



HbbTV: Introduction

Régis Saint Giron

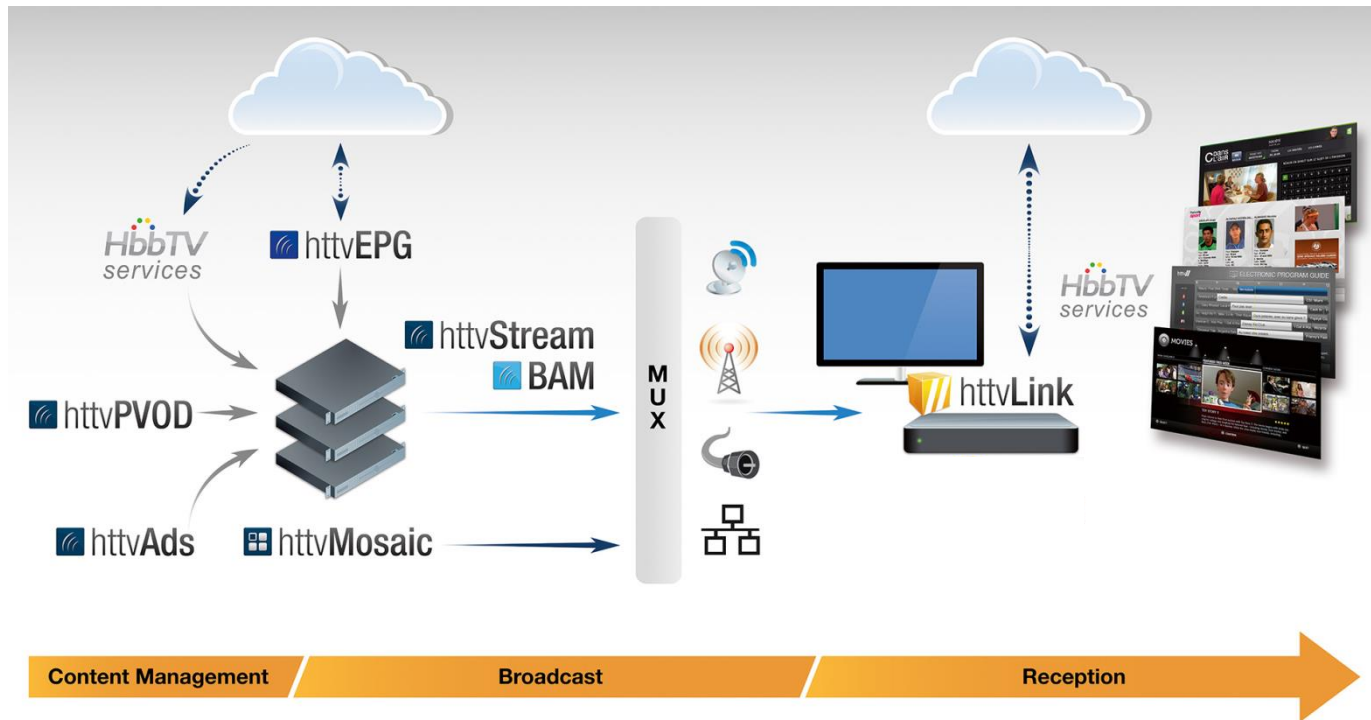
HTTV CEO

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



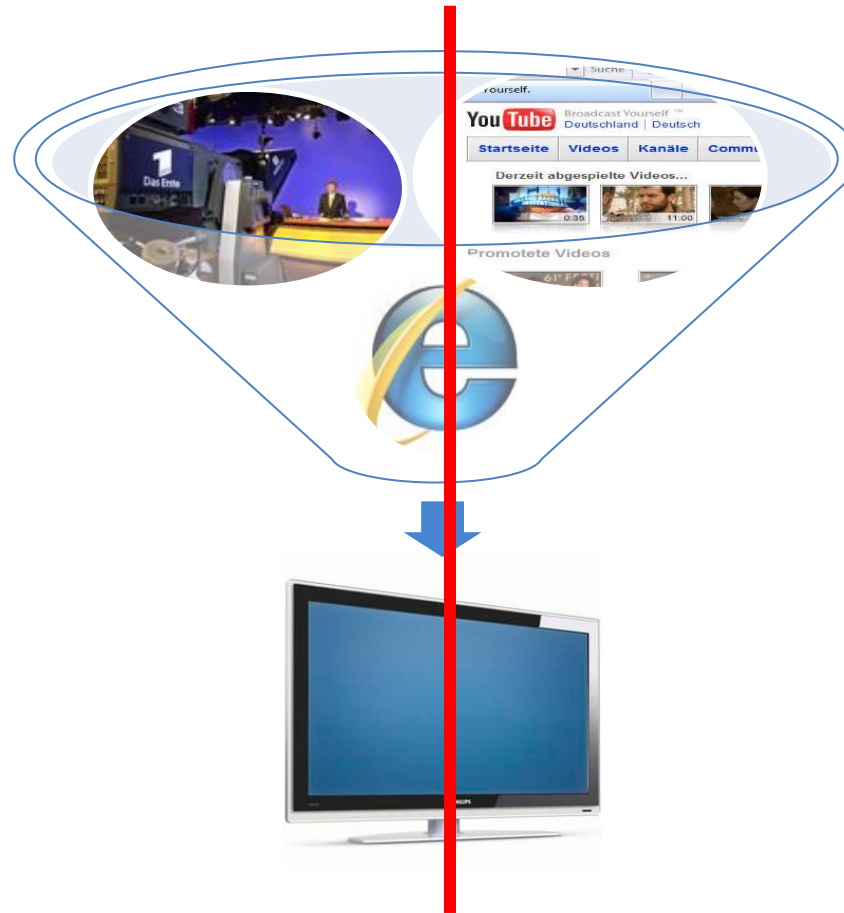
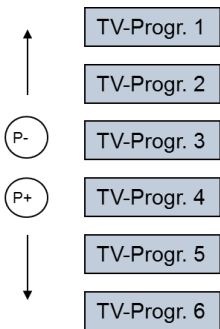
- **International implementation**

