HBB-European TV Standard for the Future

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Agenda

- **Motivation**

- **What is HBB and what is HbbTV?**

- **Concept of functionalities**

- **HBB-Next: Vision, consortium, goals**

- **HBB-Next and HbbTV**

- **The role of STU: Contribution and way into the project**

![HBB NEXT — NEXT GENERATION HYBRID MEDIA]

Imagine …

- **Your TV set recognizes you!**

➔ **It offers you just what YOU like**

- **Your family joins – TV knows too…**

➔ **TV offers YOUR family's programme!**

- **You watch TV with your friends who are elsewhere… and yet elsewhere…**

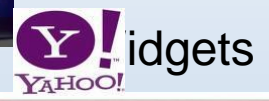- **You swipe TV-related web content**

➔ **to your smartphone**

Connected TV-World TODAY

- **Market:** *Fragmented*
    - **Proprietary solutions of Connected TV manufacturers → Isolated apps on single platforms – (TV apps stores)**

- **Services:** *Limited*
    - **Catch-up TV, on-demand content**
    - **Improved EPG and Teletext**

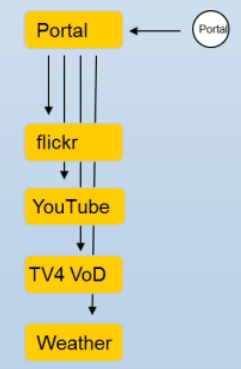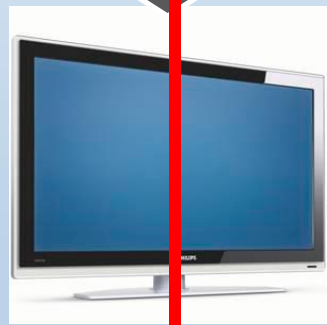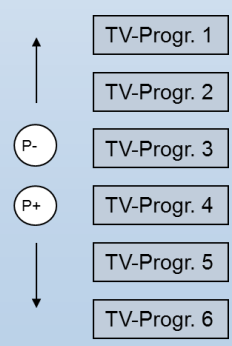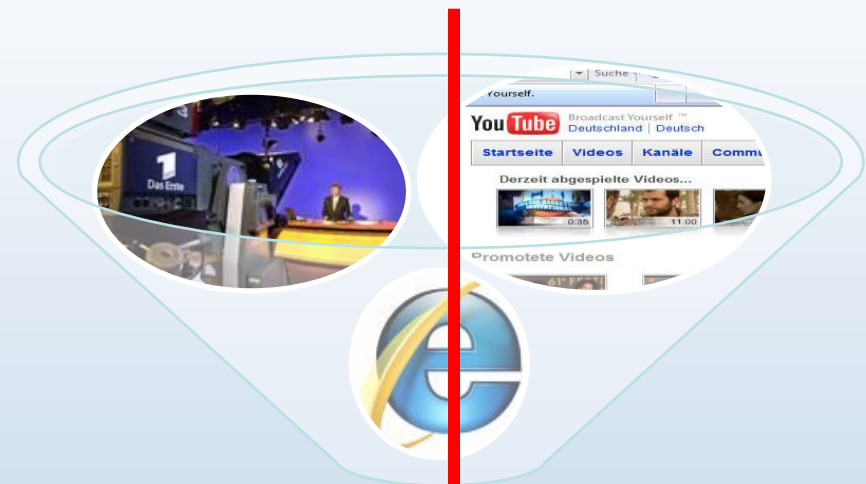- **HbbTV Standard:** *Successful uptake, increasing support*

Connected TV: CE-Manufacturer redefine the TV-set

Panasonic. VIERA CAST™

PHILIPS NetTV

SAMSUNG TV Apps

YAHOO! idgets

LOEWE.

HUMAX

LG

SONY

VIDEOWEB

SEVENTH FRAMEWORK PROGRAMME

1st generation „connected devices"
The worlds are still separated

Broadcast context

Internet context

TV-Progr. 1
TV-Progr. 2
TV-Progr. 3
TV-Progr. 4
TV-Progr. 5
TV-Progr. 6

P-
P+

Portal

Portal
flickr
YouTube
TV4 VoD
Weather

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What is HBB and what is HbbTV?

