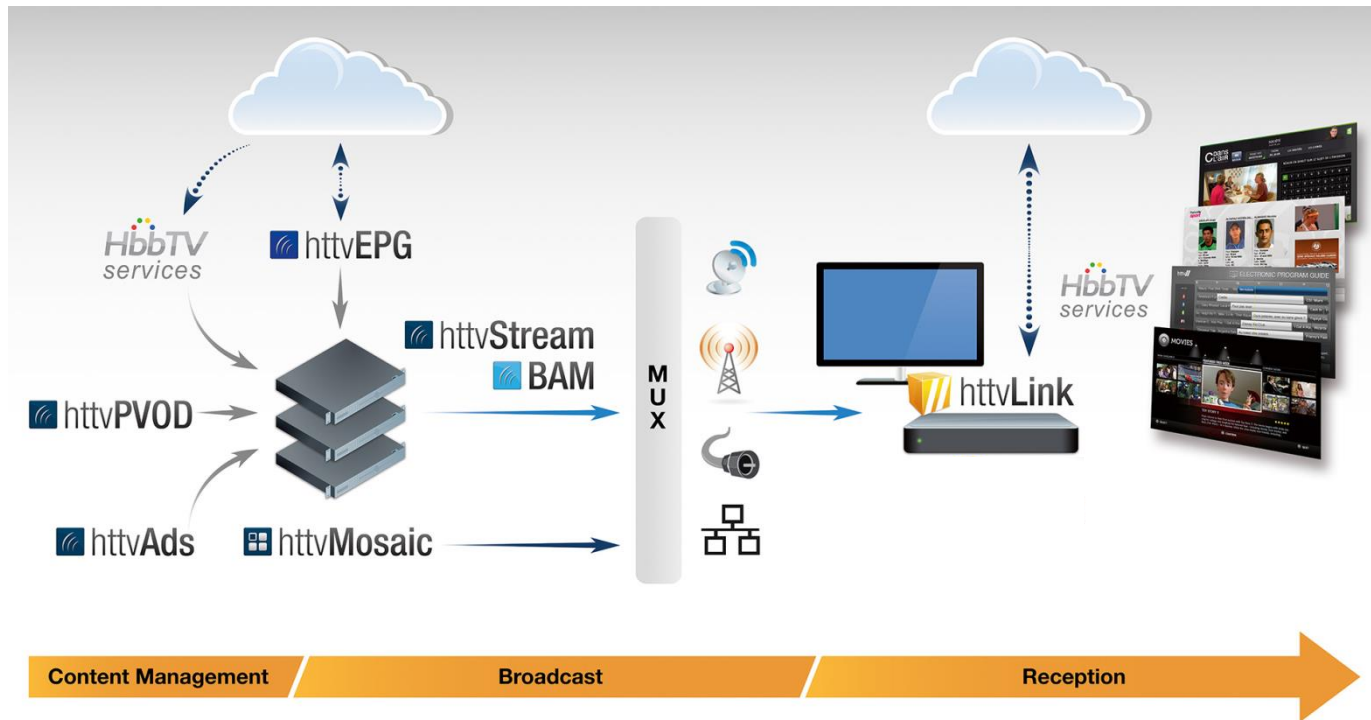# HbbTV: Introduction

Régis Saint Girons

HTTV CEO
Vice-Chairman HbbTV Marketing Group

HTTV – High Tech TV

- **Technology provider for interactive Digital TV**
  - Connected TV solutions based on **HTML5** and **HbbTV**
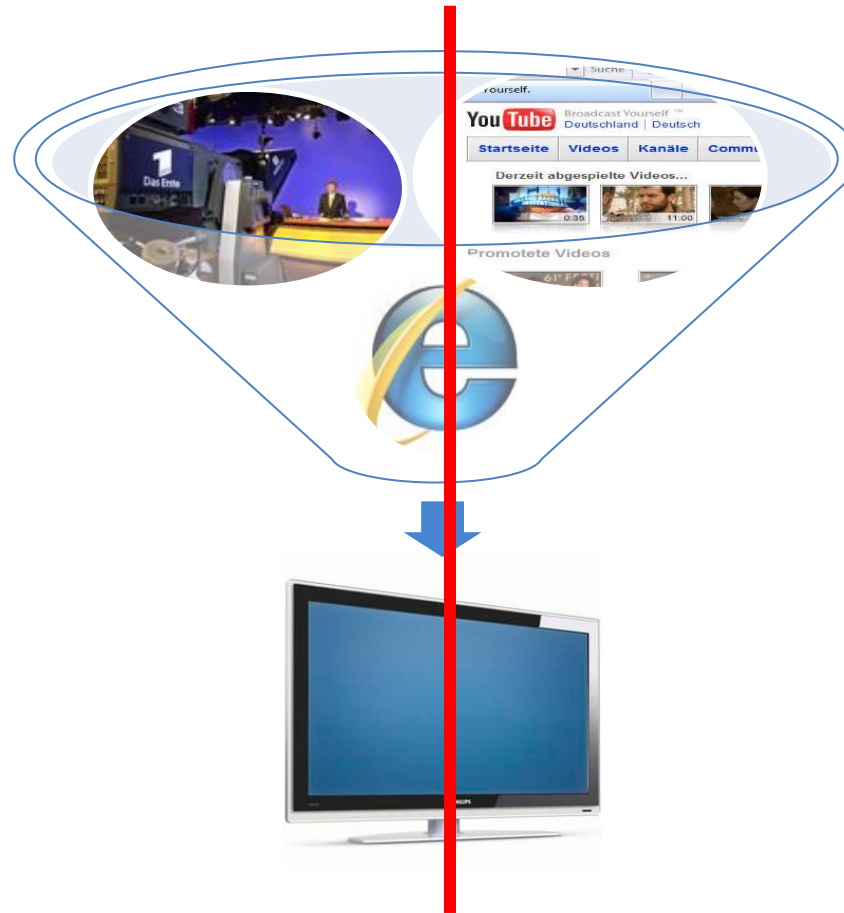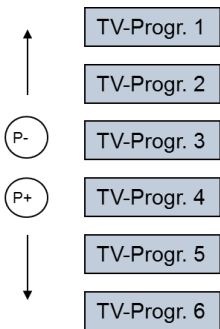 - Hybrid TV OS and Head End Play Out Server