- 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



“Smart TV” – Just an Example



- VOD
- App Store
- Recommendations
- advertisement
- Access to „media“
- TV

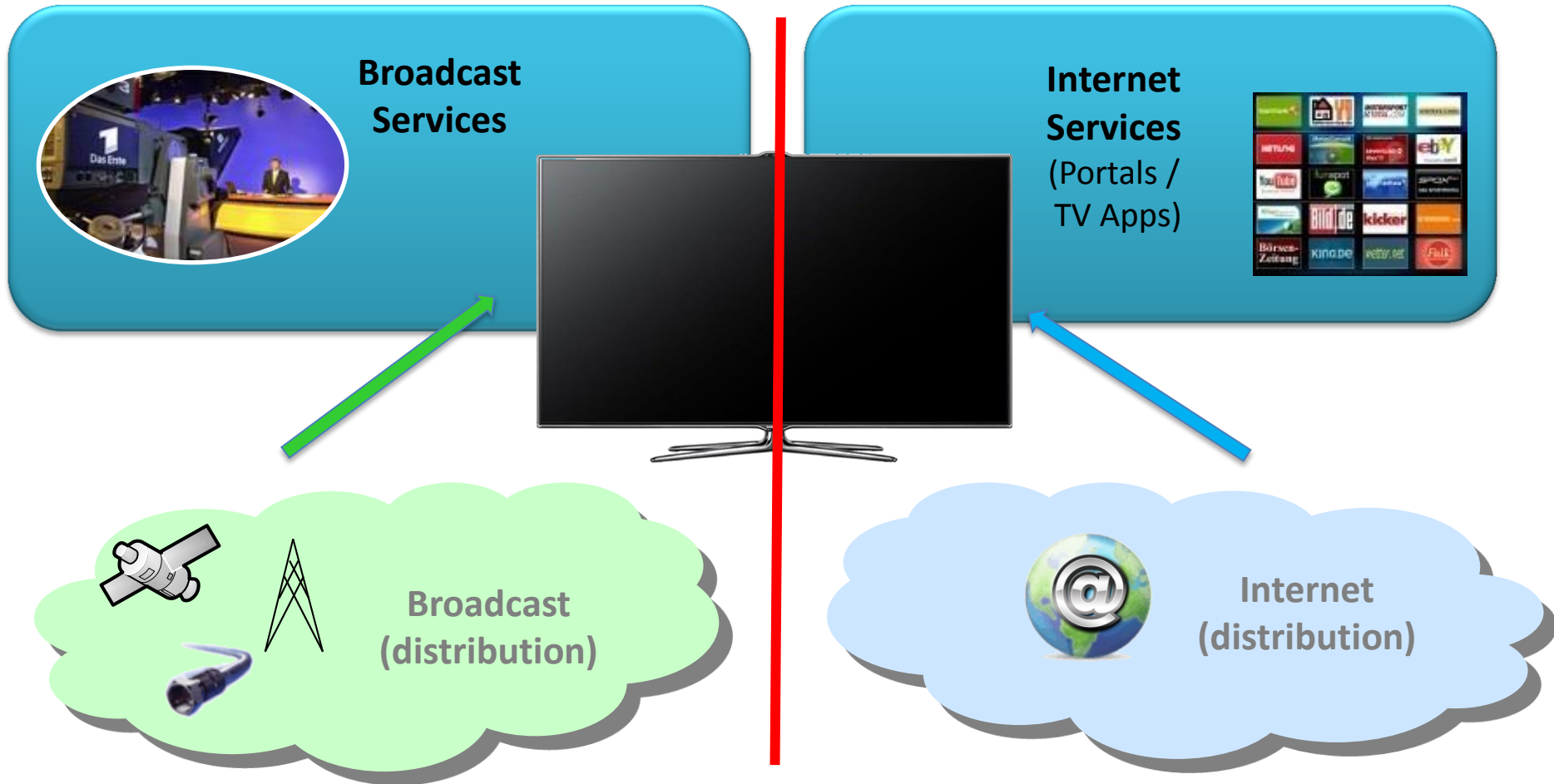
Challenges for Broadcasters



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



... HbbTV – a new paradigm



Broadcast Services

HbbTV

**Internet Services
(Portals /
TV Apps)**



**Mixing
TV Entertainment
with
the Internet Power**



(distribution)

