HbbTV

Hybrid TV – Better TV

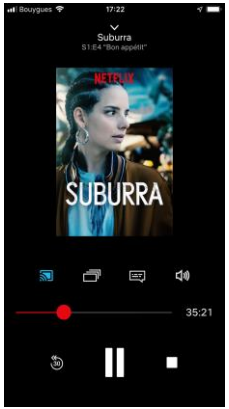
HbbTV at the Heart of Broadcast Transformation in Europe

16th EUROPEAN DIGITAL FORUM, June 6th, 2019, Lucca

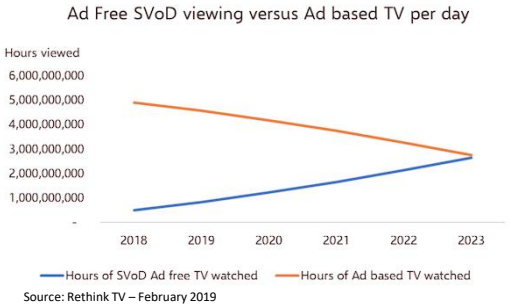
Angelo Pettazzi – Chairman of HbbTV MEWG

Broadcast TV faces many tough challenges

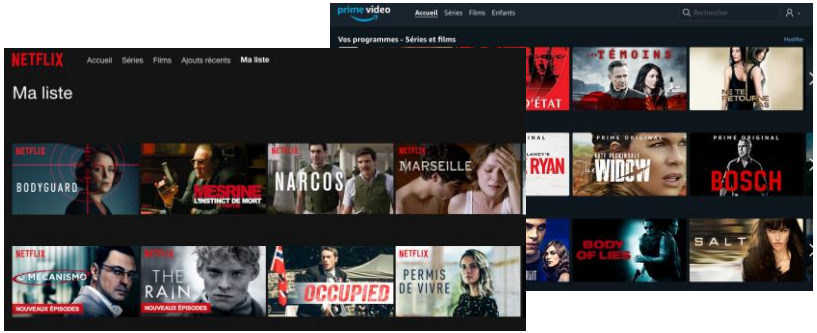
- Consumer appetite for on demand viewing
- Aggressive and talented new OTT players with compelling CONTENT…
- … and sophisticated modern user experience (CONTEXT)
- Data driven marketing and digital advertising
- Operator / IPTV intermediation
- Blurring Free / Pay segmentation



vs.



Source: Rethink TV – February 2019



Broadcasters are not the “born losers” of this change …

Broadcasters need to transform and adapt to this new world!

- Mix linear with non linear in an **OTT style**
- Leverage the **power of linear**
- Leverage **DATA**
- Introduce **addressable advertising**
- Aggregation, gather together to leverage **synergies**
- **UX**, end-user coaching, relationships
- **Branding**, educating the market on new TV proposals

These changes are enabled with HbbTV technologies!

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And this is happening …

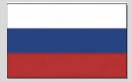
2015 – HbbTV 2.0.1

2017 – HbbTV 2.0

2017 – HbbTV 2.0.1 + OpApp

2018 – HbbTV 2.0.1

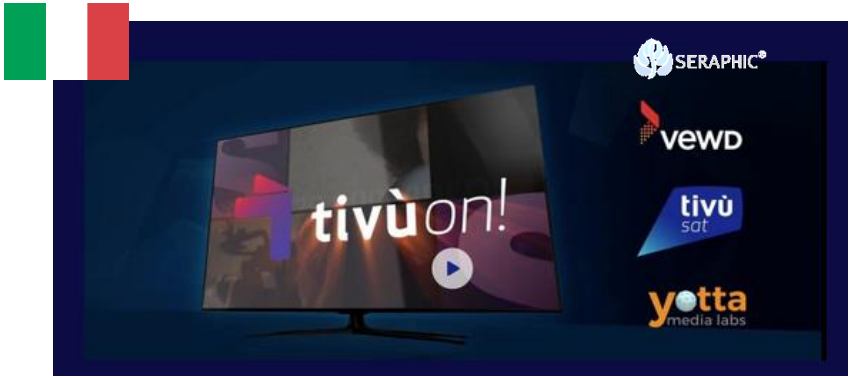
2019 – HbbTV 2.0.2



New countries ?