- **International implementation**
  - French Headquarter since 1999, Singapore office since 2011

Connected TV, two separated worlds

Broadcast Context
→ Program lists
→ linear TV
→ broadcast links

Internet context
→ Portals, TV Apps
→ On demand
→ Broadband links

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

Portal
flickr
YouTube
TV4 VoD
Weather

"Smart TV" – Just an Example

- VOD
- App Store
- Recommen-dations
- advertisement
- Access to „media"
- TV

Challenges for Broadcasters

How to get onto the portals?
How to get found in the portals?
How to adapt service for each portal technology
How to connect linear broadcast to non-linear services?

From Connected TV to …..

Broadcast Services

Internet Services
(Portals / TV Apps)

Broadcast (distribution)

Internet (distribution)
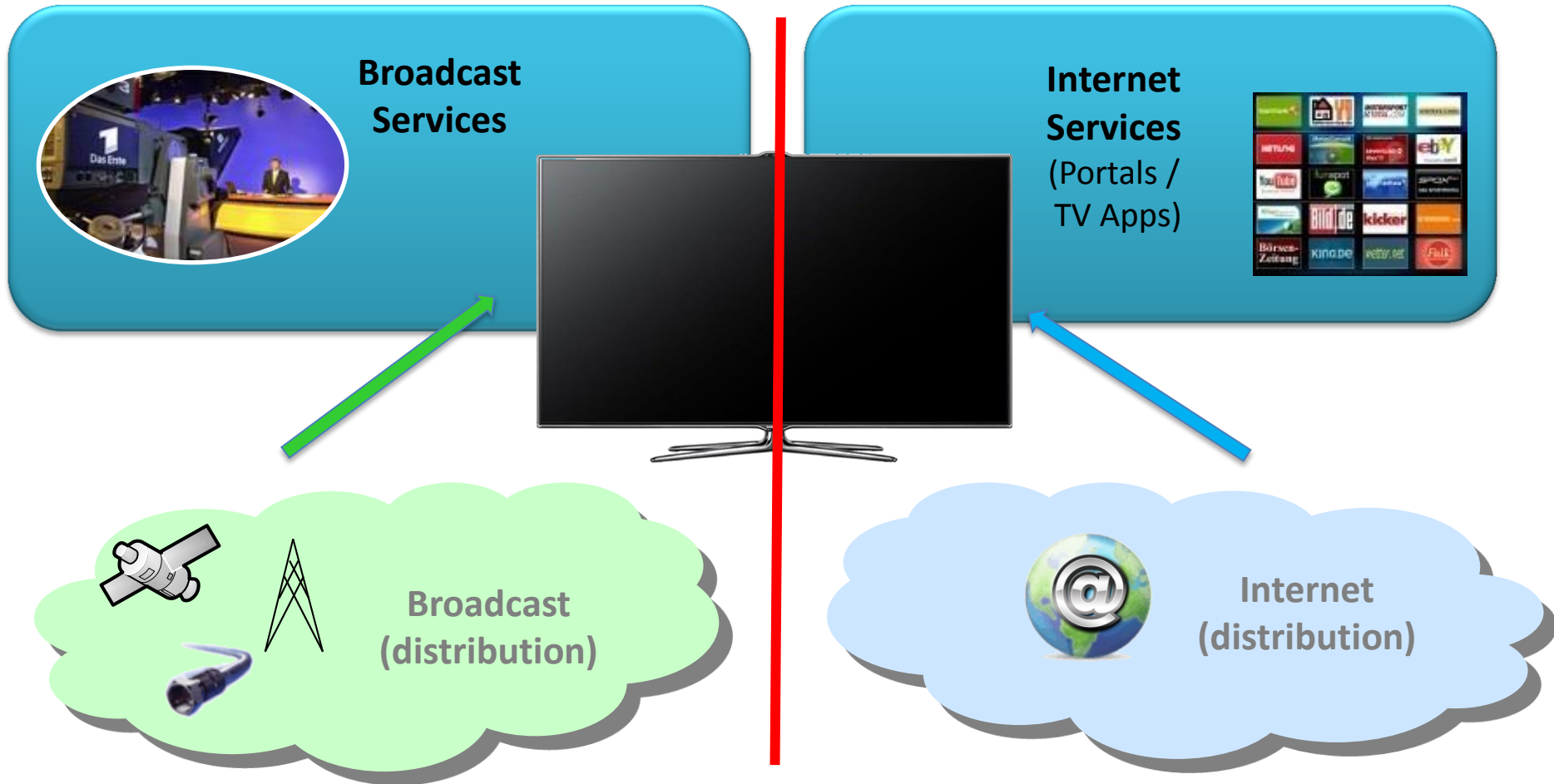
... HbbTV – a new paradigm