**Internet
(distribution)**

- **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



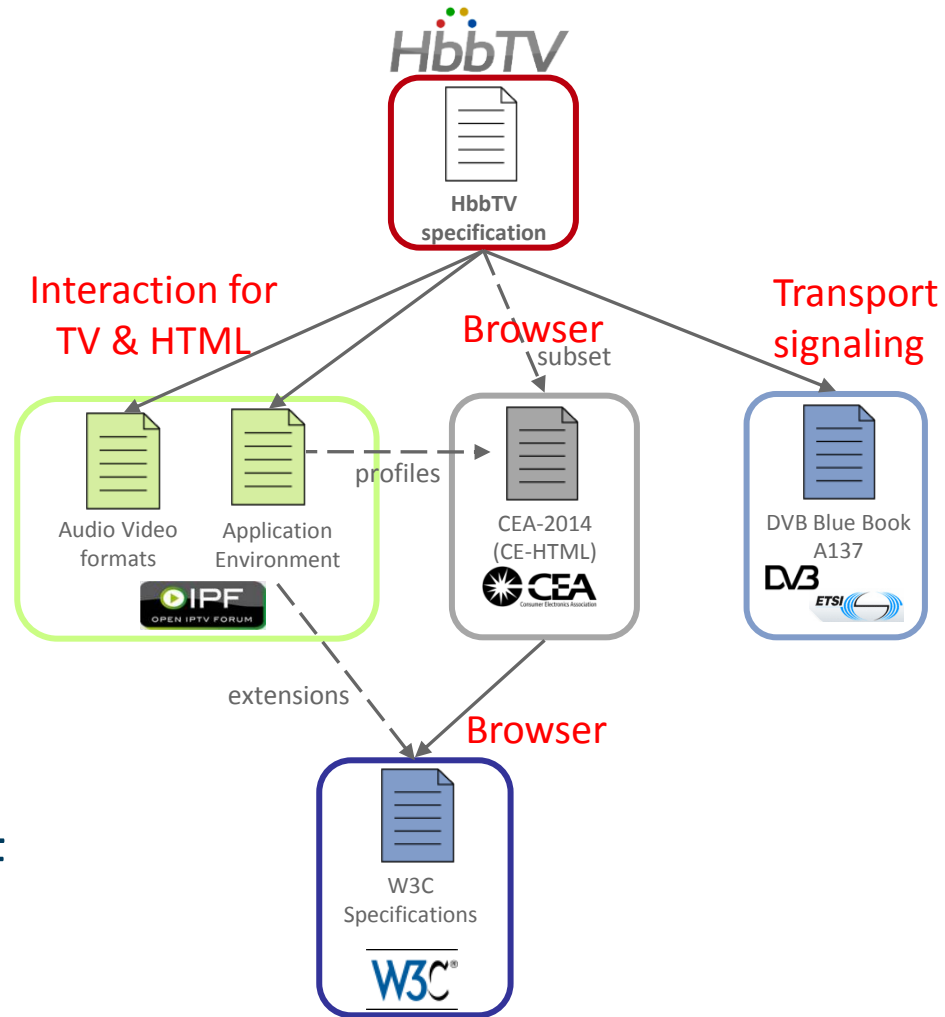
Data transmission in broadcast, Broadband not essential



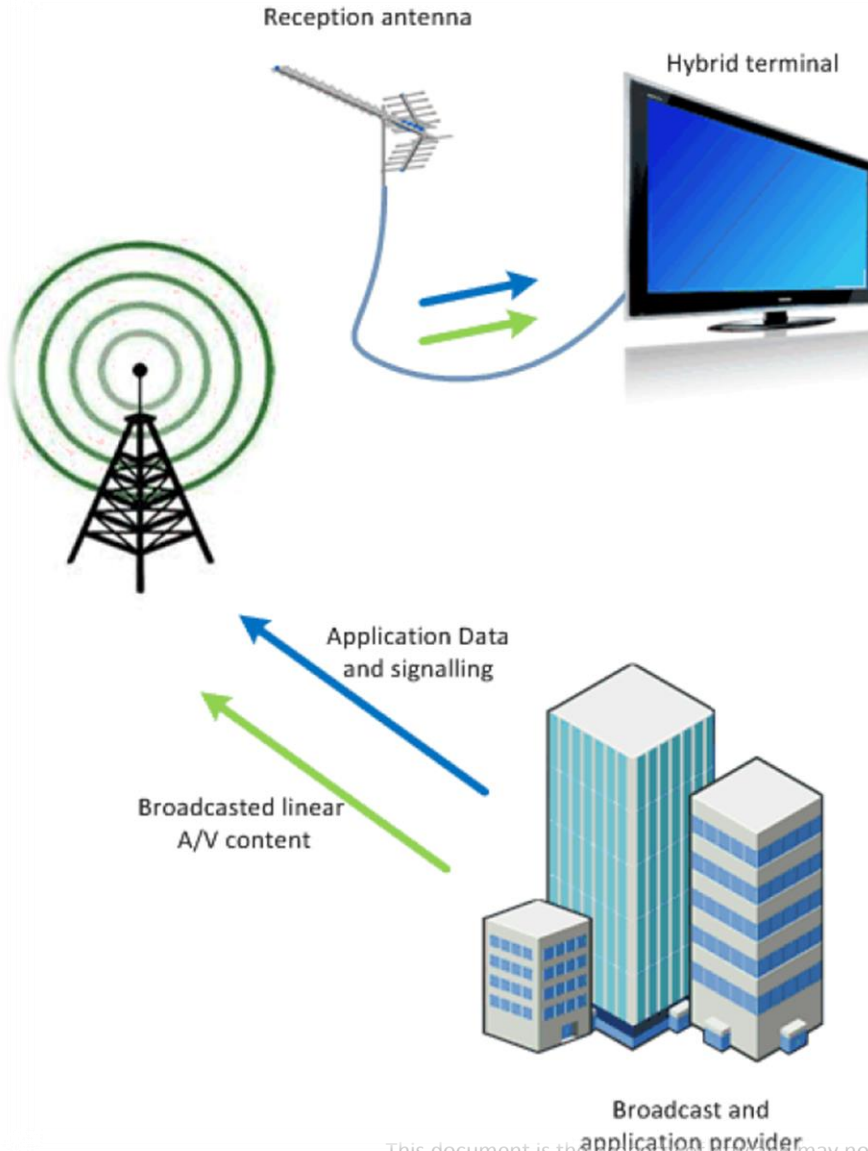
Limited receiver extra cost compared to basic HDTV STB