Broadcast Corporation

Internet Services

Broadcast Service

Seamlessly tying two worlds together

Online-offering

Portals

HbbTV
Technology plattform
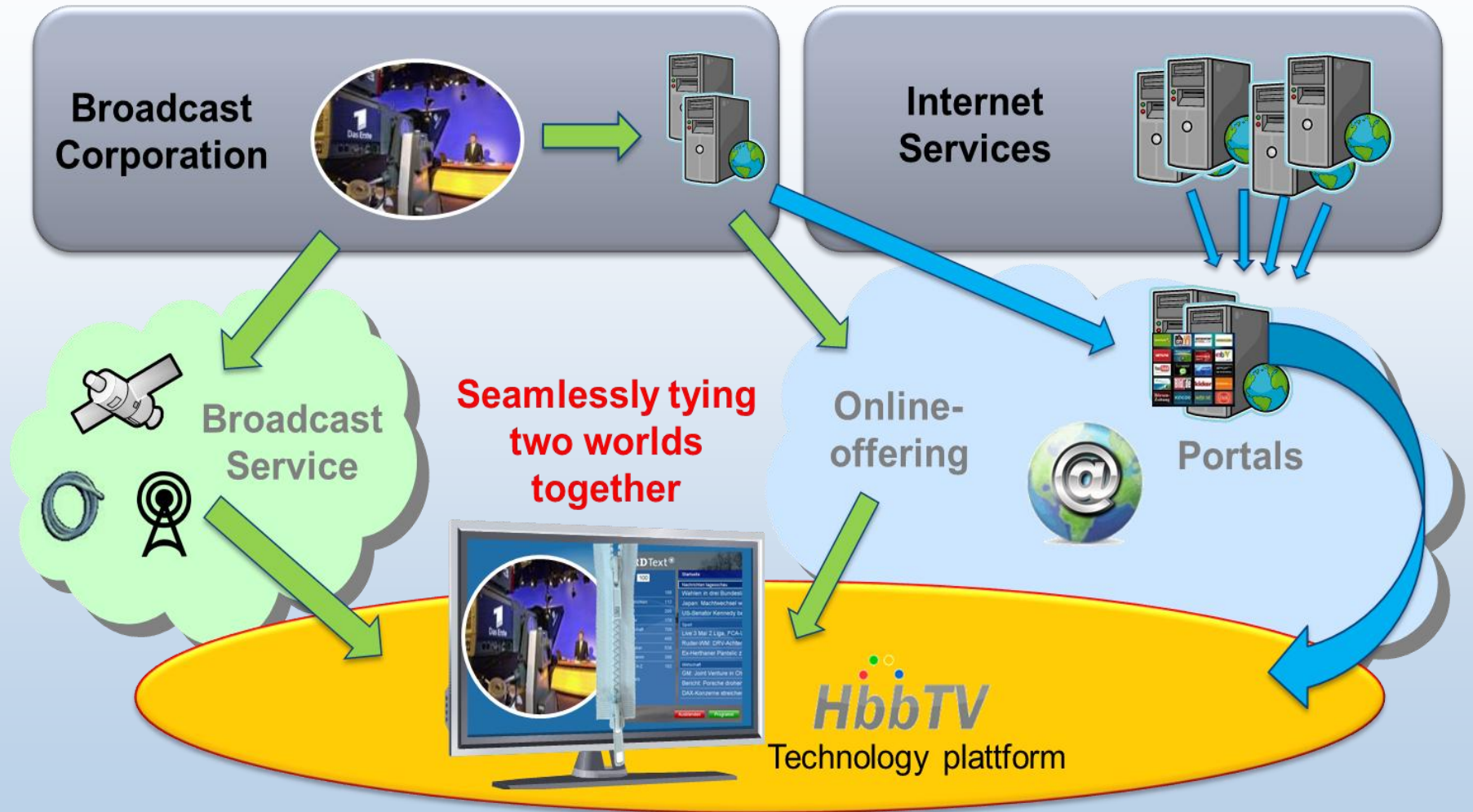
HbbTV: the standard for hybrid TV

- **Main problems of 1st generation hybrid devices adressed by HbbTV:** **(= ETSI TS 102 796)**

- **Different technological concepts**
  → *Services have to be adopted for each device individually*

  HbbTV ► **standardised browser profile**

- **No or no qualified integration of broadcast and web services**
  → *no really „hybrid" world of services can be generated*

  ► **provides lots of cross linking**
  options **HbbTV** **(„red button" plus more)**

HbbTV – a new paradigm

Broadcast Services

HbbTV

Internet Services
(Portals / TV Apps)

Seamlessly tying two worlds together

(distribution)

(distribution)

SEVENTH FRAMEWORK PROGRAMME

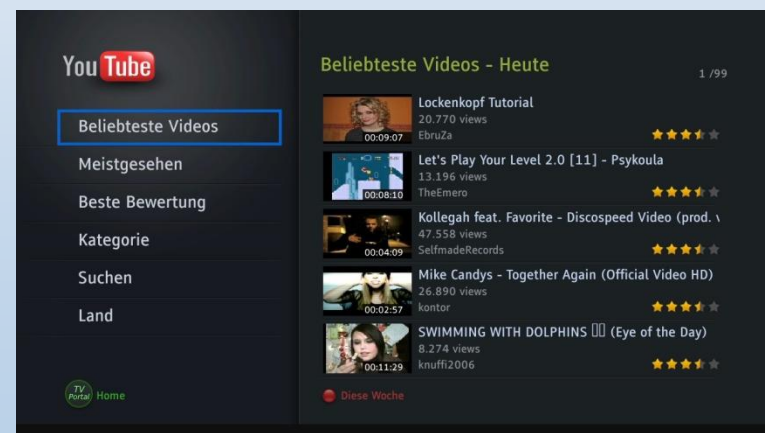# HbbTV: starting apps via broadcast and/or device portals