Broadcast Services

HbbTV

Internet Services (Portals / TV Apps)

Mixing TV Entertainment with the Internet Power

(distribution)

Internet (distribution)

Hybrid broadcast broadband TV

- **Broadcaster & TV Manufacturer initiative**
  - Moving to Pay TV

- **Combines the best of Television and the Internet**
  - Gives the broadcasters control over the internet
  - Gives the user the best service access through TV channels
  - Provides service interoperability over any HbbTV devices

- **The most deployed open interactive TV standard**

HbbTV key goals

Broadcast remain anchor for service usage

No portal needed, No central gatekeeper

Independently maintain brand and UI design

Fast application development by using a web browser

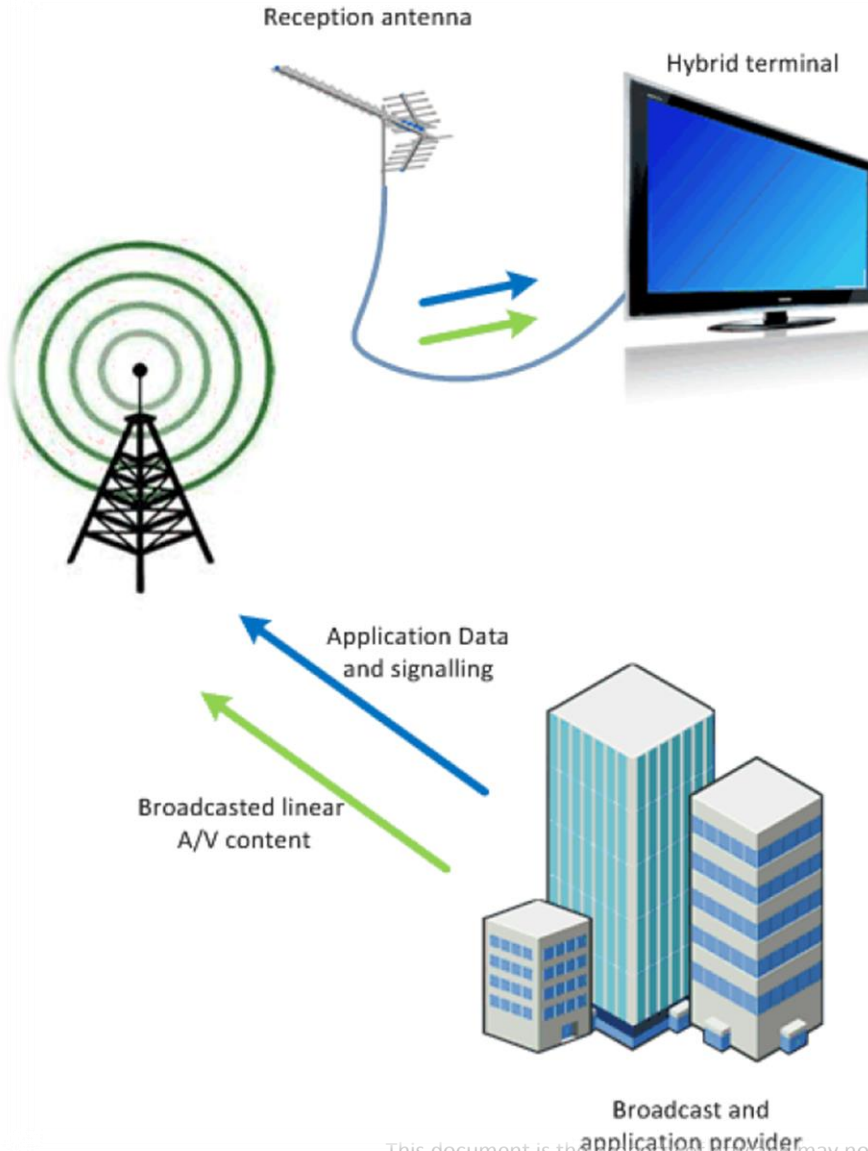Data transmission in broadcast, Broadband not essential