The Key Building Blocks

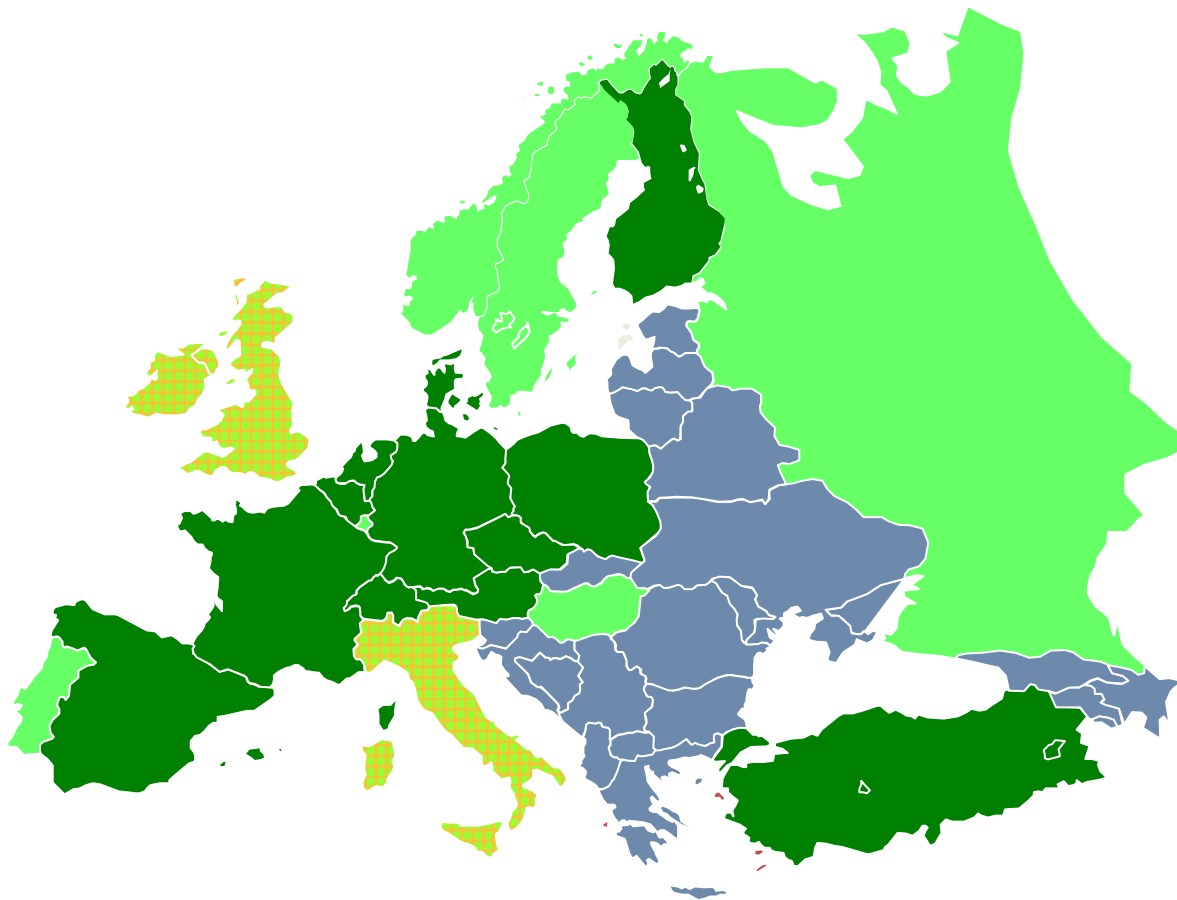
- Start from mature & stable technology
 - HTML Web standards
 - DVB DSM-CC object carousel
- Mix in elements from other work where necessary
 - Application signaling & lifecycle management as used in MHP
 - JavaScript APIs for TV from OIPF
 - MPEG-Dash Profile