Launching apps from TV programme („red button")

Launching apps via device portal

HbbTV app „ARD Mediathek"

HbbTV app „YouTube"

Interactive commercials

Live content Internet + broadcast
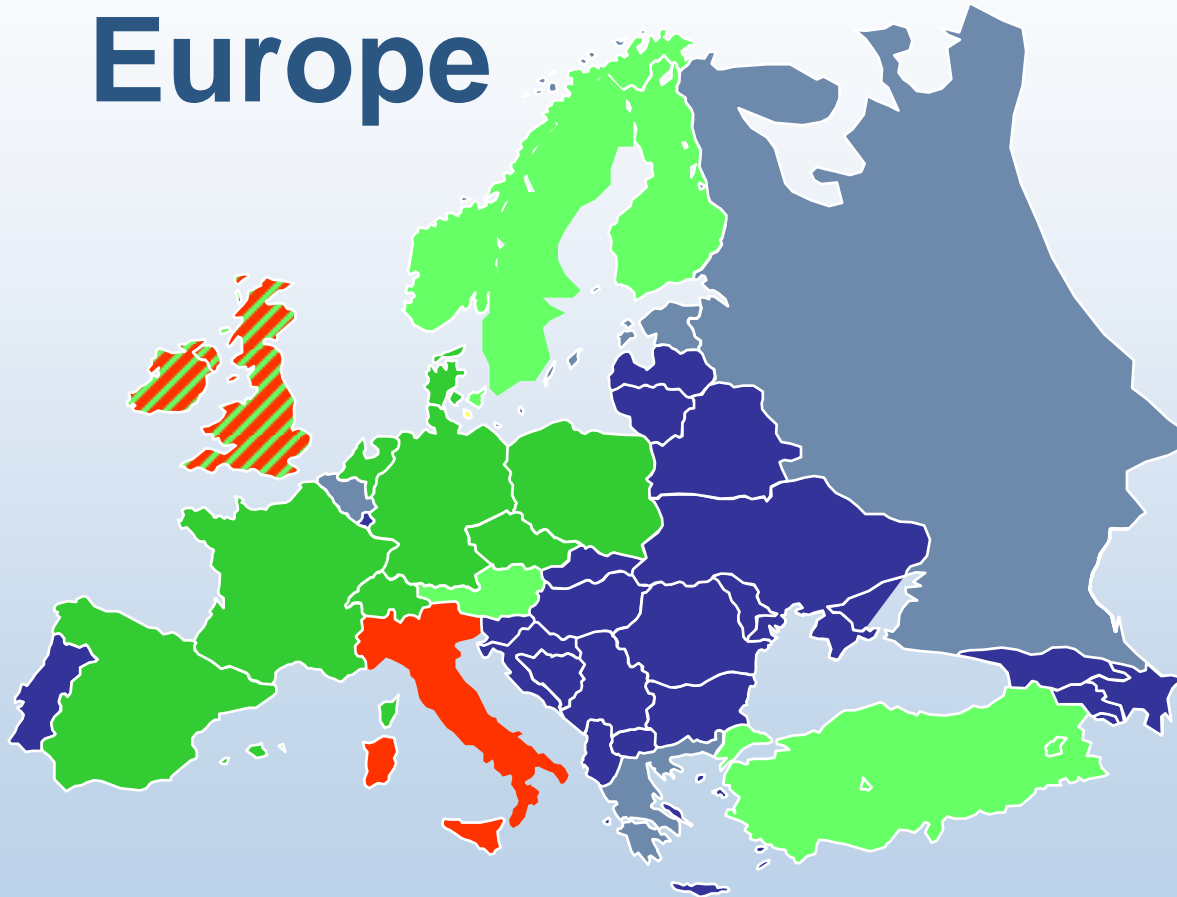
HbbTV Market Situation 2011
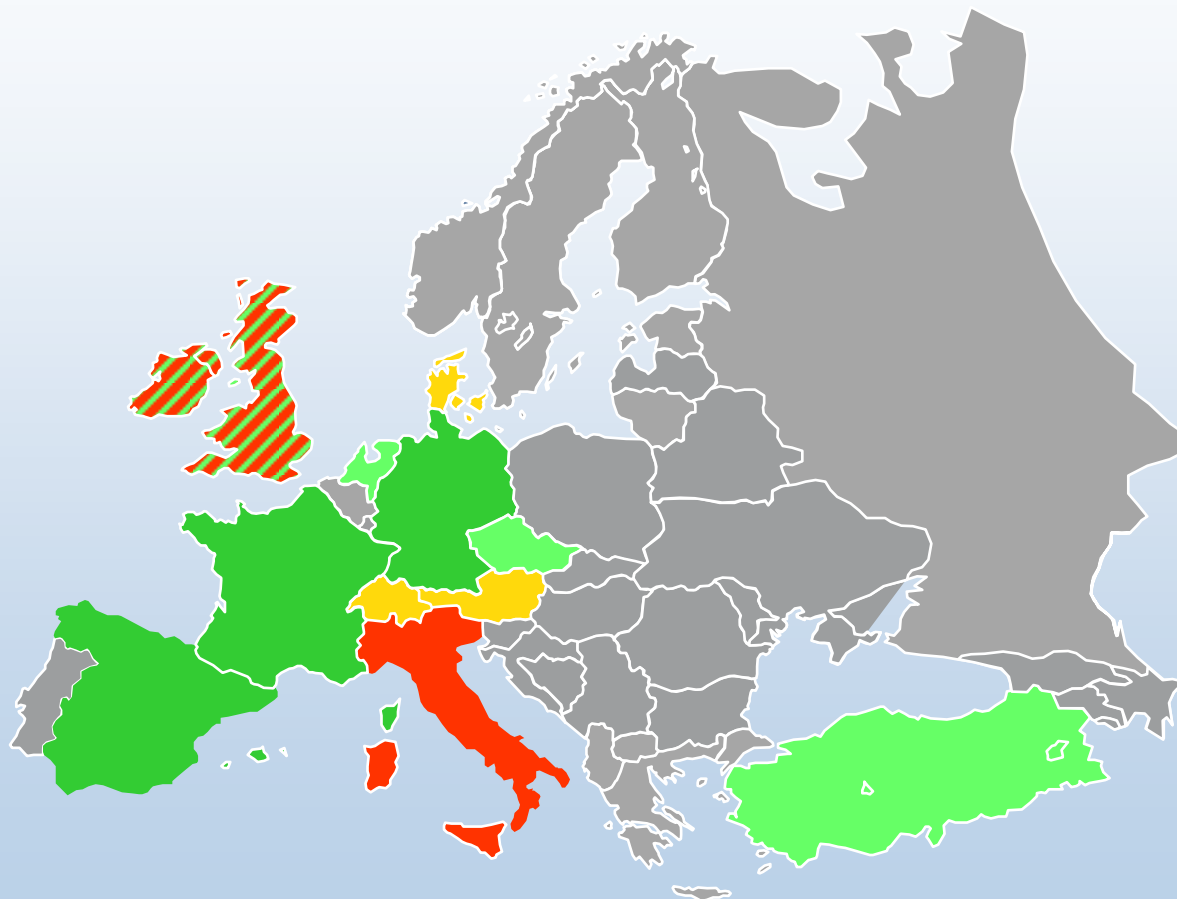
in operation