Limited receiver extra cost compared to basic HDTV STB
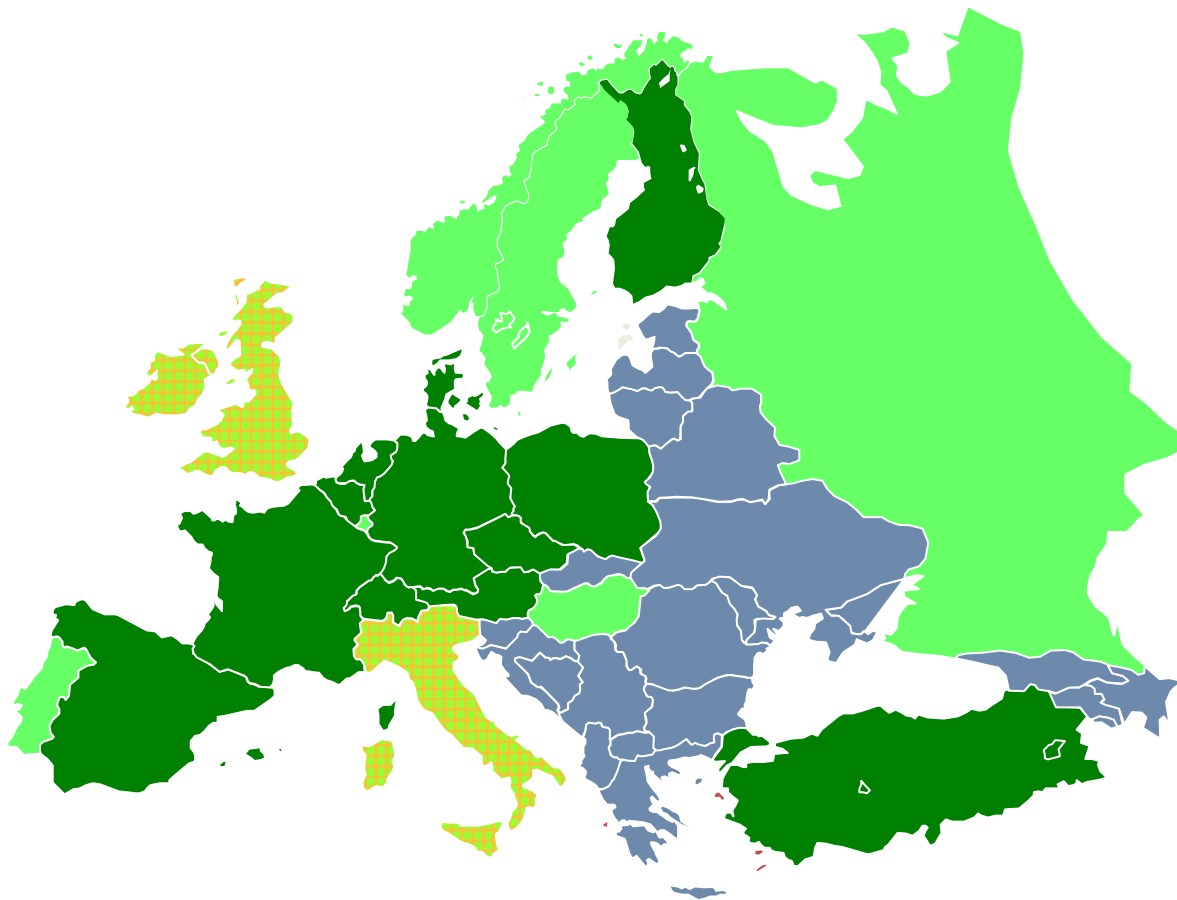
The Key Building Blocks

- Start from mature & stable technology
  - HTML Web standards
  - DVB DSM-CC object carousel

- Mix in elements from other work where necessary
  - Application signaling & lifecycle management as used in MHP
  - JavaScript APIs for TV from OIPF
  - MPEG-Dash Profile

End to end architecture

Reception antenna

Hybrid terminal

Application Data and signalling

Broadcasted linear A/V content

Broadcast and application provider
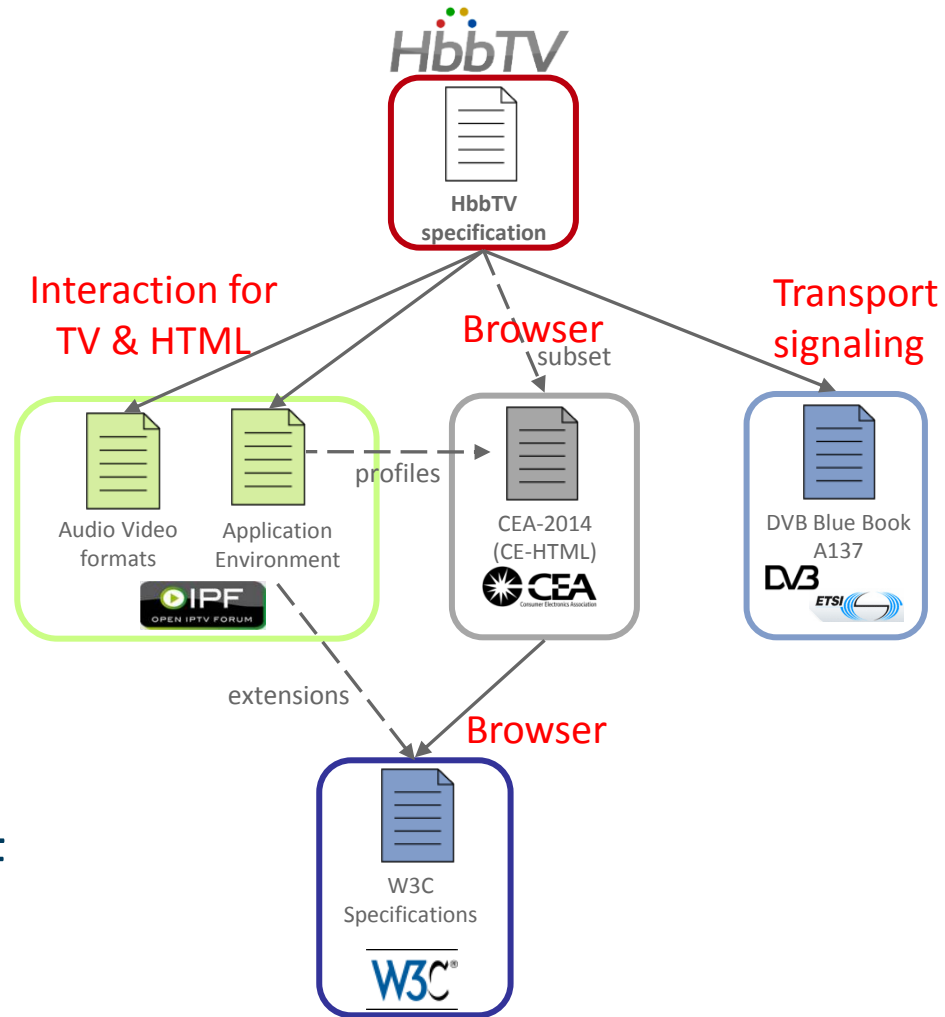
HbbTV deployments in Europe

