

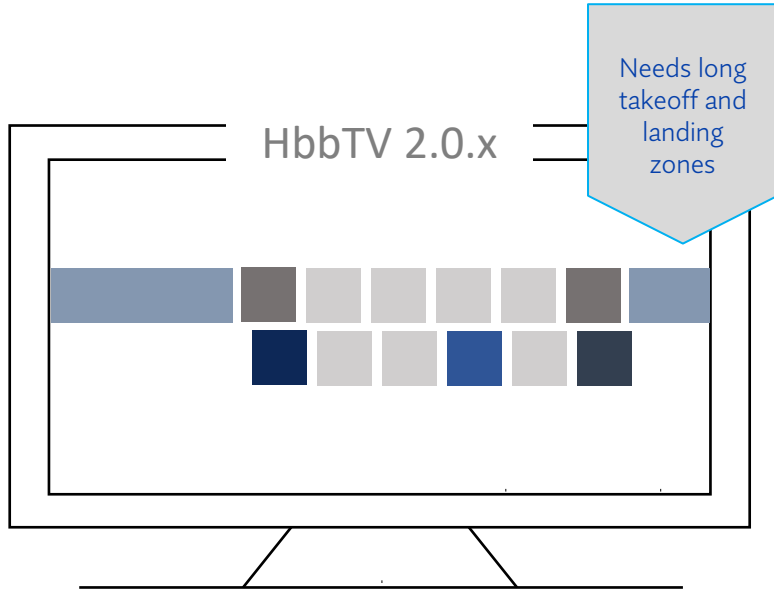


Unifying the Reach for Dynamic Ad Substitution in Linear Broadcast TV

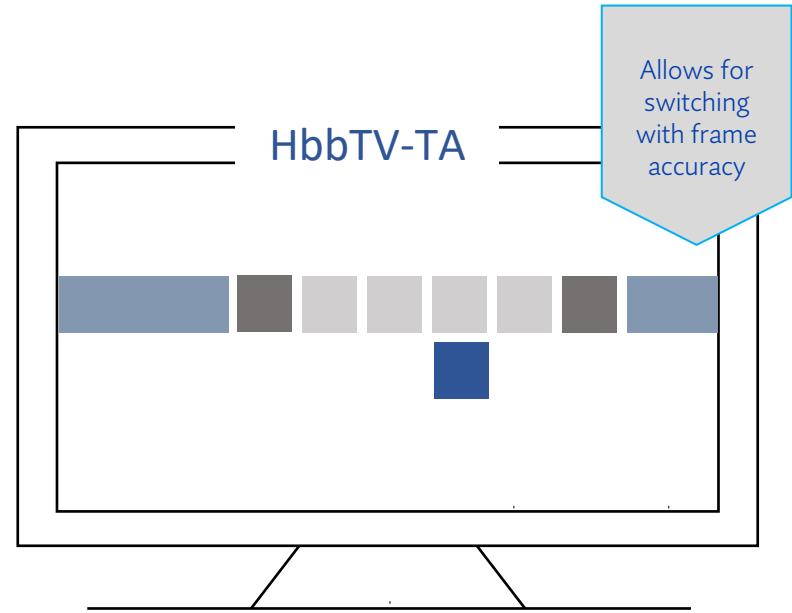
HbbTV Webinar - October 01, 2024

About HbbTV-TA

...and why it is the Game Changer



The HbbTV core spec was the Kickstarter to build up ATV reach for DAS in linear TV



HbbTV-TA (and DVB-TA) are needed to make ATV future-ready and to enable DAS on a larger scale

Challenges in building Reach

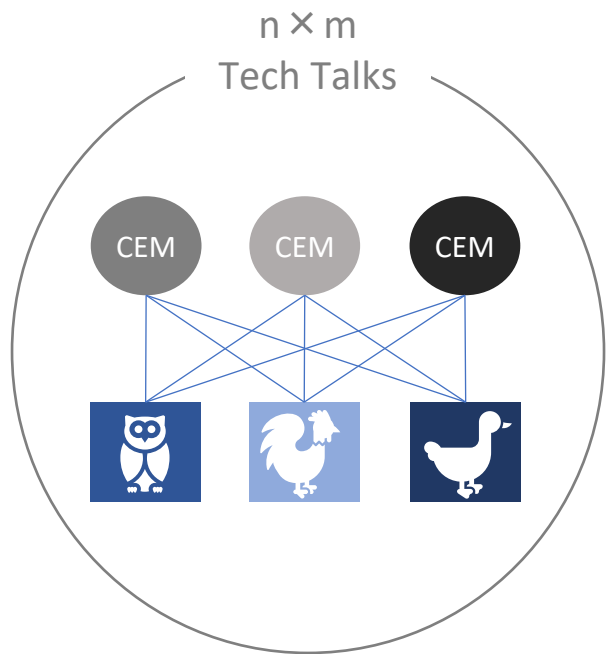
Verifying Device Compliance

- Device compliance is a classical issue in the HbbTV ecosystem as implementations of the specs usually vary between individual TV models
- HbbTV-TA performance requirements are demanding – meeting them requires efforts by all industry players (not only the TV manufacturers but also the SoC makers, browser vendors, TV OS developers etc.)
- There are dozens of TV brands with multiple new TV models per year
- Knowing which devices “really work” still requires testing to ensure a good user experience