End to end architecture



HbbTV deployments in Europe



in regular operation

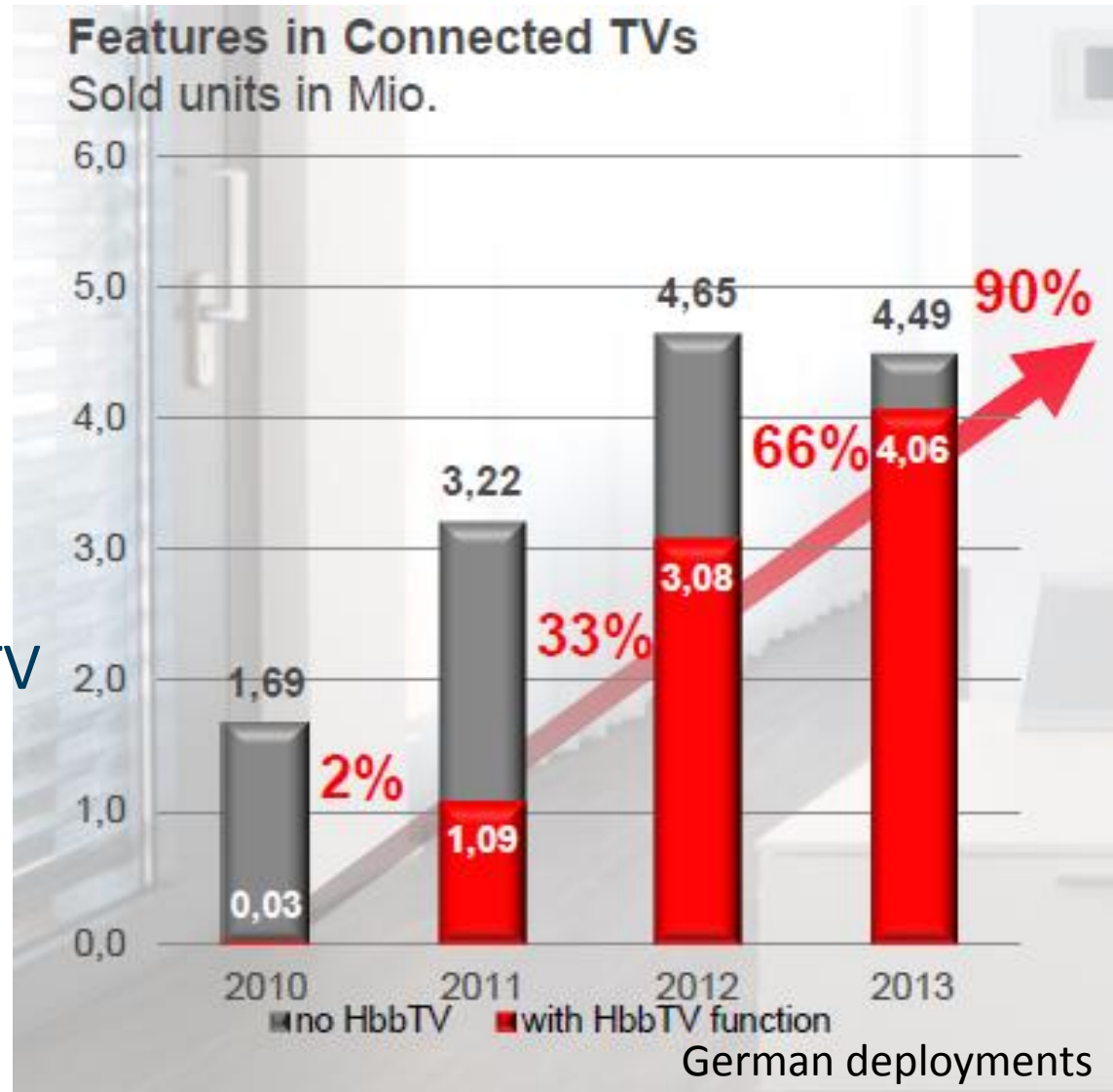
announced / trials

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

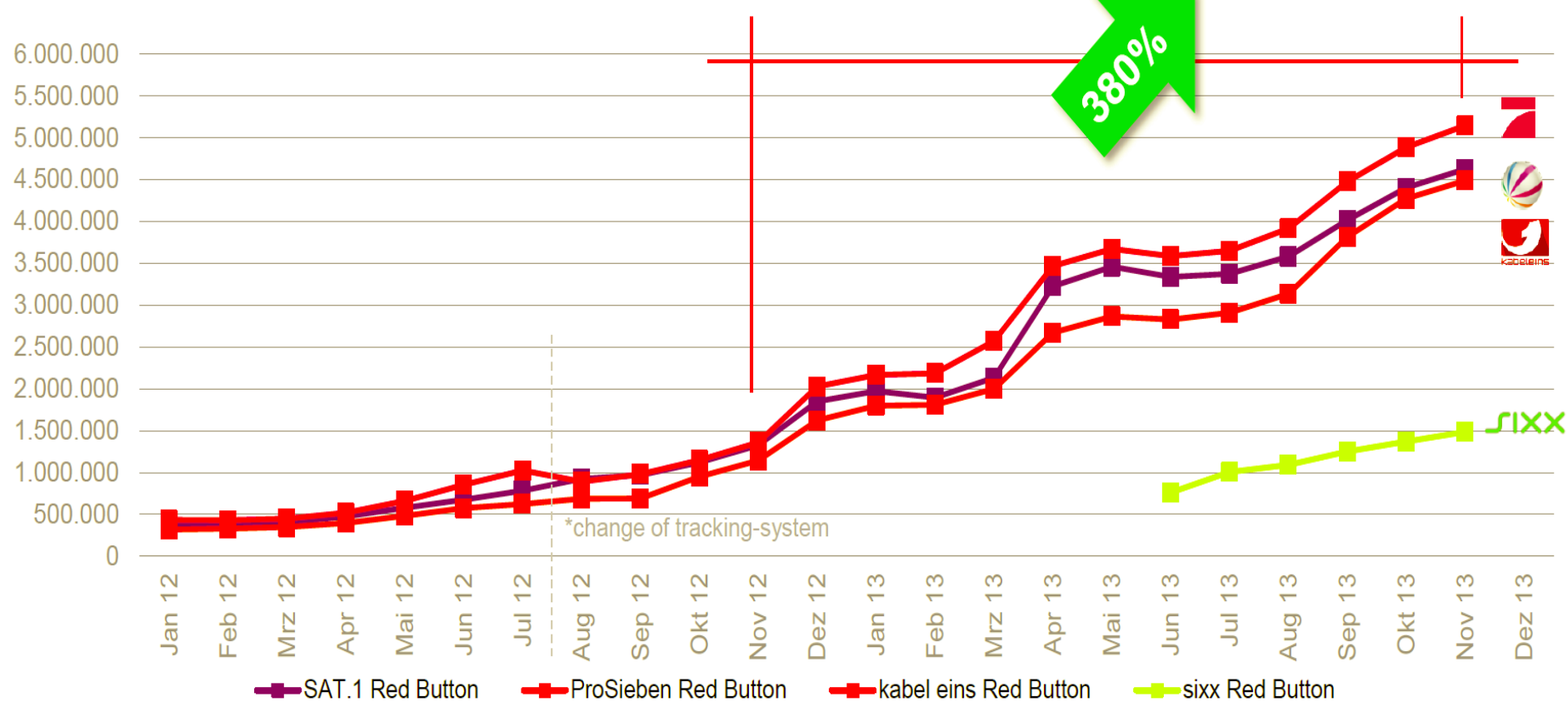


Source SevenOne media

HbbTV usage figures (Germany)



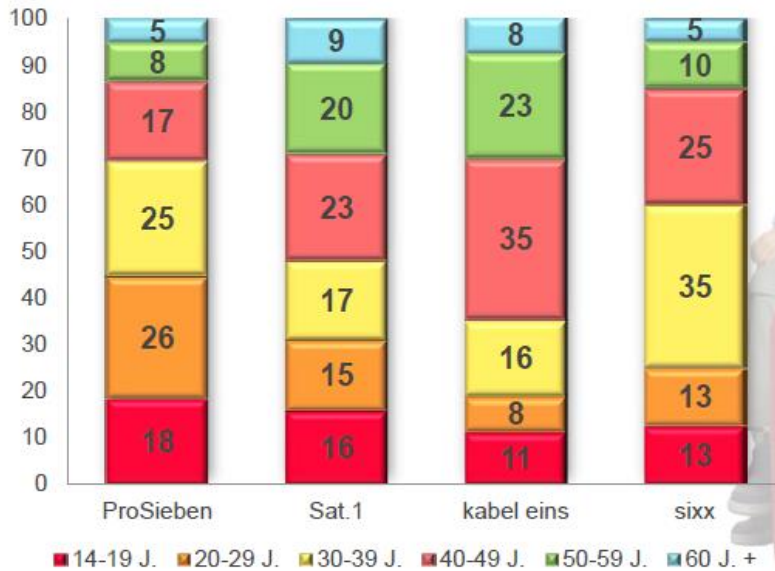
Unique Devices - SAT.1, ProSieben, kabel eins
Number of Clients (=Devices) reached monthly