announced

trial phase

no information

other plans

HbbTV in Europe

in operation

announced / tests

no information

different systems

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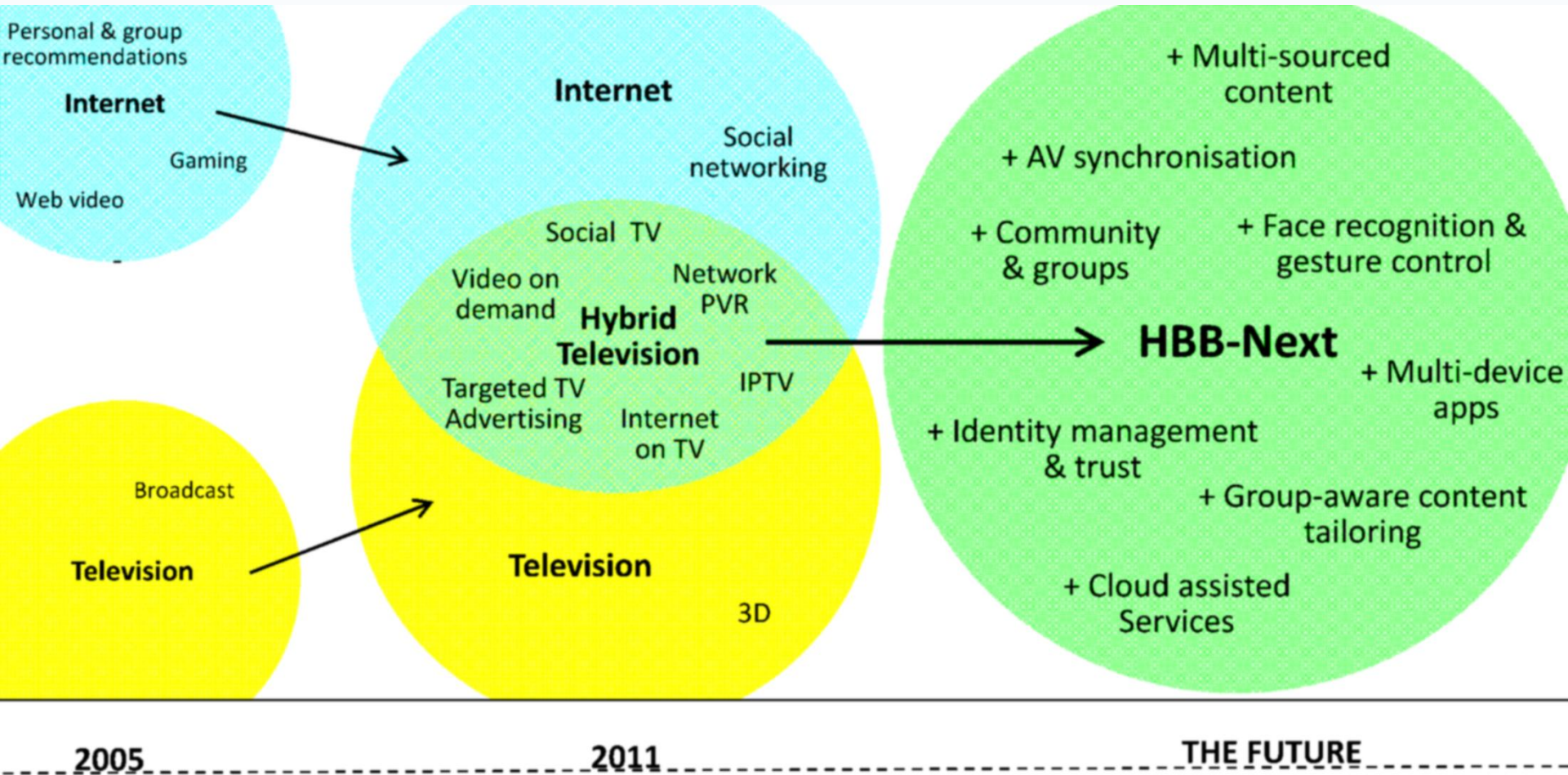# HBB-Next : Vision