HbbTV provides the technology foundation of these platforms

OpApp First Commercial Deployments



Panasonic deploys HbbTV OpApp for HD+ access in Germany

Announced in March this year

DVB started to work on Targeted Advertising on 2017 …

… and the TA specs will be ready after this summer

HbbTV Take Away …

- End user **want new / enriched services** on their TV set
- Broadcasters **want to serve these needs** (and not let open road to rival OTTs pure-plays or leave new advertising formats to dominant global players)
- **HbbTV is the friendly "TV OS" for them to do so,** leveraging their unique broadcast presence and reach
- This is a dynamic moment for HbbTV:
  - High level of market attention
  - Exciting new features, like TA and OpApp
  - Increased appetite for HbbTV deployments and adoption to accelerate market transformation
  - New members! +10% in less than a year
- And also some challenges : keep up with high market expectations

Thank you - Join us in Athens !

8th HbbTV Symposium and Awards - Athens November 21-22, 2019

MEGARON
ATHENS INTERNATIONAL CONFERENCE CENTRE

In collaboration with:

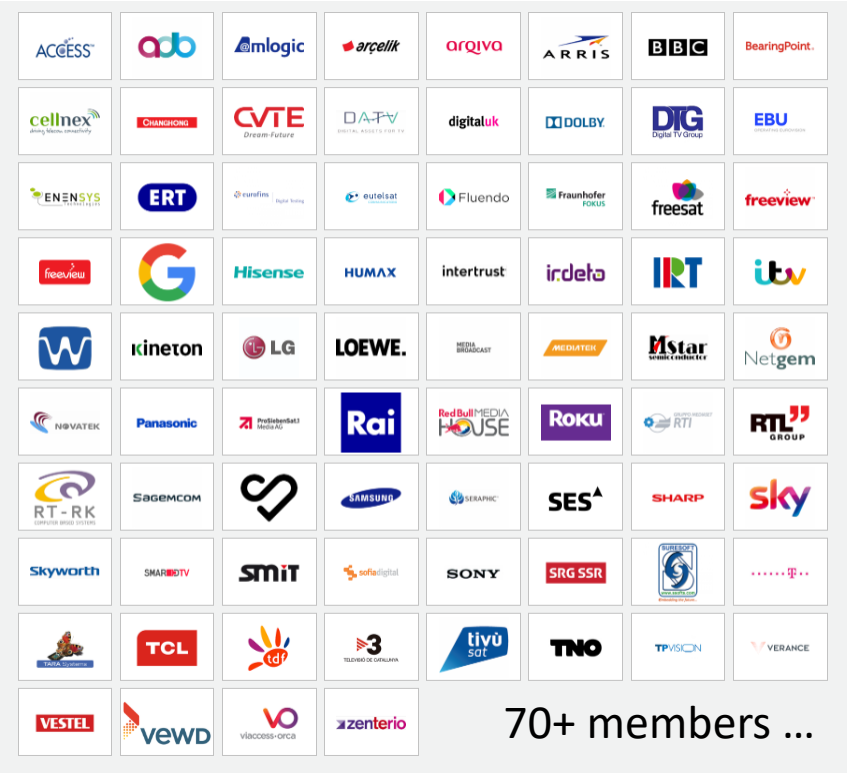
EPT

HELLENIC REPUBLIC
Ministry of Digital Policy, Telecommunications and Media

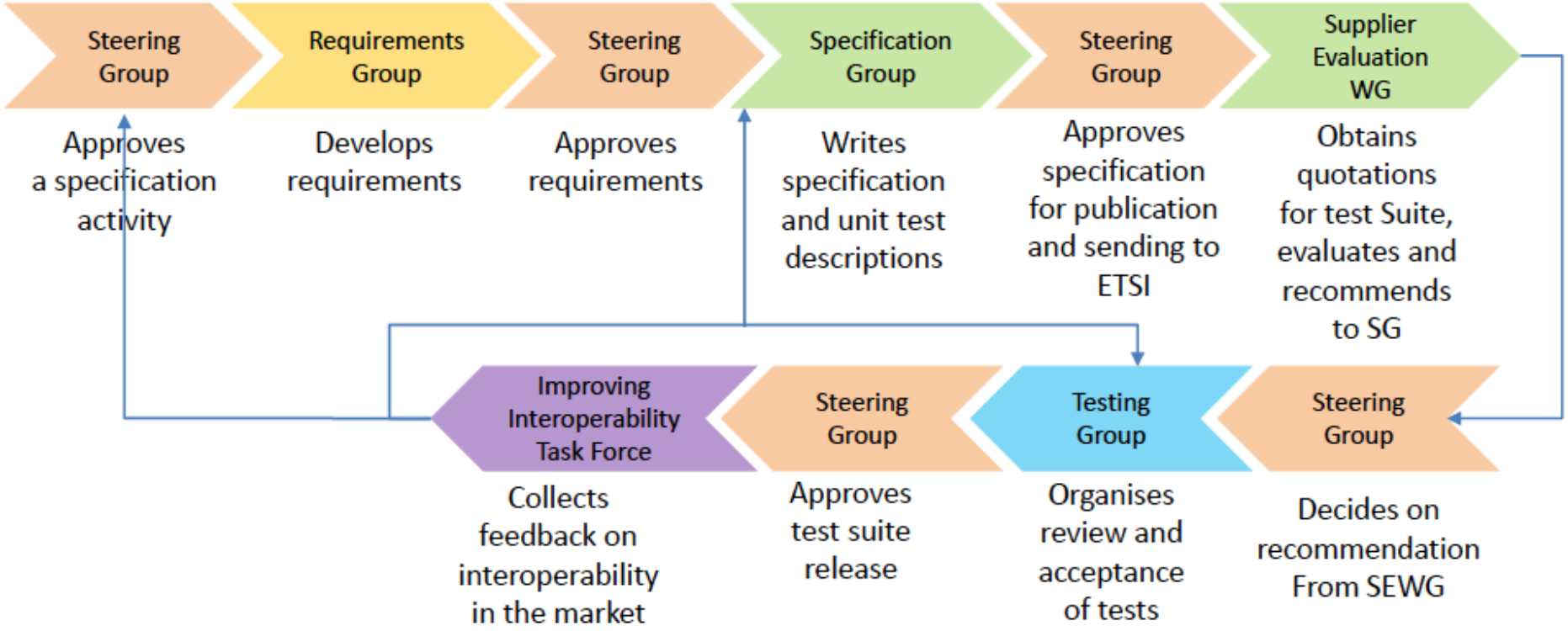
Back up

The Mission of HbbTV

To develop and promote *open specifications and solutions for hybrid* ***broadcast/broadband and IPTV*** *television systems, with the ultimate public interest objective to allow harmonization of broadcast and broadband delivered entertainment services and consumer equipment*



The HbbTV Workflow



HbbTV Specifications

HbbTV 1.0

CE-HTML

HbbTV 1.5

mpeg-DASH

Microsoft PlayReady®

marlin

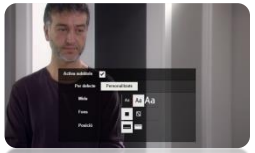
HbbTV 2.0

HTML

H.265 HEVC

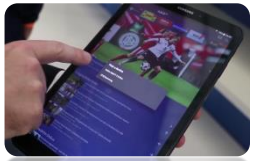
EBU-TT-D

EBU-TT Subtitles



Advert insertion

Second Screen App start



Multi Stream Sync

HbbTV 2.0.1

HbbTV & mhp

MHEG-5

tivùon!

FreeviewPlay

HbbTV 2.0.2

IMMERSED IN SOUND

NEXT-GENERATION AUDIO

Dolby® AC-4

HLG

HDR 10

HFR HIGHER FRAME RATE

Test Suite v.2019-1 (April 19)