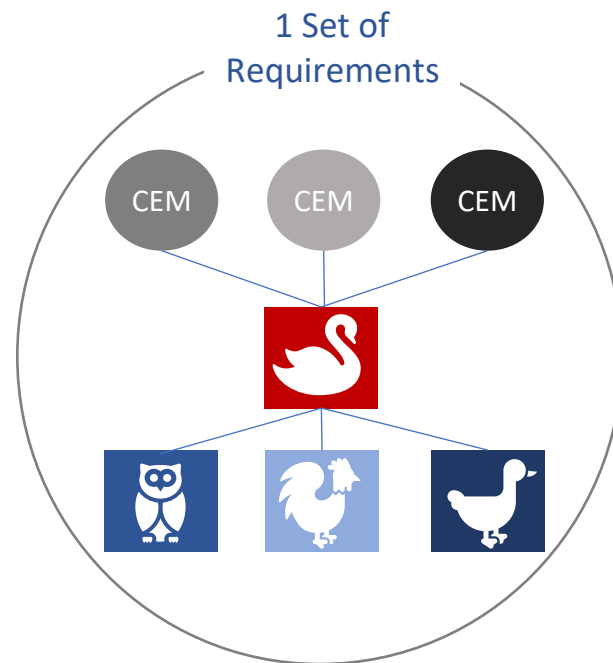


Challenges in building Reach

Align Priorities to Broadcasters' real Needs



Uncoordinated broadcaster tech demands hinder multinational CEMs to create a scalable setup



Consolidation of broadcaster tech demands enable multi-CEM-harmonized HbbTV-TA implementations

ATVI's Approach

Introducing the Addressable TV Initiative (ATVI)



Our Goals

- Create a unified reach for Addressable TV (ATV) services and particularly for Dynamic Ad Substitution (DAS) based on HbbTV-TA
- Facilitating for a fast market adoption of the related Open TV Standards and unlock full business potential for both, Broadcasters and Manufacturers

About the Company

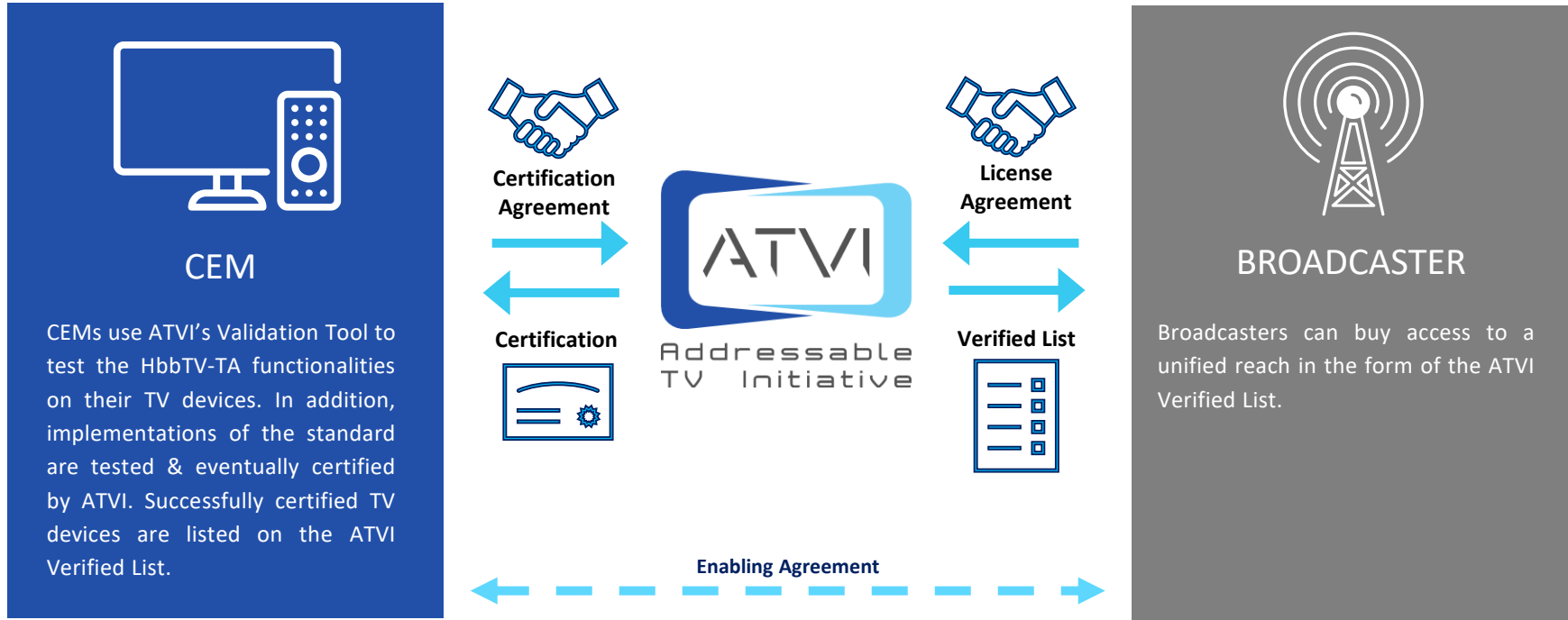
- A German company (GmbH) with HQ in Frankfurt
- Initial shareholders = RTL Deutschland & ProSiebenSat.1
- Pan-European ambition: serving all European Broadcasters and all Manufacturers active in Europe



