsequently extended to any Telecom (including Multimedia) services over IP

- Inter-operable, Inter-domain**
- All IP-based network**
- Broadband access**
- Multi-media capabilities**
- Support mobility & nomadicity**
- Multiple services**
- Business Model Agnostic**



Person-to-Person

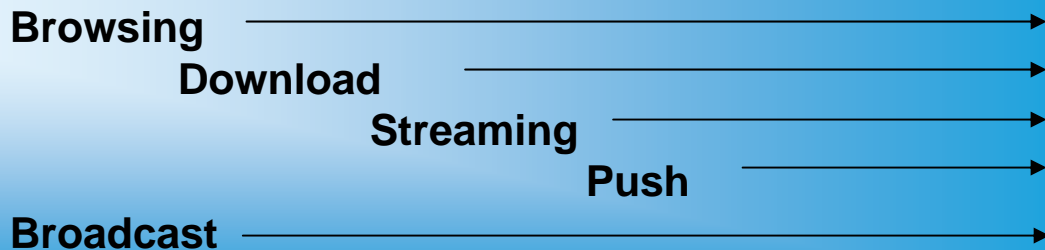
Conversational



Messaging



Content-on-demand



Building Rich Media

**Mobile Voice,
Video, Data**



**Broadcast Video,
Data**

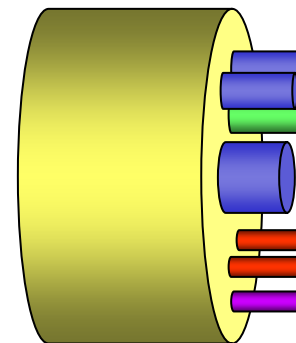




**IM Client
Voice, Video**



Voice, Video

Multimedia Session



-  **Voice**
-  **Video**
-  **Broadcast**
-  **Messaging**
-  **& Presence**
-  **Web**

- Mobile** (*3GPP standardization*)
- Digital Subscriber Line**
- Wired & Wireless LAN**
- Cable**

Legacy Networks

- PSTN/ISDN emulation**
- PSTN/ISDN simulation**

PSTN: Emulation - Simulation

□ PSTN Emulation

- *Provides PSTN/ISDN service capabilities and interfaces using **adaptation to an IP infrastructure.***

□ PSTN Simulation

- *Provides **PSTN/ISDN-like** service capabilities using **session control over IP interfaces and infrastructure.***

□ Service capabilities

- Real time conversational services (Voice, Video calls/sessions)
- Messaging (Instant Messaging, MMS) and Presence
- PSTN/ISDN emulation and simulation

□ Network Architecture

- 3GPP IMS (R6) core sub-system reused as basis for SIP-based services control
- xDSL access a primary focus
- Initial network-edge QoS controls

Subsystem oriented approach:

❑ IP connectivity subsystems

- Network Attachment Subsystem (**NASS**)
- Resource and Admission Control Subsystem (**RACS**)

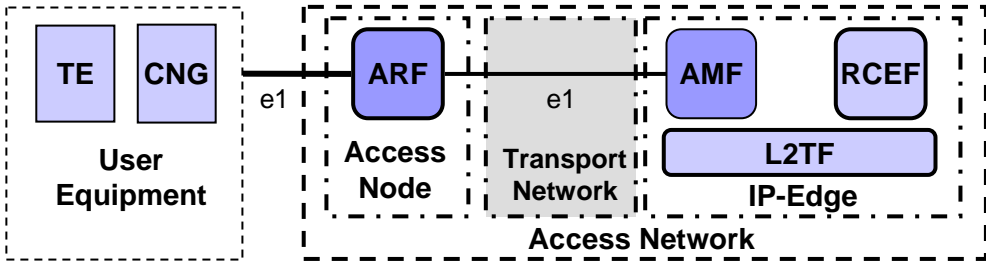
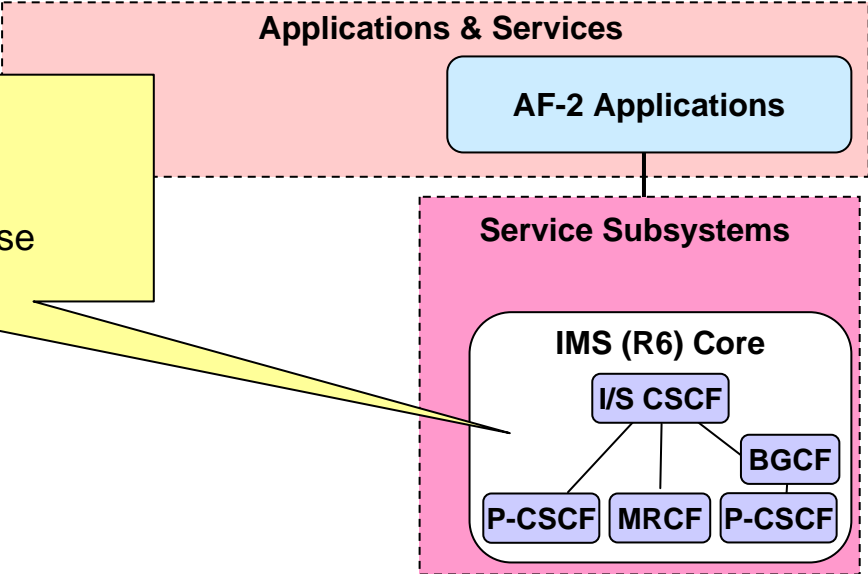
❑ Service-oriented subsystems:

- 3GPP IMS (R6) supporting multimedia services and adapted to accommodate xDSL-based access, and PSTN/ISDN Simulation & Emulation. (**IMS**)
- A PSTN/ISDN Emulation subsystem specifically tailored to allow TDM equipment replacement, while keeping legacy terminals unchanged. (**PES**)

* Simplified

3GPP IMS Core

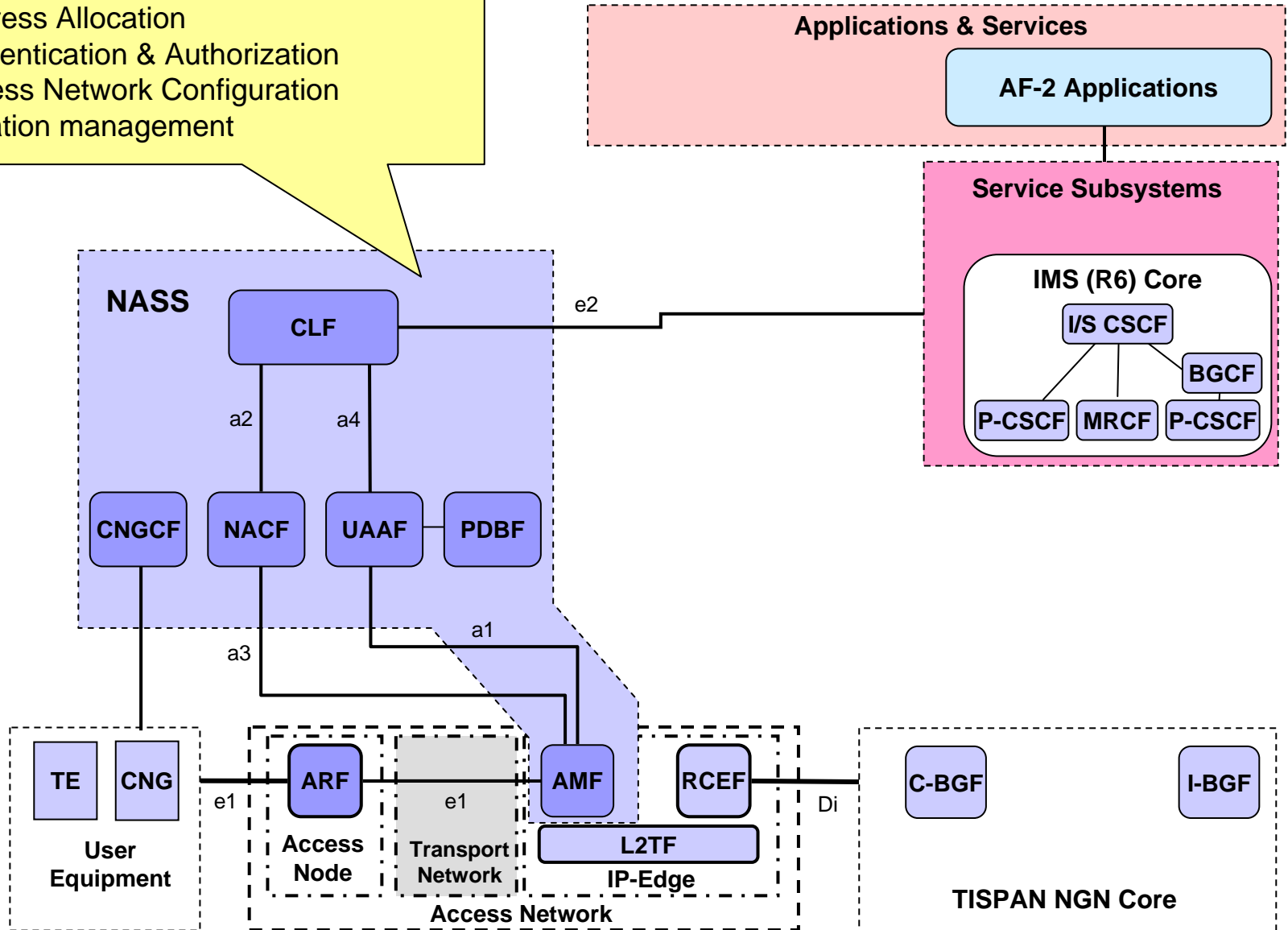
- Release 6 subset
- High Degree of component re-use