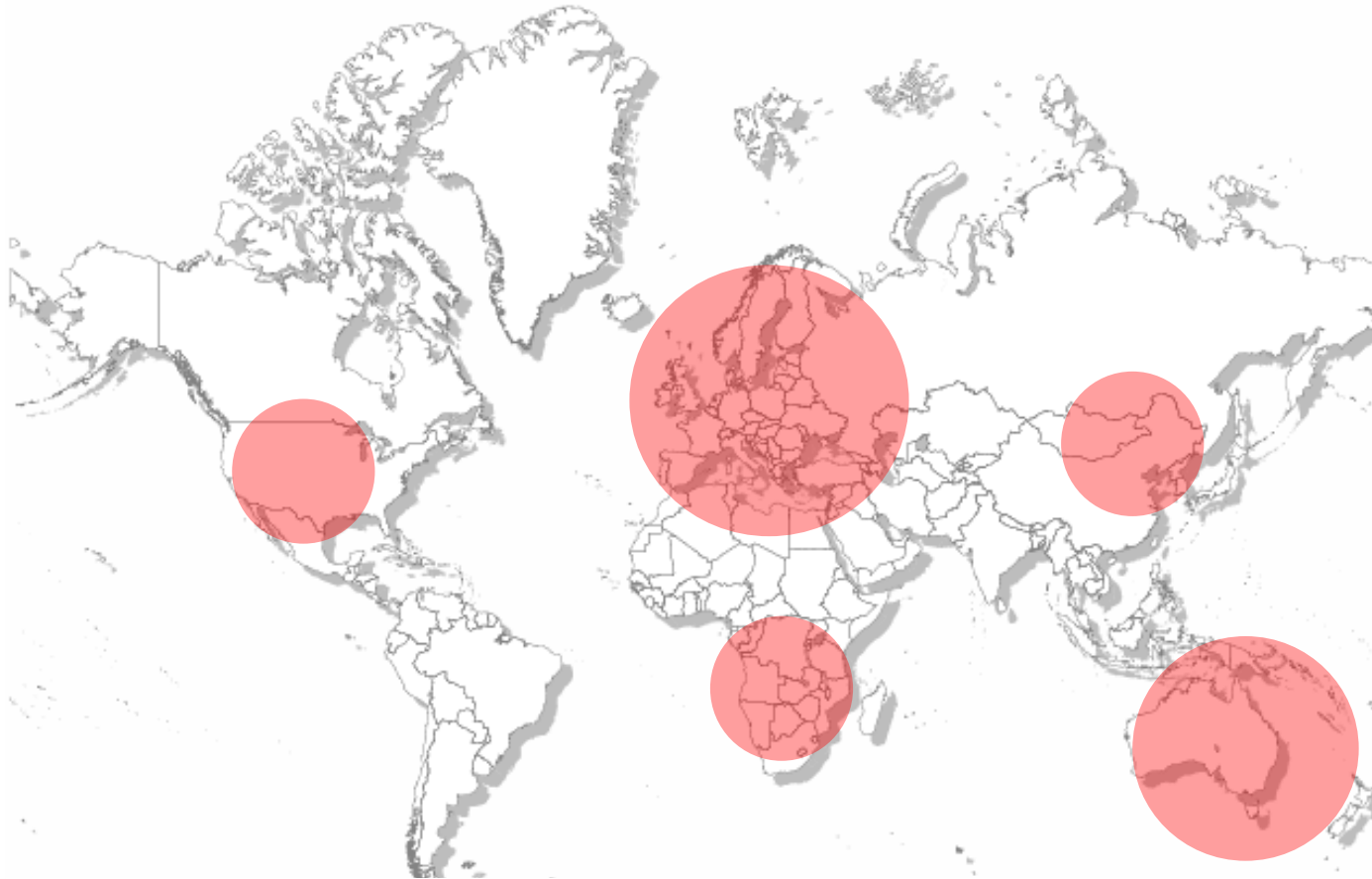
Source:
Internal Tracking SevenOne Media