Addressable
TV Initiative

ATVI's Approach

Technical Harmonization is Key to build a unified Reach

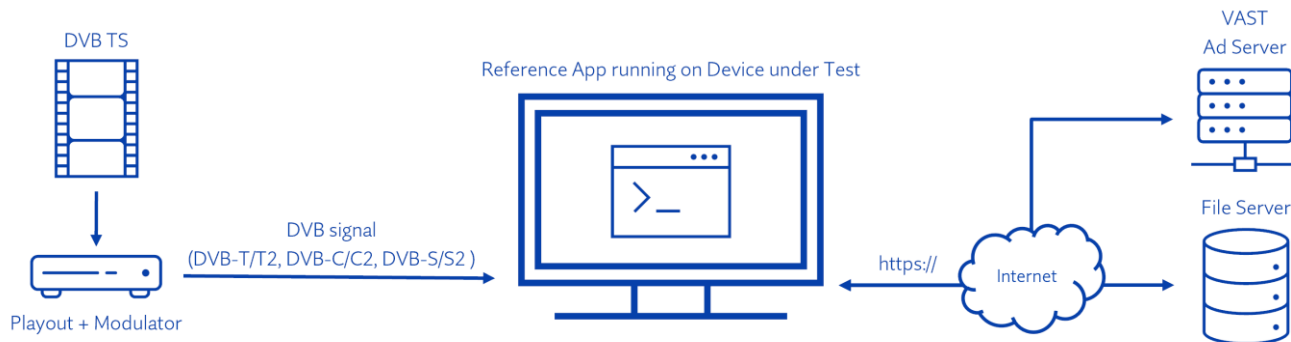
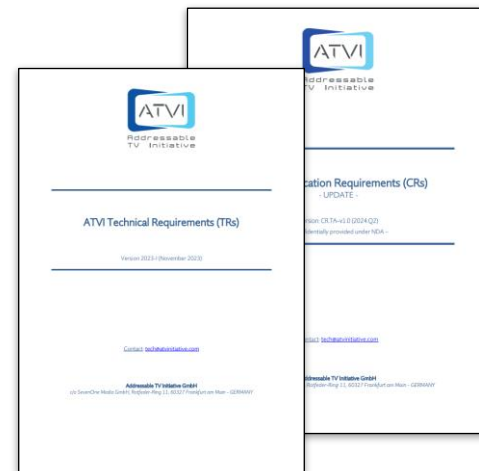


What ATVI offers to CEMs



Documents and Tools

- The **Technical Requirements (TRs)** are the main guiding document for ATVI's certification activities
 - It refers to the HbbTV core specification, to HbbTV-TA, to DVB-TA etc.
- The **Certification Requirements (CRs)** are precisely describing the ATVI certification criteria
 - It refers to the ATVI Test Set for E2E Integration Testing and the ATVI Certification Process description
- The **ATVI Validation Tool (VT)** consists of
 - A set of DVB-compatible Transport Streams
 - ATVI Reference App
 - Substitution content assets
 - Related backend system components (app hosting, simple ad-server, etc. – all in the cloud)



What ATVI offers to Broadcasters



Access to the unified Reach

- ATVI provides the (non-public) country-specific **Verified List** exclusively to its Licensed Broadcasters (LBs)
 - ATVI maintains the Verified List (e.g. ATVI takes care of firmware updates), so that Licensed Broadcasters can safely deploy DAS solution
- Licensed Broadcasters will receive full access to the **ATVI Reference Application** (refApp), implementing the core functions / modules necessary to execute DAS with HbbTV-TA
- Licensed Broadcasters are provided with **Guidelines** and best practices for TA-related matters like e.g. for program scheduling, signaling of placement opportunities, substitution content editing & encoding
- ATVI further assists Licensed Broadcasters by providing relevant business-related information incl. **Reach Forecasts** for TV models of certified devices (incl. timing & validation) and designated CEM contacts



Summary



- ATVI's mission is to thrive the technical harmonization of addressable TV with a focus on Dynamic Ad Substitution (DAS) in linear broadcast TV.
- ATVI is loyal to open standards (like HbbTV-TA and DVB-TA) and checks the TA-compliance of TV sets by testing and certifying devices against its Certification Requirements.
- For this ATVI has built the ATVI Validation Tool that is offered for free to partnering manufacturers (and other industry players).
- Certified devices are put on the Verified List, which ATVI provides to broadcasters that become licensees.
- So, licensed broadcasters can rely on the unified reach provided by ATVI when targeting real devices in the field with their own ATV services.



Addressable
TV Initiative

Building a reliable reach for
Addressable TV across Europe •