Legend:
- in regular operation
- announced / trials
- no information
- other plans

Fast HbbTV device deployments

- **Over 20 Million devices**
  - 10 Million devices sold in Germany

- **Mix of TVs and STBs**

- **Technology established in 3 years only**

- **90% of Connected TV sold in Europe are HbbTV**

Source SevenOne media

Features in Connected TVs
Sold units in Mio.

	2010	2011	2012	2013
total	1,69	3,22	4,65	4,49
with HbbTV	0,03	1,09	3,08	4,06
%	2%	33%	66%	90%

■ no HbbTV ■ with HbbTV function

German deployments

HbbTV usage figures (Germany)

Unique Devices - SAT.1, ProSieben, kabel eins
Number of Clients (=Devices) reached monthly

380%

*change of tracking-system

Legend: SAT.1 Red Button — ProSieben Red Button — kabel eins Red Button — sixx Red Button
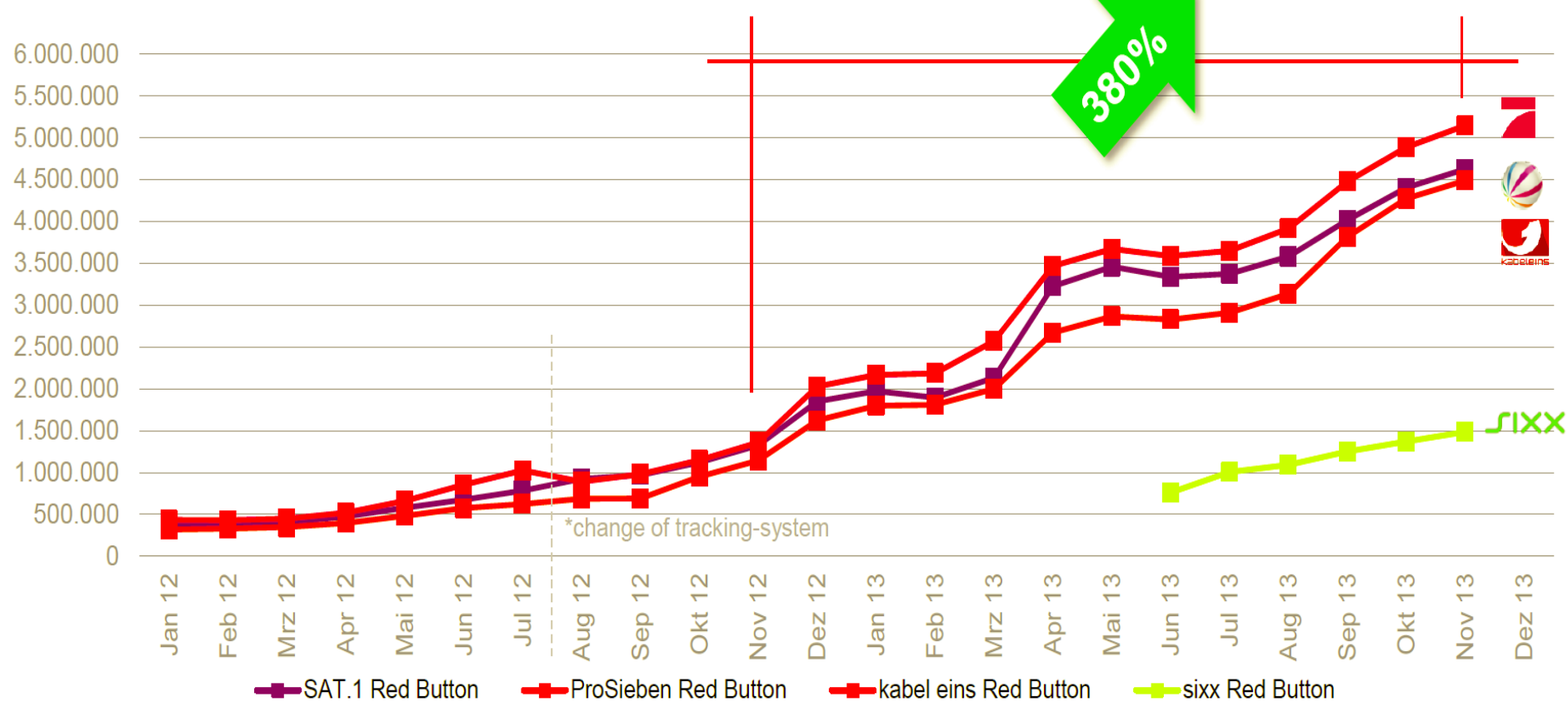
Source:
Internal Tracking SevenOne Media