Taking Hybrid Broadcast Broadband to the next level

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HBB-NEXT : Consortium

Source: HBB-Next project

HBB-NEXT : Project

WP1 (RBB)
Project Management

WP2 (RBB) Usage Scenarios, System Requirements and User Validation

WP3 (NEC)
Identity, Security and Trust

WP4 (THM)
Next-Generation Multi-Synch and Application Performance

WP5 (TNO)
Multi-User and Context-Aware Personalisation

WP6 (IRT)
System Architecture, Application and Monitoring

WP7 (STUBA) Dissemination, Standardization and Exploitation Plan

Source: HBB-Next project

HBB-NEXT : Architecture framework

Source: HBB-Next project

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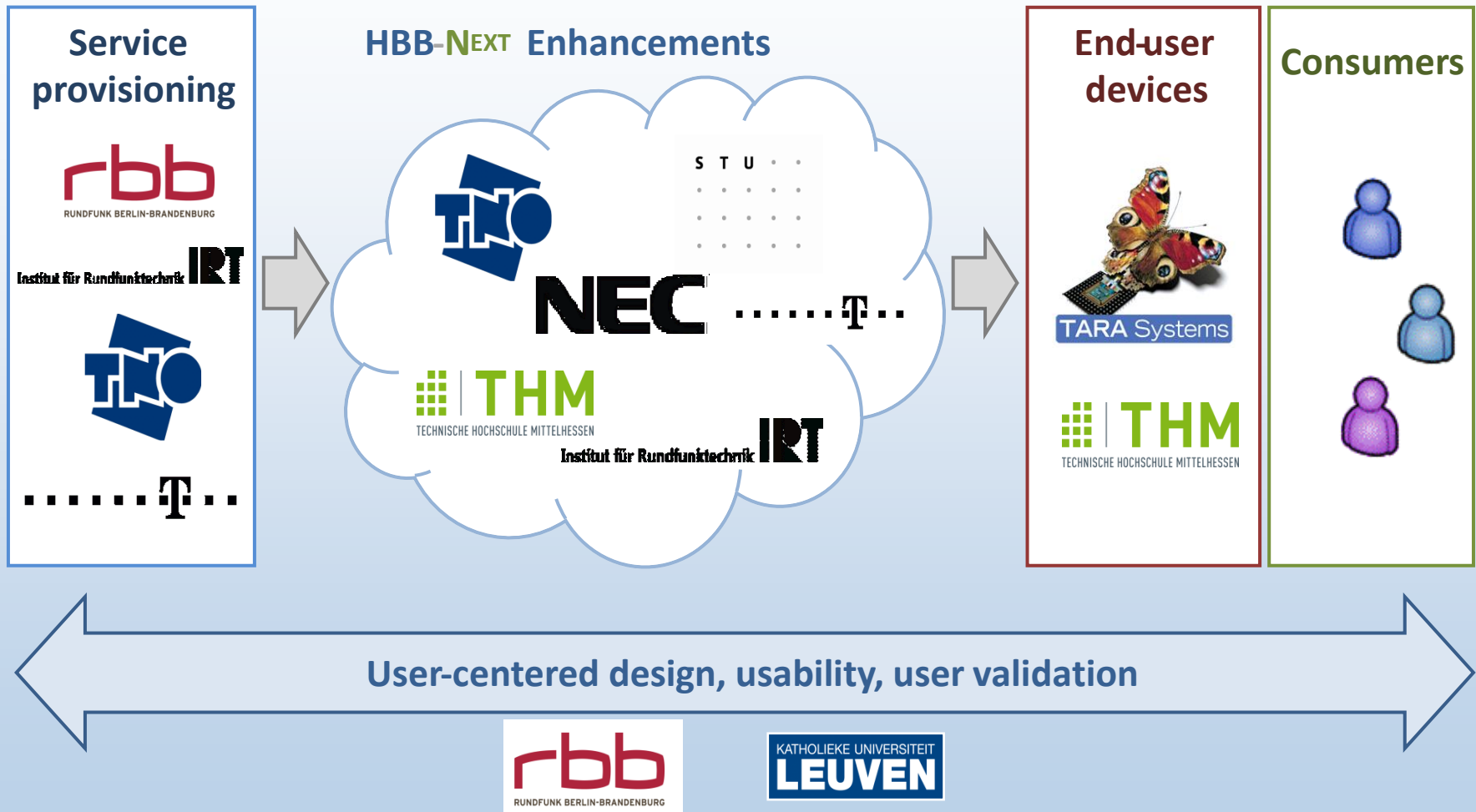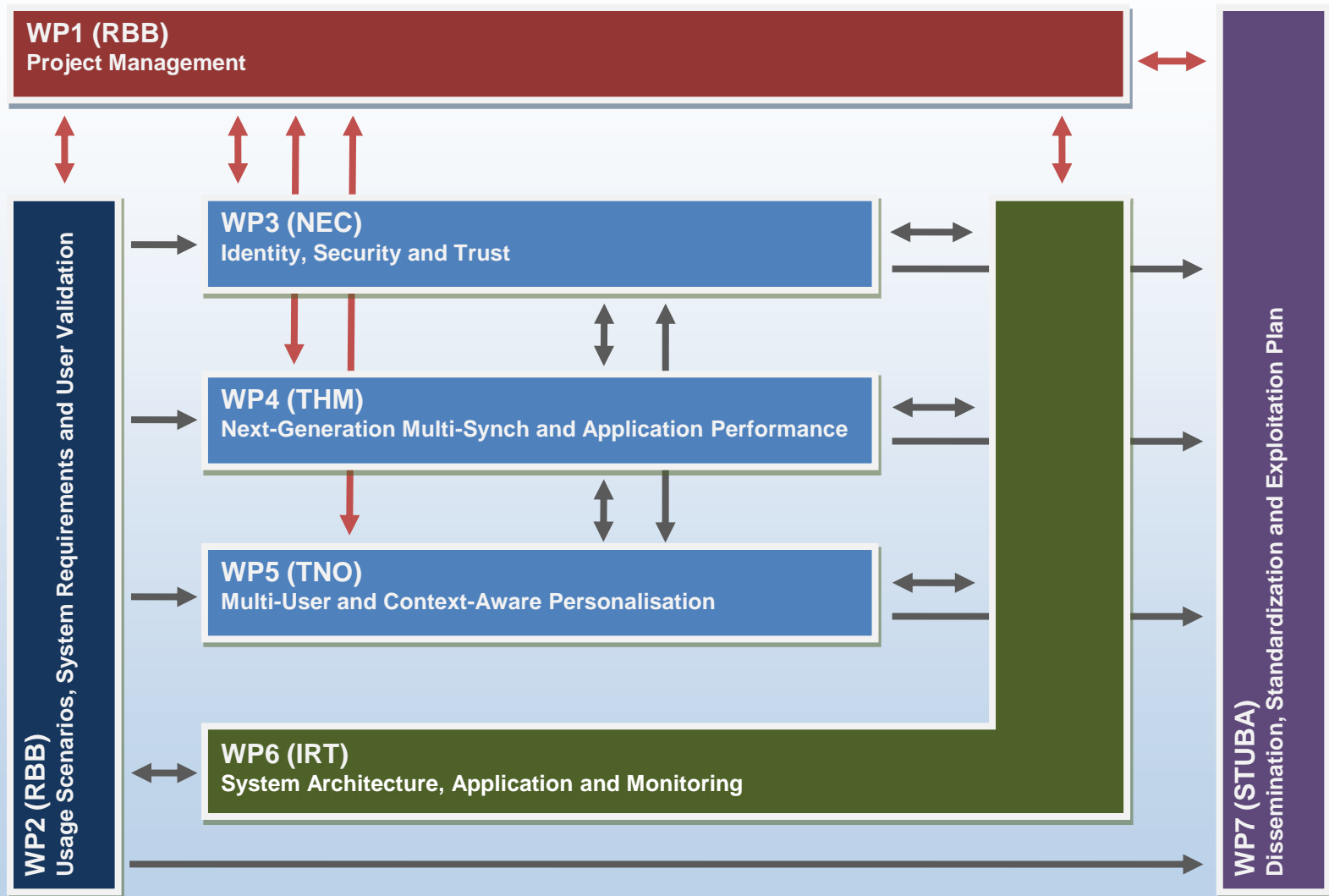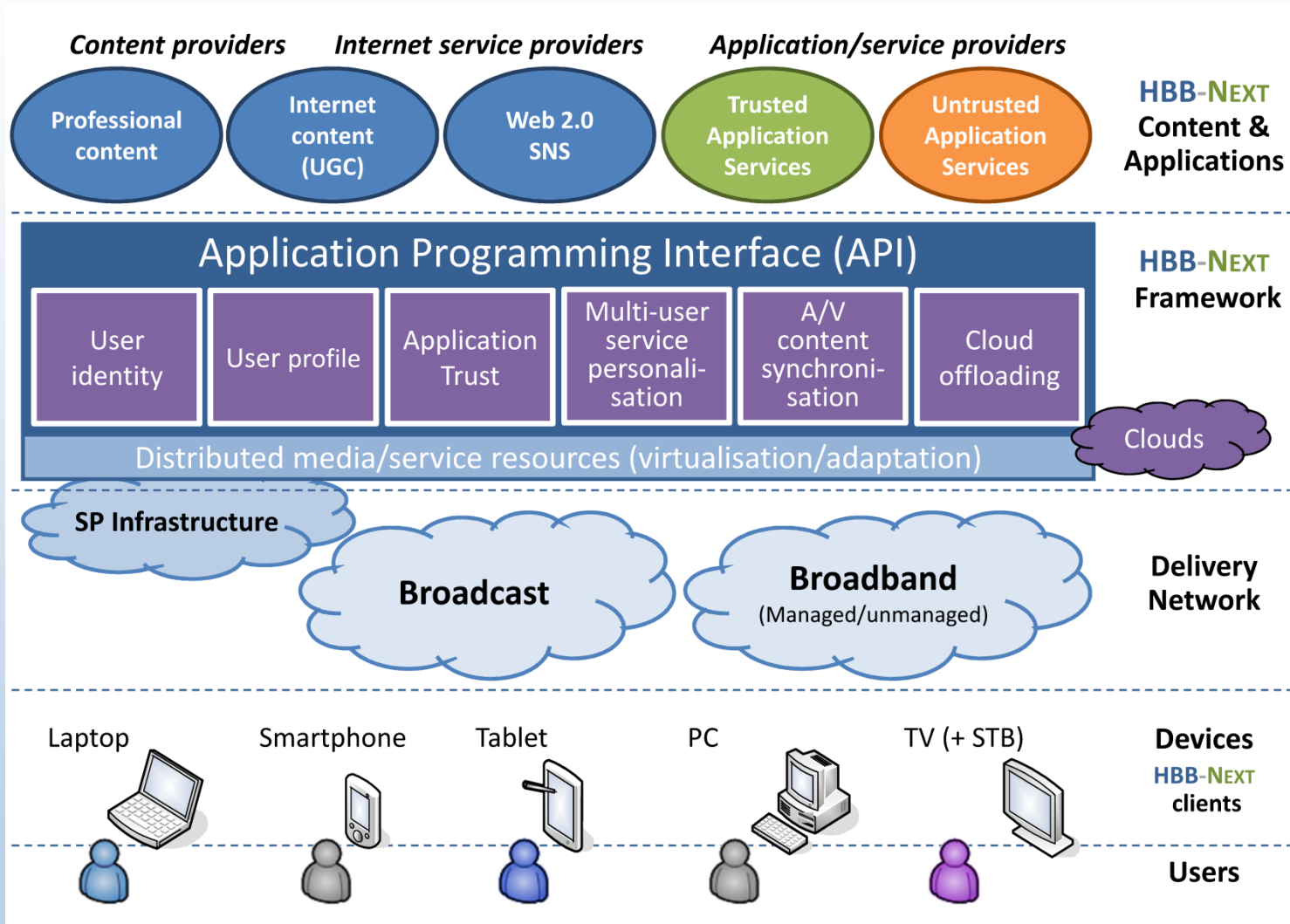- **The role of STU: Contribution and way into the project**