HbbTV is used by people from any Age

Ages
Data in percent



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



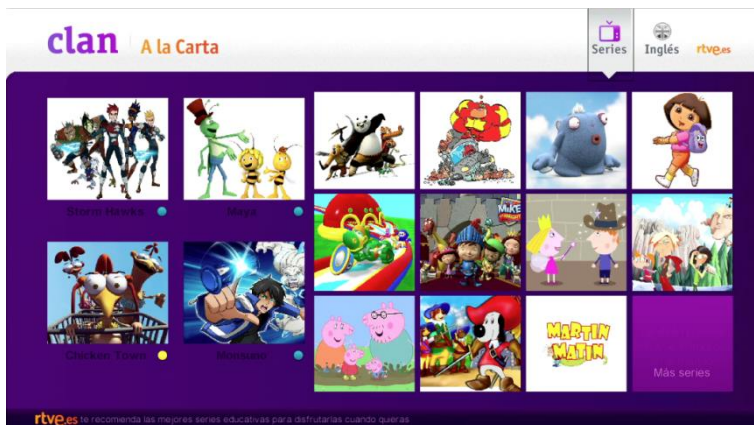
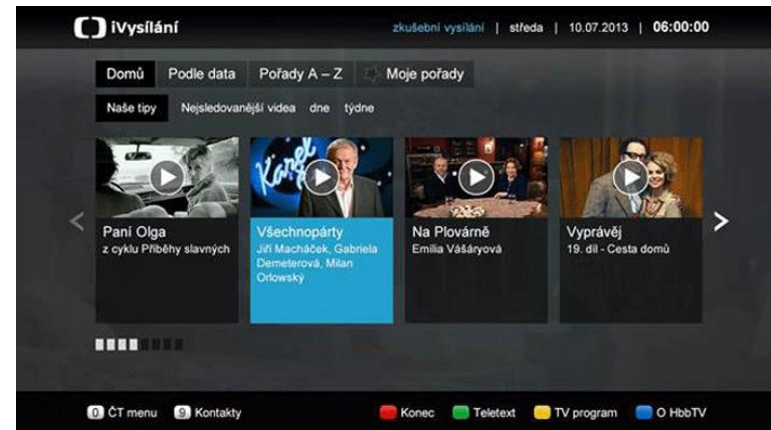
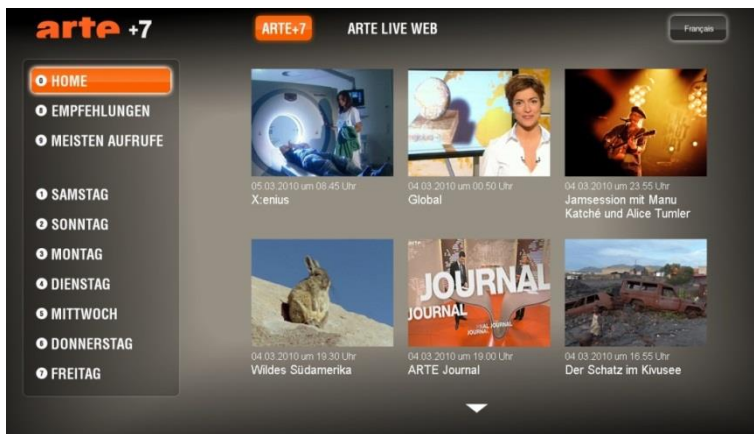
- Malaysia and Vietnam are specifying HbbTV as part of their DVB-T2 launches
- Other countries... are actively considering HbbTV for their Terrestrial Analog Switch Off

■ 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

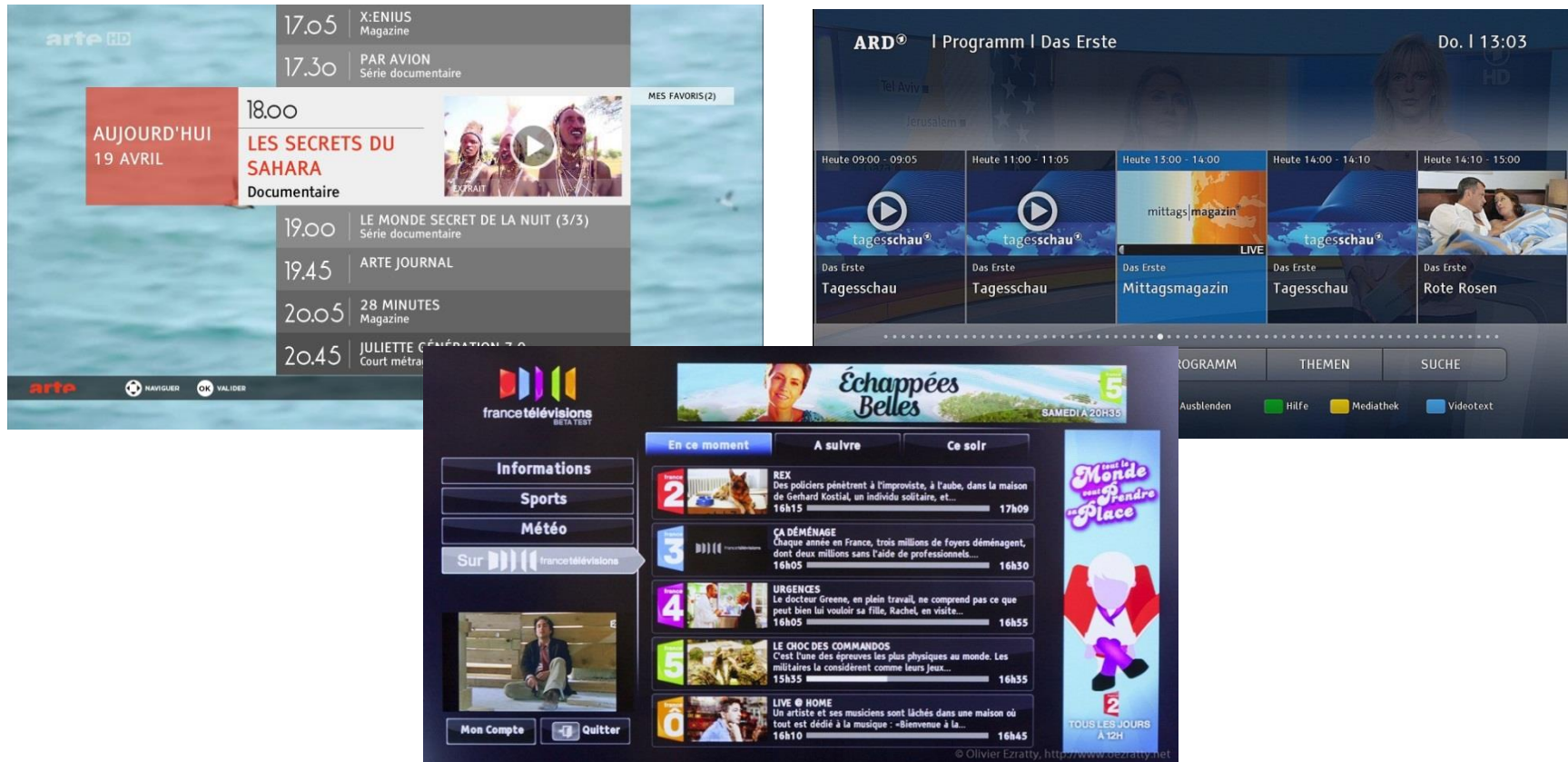
Catch-up, Start-over, VOD services

- 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



The image displays three different Electronic Program Guide (EPG) interfaces:

- ARTE HD (top left):** Shows a program grid for '19 AVRIL'. The main feature is 'LES SECRETS DU SAHARA' (Documentaire) at 18:00. Other programs include 'X:ENIUS Magazine' at 17:05, 'PAR AVION' at 17:30, 'LE MONDE SECRET DE LA NUIT (3/3)' at 19:00, 'ARTE JOURNAL' at 19:45, '28 MINUTES Magazine' at 20:05, and 'JULIETTE GÉNÉRATION 70' at 20:45.
- ARD (top right):** Shows a program grid for 'Das Erste' on 'Do. | 13:03'. Programs include 'tagesschau' at 09:00, 11:05, and 14:00, 'mittagsmagazin' at 13:00, and 'Rote Rosen' at 14:10.
- France Télévisions (bottom):** Shows a program grid for 'francetélévisions BETA TEST'. The main feature is 'Échappées Belles' (SAMEDI A 20H35). Other programs include 'REX' at 16h15, 'ÇA DÉMÉNAGE' at 16h05, 'URGENCES' at 16h05, 'LE CHOC DES COMMANDOS' at 16h35, and 'LIVE @ HOME' at 16h10.

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

rbbtext^{HD}
02.09.2010 | 10:43 Uhr

Nachrichten
50. Funkausstellung startet
Weiter Probleme bei der S-Bahn
Karstadt: Tag der Entscheidung
Berliner gewinnt 14 Millionen
Behinderungen auf Autobahn A 2
Friedrichstadtpalast: Neue Revue
Daimler bleibt in Berlin
Auftritt zum Berliner Musikfest

Wetter heute
Vorhersage heute (MeteoGroup)
Aussichten (5 Tage)

Startseite
Nachrichten regional
tagesschau
Wetter
Sport
Fußball
Verkehr
Untertitelte Sendungen
Alles auf einen Blick

Jetzt im Programm
10.30 QUIVIVE
11.15 Brisant
12.00 nano

Temperaturen
Frankfurt bedeckt 15°C

Starleiste 0 Hilfe 1 Ausblenden Programm Mediathek

Uusin uutislähetyt **MTV3**

Sää lauantai jopa 20 astetta vuorokaudessa, kuumat jatkuvat
Sää vaihtelee tällä viikolla nopeasti. Aikeli on tänään ilmapäivä ja illalla huono maan länsi- ja eteläosissa kuumatien takia. Heikkoa lumsateita.

Vapaehtoiseen asepalvelukseen haki 650 naista
Naisten vapaaehtoiseen asepalvelukseen hakijoita oli tänä vuonna yhteensä 650. Määrä on pienempi kuin kahtena edellisvuonna, mutta selvästi suurempi.

Viestintävirasto kehottaa poistamaan turhat jävat
Java-ohjelmiston käyttö voi yhä vaarantaa kotikoneesi. Viestintäviraston mukaan Javaa hyödynnetään haittaohjelmien levittämisessä.

Polisi neuvoi isää väärin – äiti vei lapset
Polisin pitäisi parantaa ohjeitaan lapsikaappausten ehkäisemiseksi, vaati apulaiskoetusasiamies Jussi Lajunen.
Päruoa ottaa kantaa tapaukseen, jossa Lappeenrannan poliisin toiminta.

Salattujen elämien nuoret jättävät mökkipöytäsoiton Tuusulanmaalla
Senaa jättämät kääntö 12. elokuuta.

Helsinki klo 18:00 +1 +1 -3

2 Dernier JT France 2
HEURES
20 heures - 29 août 2011

1 Dernier JT régional
3
Retrouver le dernier JT régional des chaînes France 3 et 1ère

3 Dernier JT national France 3
13
19:20 - 29 août 2011

Les JT 1ère
Les JT France 2
8 heures
13 heures
20 heures
Les JT France 3
12:13
19:20
SOIR 3

DER NEUE RENAULT CLIO
SERIENMÄSSIG MIT GOLDENEM LENKRAD

ID-Text	Videocenter	Programm	Sendungen	Applikationen
Übersicht	News	Sport	V.I.P	Service
NEWS	Petraeus: Frauen oft im Weißen Haus	Zentrales Waffenregister kommt	AFG-Bundeswehr will Mio investieren	1:11 1:12 1:21
SPORT	Kopfbäll von Stefan Picht	2. Liga: Schaffl Hertha den Sprung?	Formel 1: Pressesstimmen zum USA-GP	2:11 2:12 2:02
V.I.P.	American Music Award für Bleber	Stone & Garfield kaufen ein Haus	Wird Russel Brand Yoga-Lehrer?	1:51 1:52 1:55
Exklusive Videos & Bilder	20:15 Trailer ansehen: The Voice of Germany	Videocenter Clp: Liebes-Blender		13:00 BritT 13:30 The Hole

AUSBLENDEN STARTLISTE IMPRESSUM

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



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



Tafakari

Sharing fairly into halves, quarters and eights

Patterns in fractions

Sharing fairly into thirds and ninths

Equivalent fractions

Comparing fractions

Acknowledgements

Sharing fairly into halves, quarters and eights

Sharing fairly into thirds and ninths

Comparing fractions

Acknowledgements

KIE USAID FROM THE AMERICAN PEOPLE mindset

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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