HbbTV is used by people from any Age

Ages
Data in percent

	ProSieben	Sat.1	kabel eins	sixx
60 J. +	5	9	8	5
50-59 J.	8	20	23	10
40-49 J.	17	20	23	25
30-39 J.	25	23	35	35
20-29 J.	26	17	16	13
14-19 J.	18	15 / 16	8 / 11	13

■14-19 J. ■20-29 J. ■30-39 J. ■40-49 J. ■50-59 J. ■60 J. +
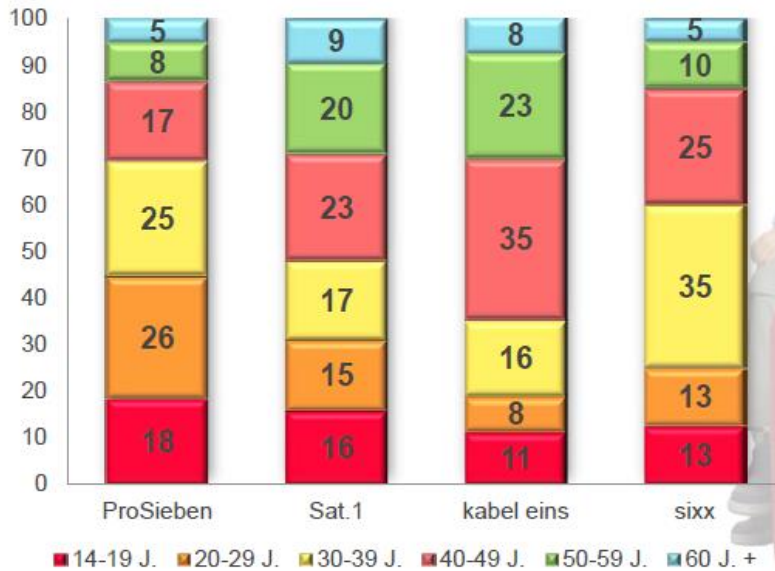
Source: 730 respondents
Question: „And how old are you: …"
SevenOne Media, July 2013
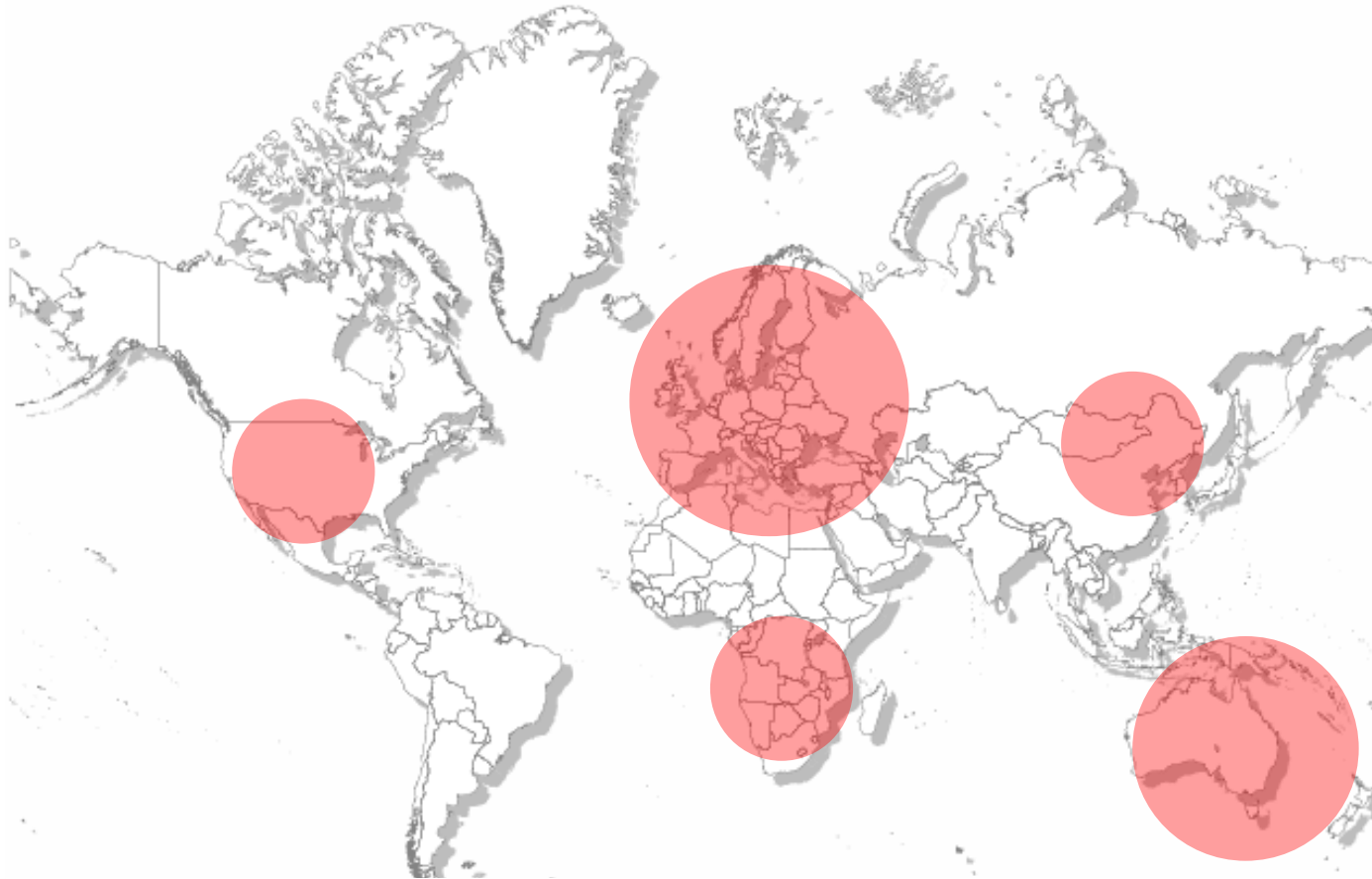
2011-2013: Europe, Middle East