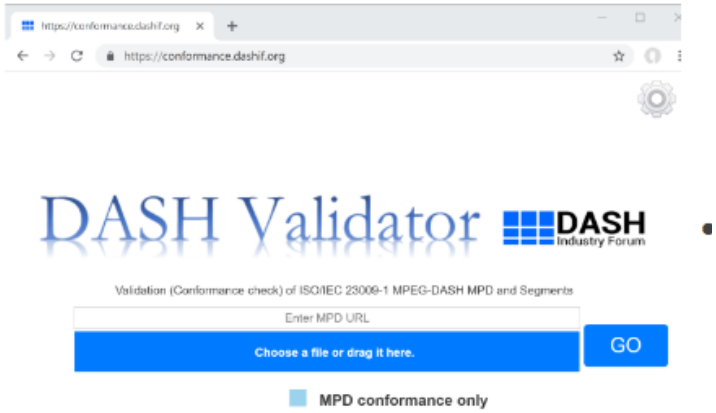
Test suite v2019-1 release proposal

22nd March 2019

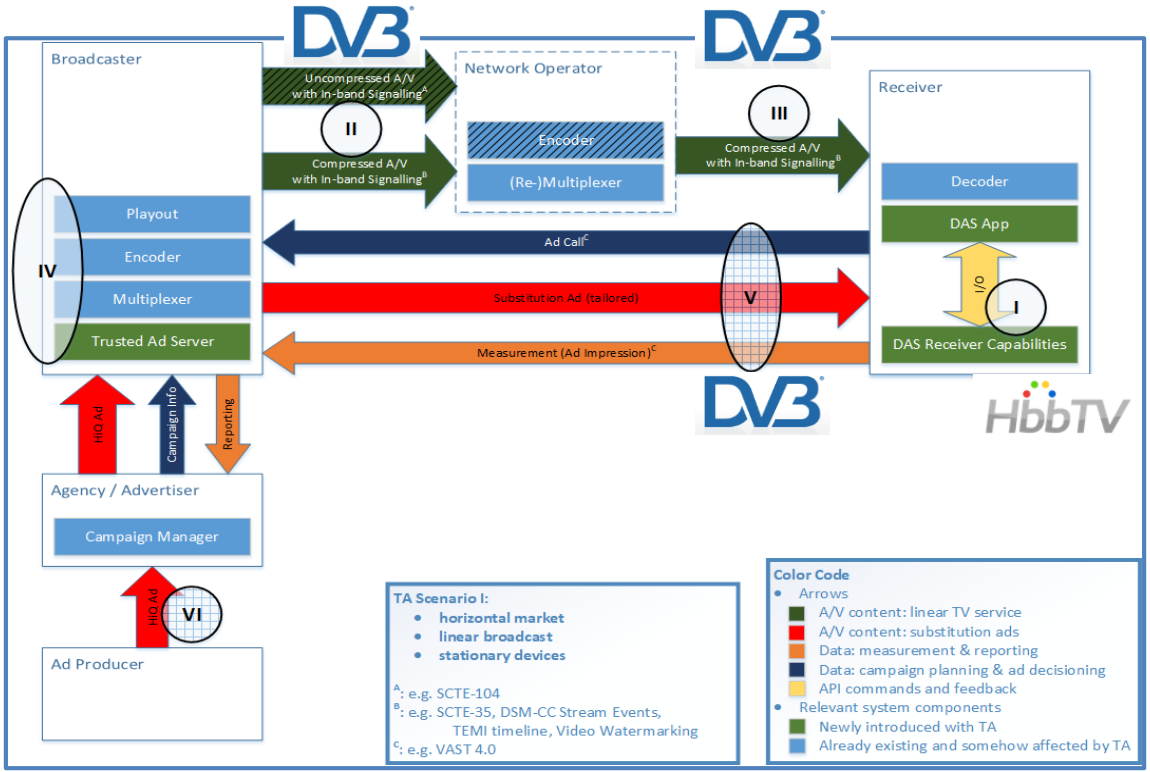
- First release covering HbbTV 2.0.2 (UHD, NGA)
- Also covers OpApp (parts)

Name	Total size	Total size with Nordig & OIPF B	Date
v8.0	966	966	31.07.2015
v8.1	965	965	11.02.2016
v8.5	1548	1548	31.08.2016
v9.0	1521	1715	31.10.2016
v9.1	1538	1791	16.01.2017
v9.2	1908	2102	20.07.2017
v9.2.1	1916	2110	17.11.2017
v2018-1	1924	2118	23.03.2018
v2018-2	1952	2146	04.07.2018
v2018-3	1951	2146	11.11.2018
v2019-1	2079	2274	15.03.2019

Reference Apps



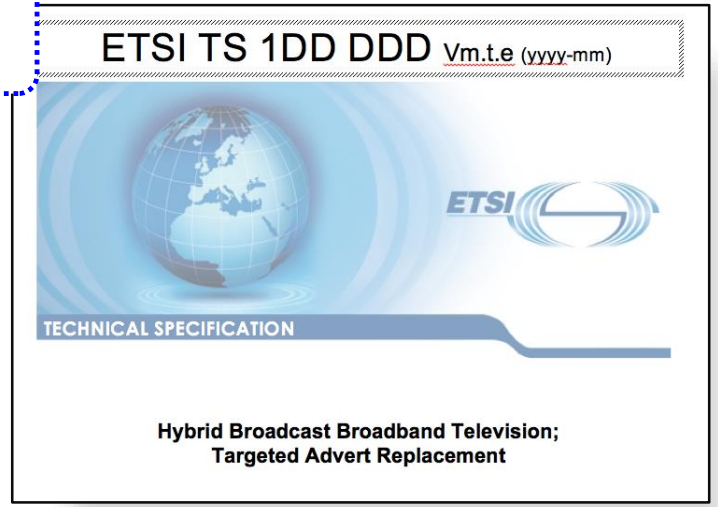
HbbTV & DVB : Who does what ?



The future HbbTV-TA specification

- Independent specification
- Published summer 19 (?)
- In devices : 2020 (?)

Key features

- “better” pre-load of ad in RAM
- Play AV content from RAM (MSE)
- Fast Media Switch API
- Reporting
- Encryption authentication
- MSE integration

Work in progress !