* Simplified

Network Attachment Subsystem

- Address Allocation
- Authentication & Authorization
- Access Network Configuration
- Location management

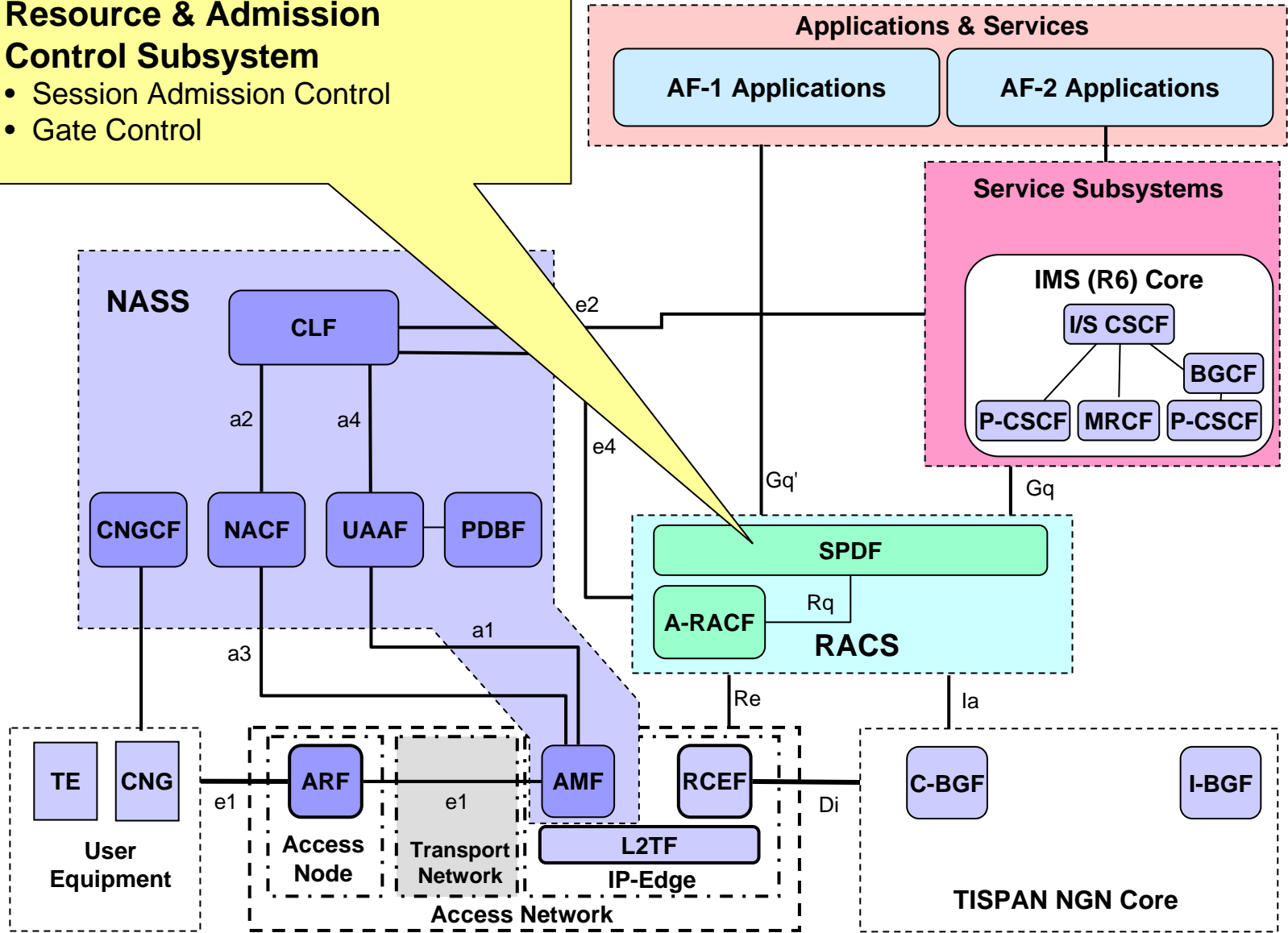




* Simplified

Resource & Admission Control Subsystem

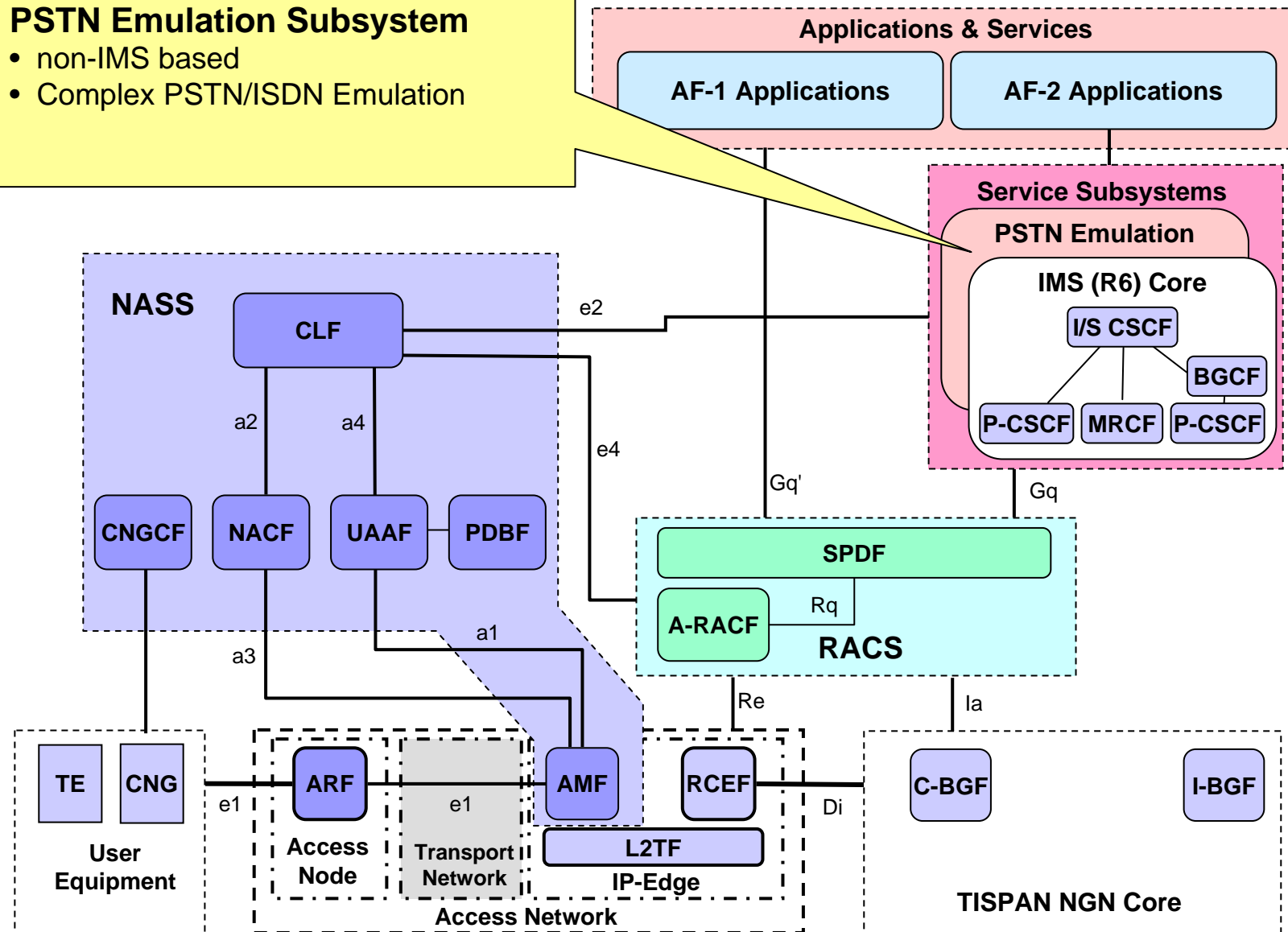
- Session Admission Control
- Gate Control