2014-2015: Asia Pacific

Next: Africa, USA, China

Deployments outside Europe

- **Australia and New Zealand**
  - Freeview in Australia and in New Zealand have announced to move from MHEG5 to HbbTV in 2014 on Terrestrial and Satellite

- **USA**
  - ATSC is in active liaison with HbbTV to use the technology as part of ATSC3.0.

- **ASEAN**
  - Malaysia and Vietnam are specifying HbbTV as part of their DVB-T2 launches
  - Other countries... are actively considering HbbTV for their Terrestrial Analog Switch Off

- **Africa**
  - ASBU (Arabic States Broadcast Union) has specified HbbTV for their Analog Switch Off
  - CEDEAO (West African French speaking countries) has also specified HBBTV for their ASO
  - Sentech (South Africa) is testing HbbTV over satellite
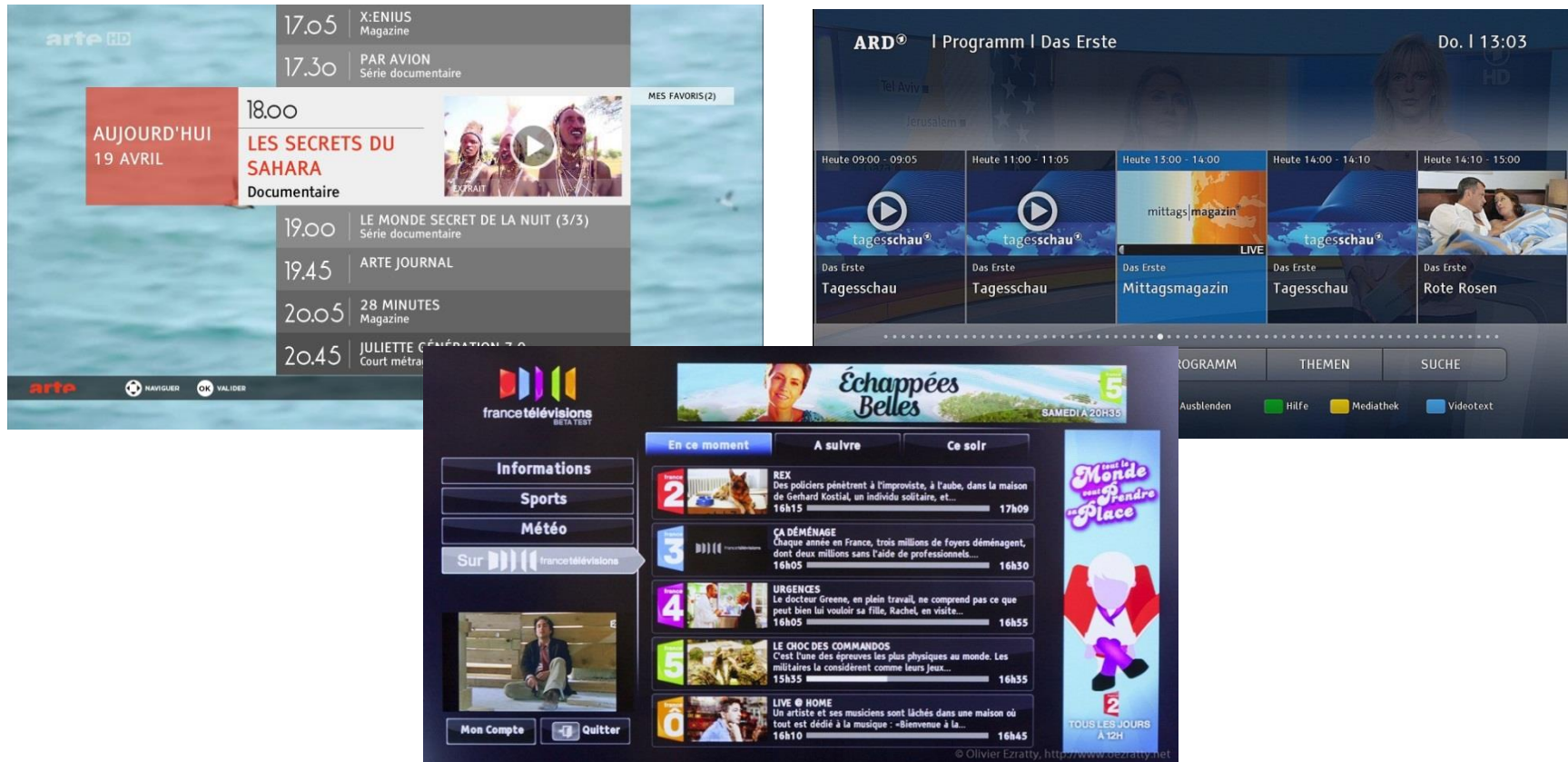
Catch-up, Start-over, VOD services