HBB-Next and HbbTV

- **HbbTV 1.0 has been published in ETSI**
- **HbbTV 1.5 work ongoing**
- **Start discussion about HbbTV future features & standardization**
  - **It is expected that HBB-Next can contribute to future HbbTV specification**
- **And: Development of open APIs that might go beyond next HbbTV releases**

HBB-Next and Digital Agenda for Europe

Digital Agenda	HBB-Next
Pillar I: Digital Single Market	Convergence of media market
Pillar II: Interoperability and Standards	open solutions, respective standardization bodies
Pillar III: Trust and Security	trust and reputation framework
Pillar IV: Very Fast Internet	cloud-based aspects, HDTV-quality
Pillar V: R&I: Act. 54: Develop a new generation of web-based applications and services	interworking anytime, anywhere, on any device
Pillar VI: Enhancing e-skills	multimodal user interface, people with disabilities
Pillar VII: ICT for Social Challenges	easy access to web for elderly people and the youngsters

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Contribution of Slovak Partners

- **Slovak University of Technology**
- **Slovak Telekom**

- **Multimodal interface**
- **Security and identity management**
- **Multi-device environment**
- **High level architecture**

- **WP leader**
- **2 tasks leader**

Way of STU into the Project

- **20 years of cooperation in other EU projects**
- **Personal contacts from bilateral mobility projects**
- **PhD students exchange**
- **Scientific responsibility**
- **Partner's responsibility**
- **Common publications**
- **Partnership within international boards**

Background of our FP7 success
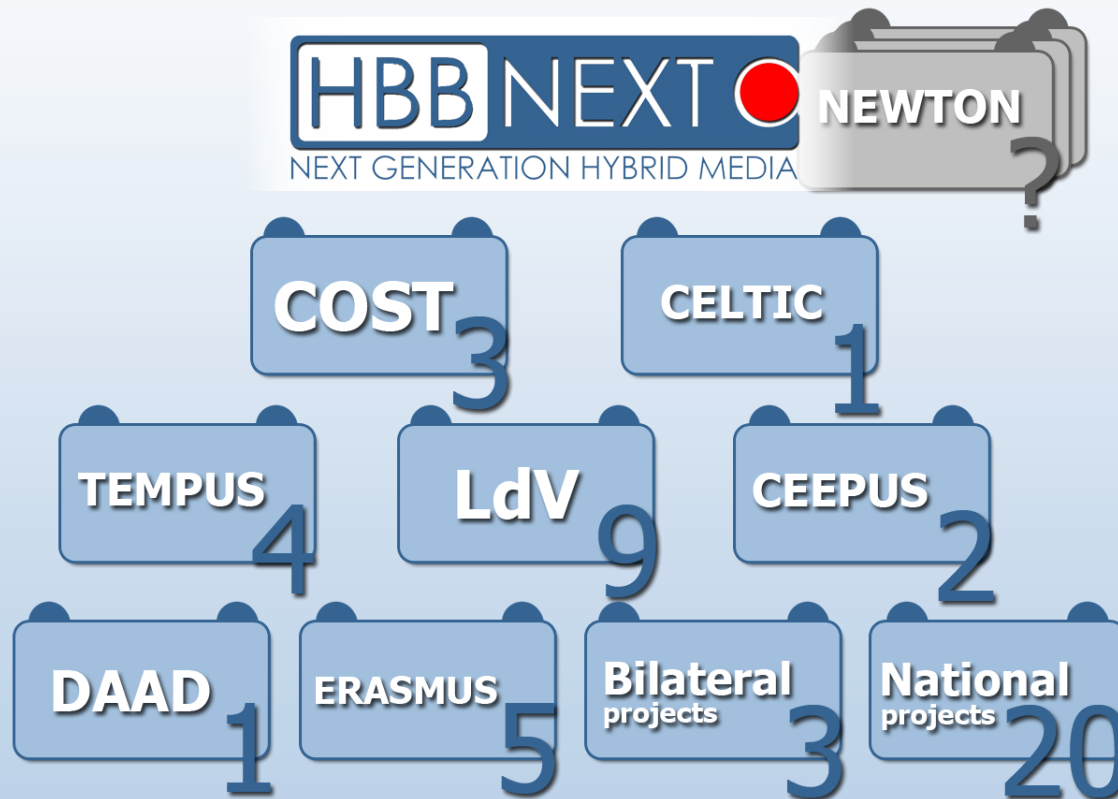
Conclusion

- **New EU stnadard for TV**
- **Enhanced funcionality of the system**
- **Non-vendor solution**
- **HBB-Next: FP7 project for new face of HbbTv**
- ***The best proposal* for objective ICT-2011.1.5 (FP7 in ICT Call7)** Networked Media and Search Systems

Personal contacts are more efficient than open days for partner search

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Thank you for attention.
Questions?

http://www.hbb-next.eu