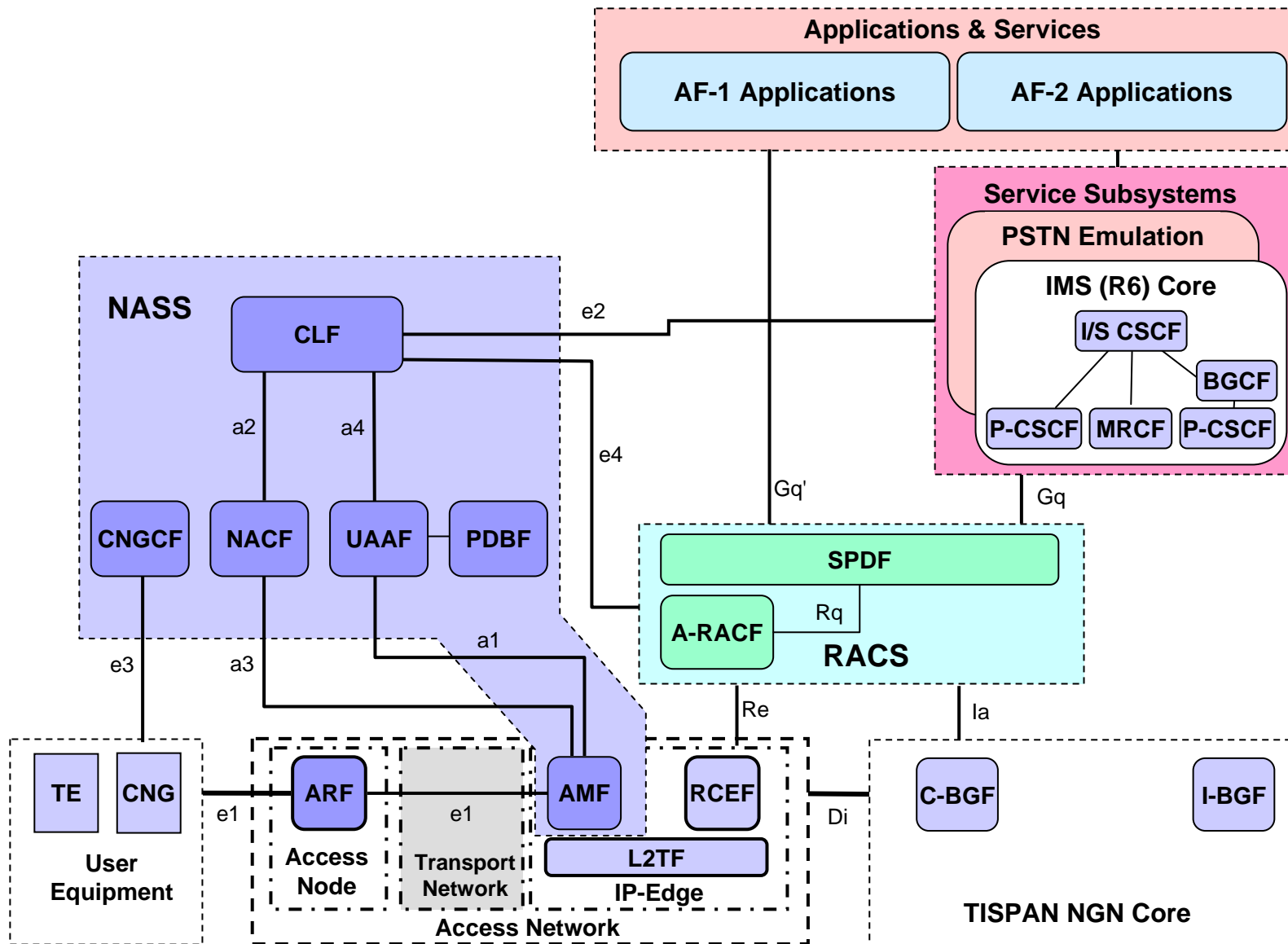
* Simplified

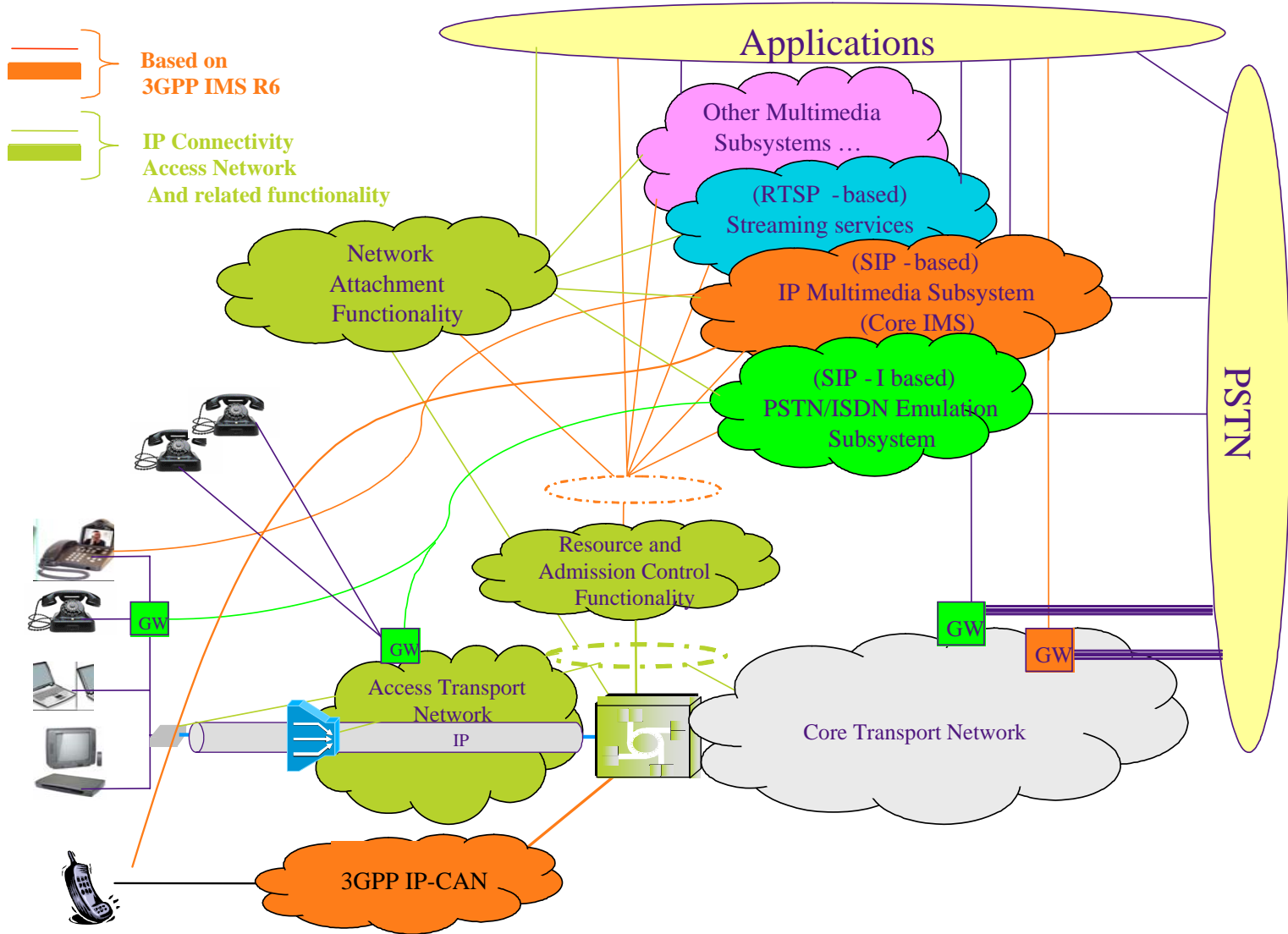
PSTN Emulation Subsystem

- non-IMS based
- Complex PSTN/ISDN Emulation



* Simplified







□ TISPAN Release 1

- First comprehensive set of NGN standards released to industry
- December 2005

□ TISPAN Release 2

- In development for new access methods and services
 - 3GPP IMS (R7)
 - Additional support for Mobility & Nomadicity
 - IPTV and other new services
- Target: ~ 2007



THANK YOU !!!

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