- 7 days catch-up (ReplayTV) into the past
- Start-over the most used service in France
- Available on both free and premium channels
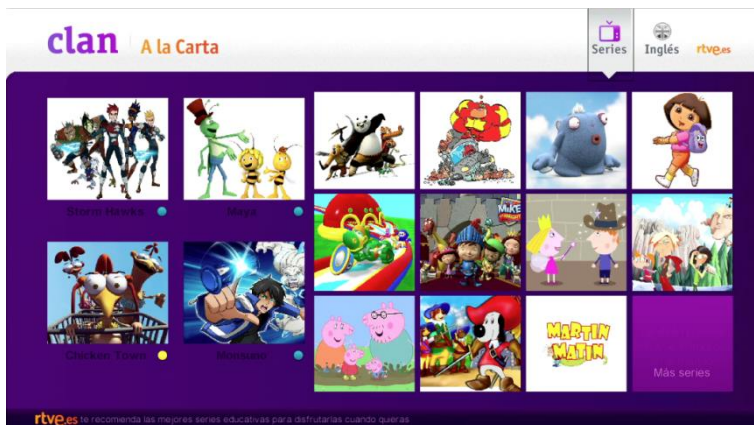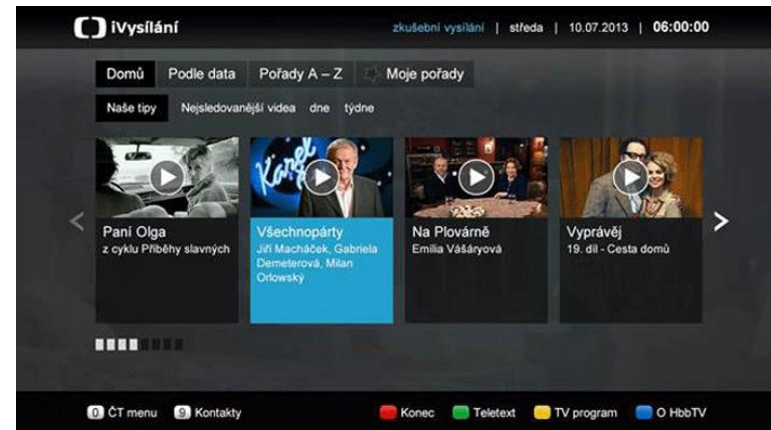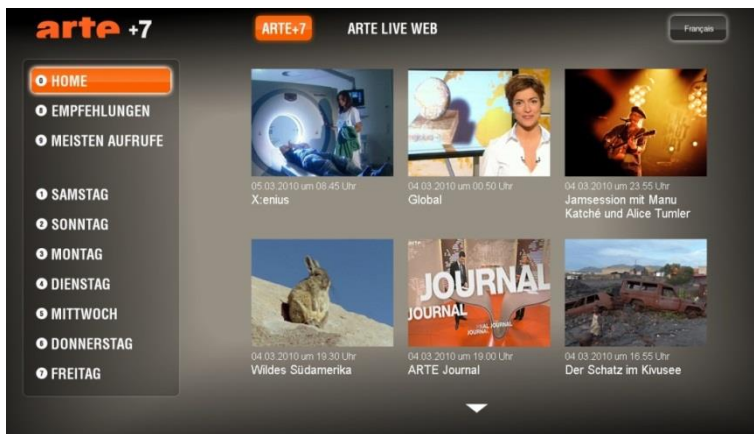
EPG

- Entire program offering: linear and on-demand
- 7 days into the past
- Can be shared across all channels from the same broadcaster

Information services

- High usage in Europe (several million users per day)
- Keeps the established and well known UI (numbered pages)
- Web-based technology offers lots of Internet features

Advertising campaigns

- Microsites user experience
- Improved Brand Awareness

H&M

H&M

Hyundai

Disney (Thor 2)

Yourfone

BMW

Meßmer (OTG)

EDEKA

L'Oréal

Schöfferhofer

Renault

OTTO

Improved Accessibility

- Change font sizes for readability
- Sign language via additional stream

Education

- Enhanced Live TV Programs with interactive education service
- On demand education programs (VOD or Push VOD)

HbbTV Moving to Pay TV networks

- Deployed on satellite with embedded CAS
  - HD+ SmartTV, Fransat
- Deployed on Pay TV Cable
  - KabelKiosk (Germany)
- On going deployments to replace legacy PayTV middleware with HbbTV
  - Digiturk and more to come in 2014 including Cable and IPTV networks
- Moving to IPTV
  - KabelKiosk and DT (trial)
  - Considered by PayTV operators to access Free To Air HbbTV services (IPTV Telco operators in France)

Network Operator HbbTV services

- Making Network operator's HbbTV services coexisting with the Broadcast HbbTV services
  - Kabelkiosk, Fransat example

Live demonstration

Thank You

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