UPDATE ON HBBTV OPERATOR APPLICATIONS
TEUN VAN DER VEEN, SENIOR CONSULTANT, TNO

HBBTV WEBINAR 23 MARCH 2021 WITH TNO, ZATTOO AND PANASONIC

TNO UNIT ICT - MEDIA NETWORKING: INTERNATIONAL AND INNOVATIVE

We develop new technology in international context

together with clients and partners in the telecom and media sector..

..using our leading position in industry fora

https://tnomedialab.github.io/

THE NEW HBBTV OPAPP STANDARD – AN UPDATE

› Intro Standards and HbbTV

› Operator Apps:
  › Standard for a virtual STB integrated in TV sets
  › How it works
  › In the pipeline: OpApps v2

› Consequences for the different stakeholders
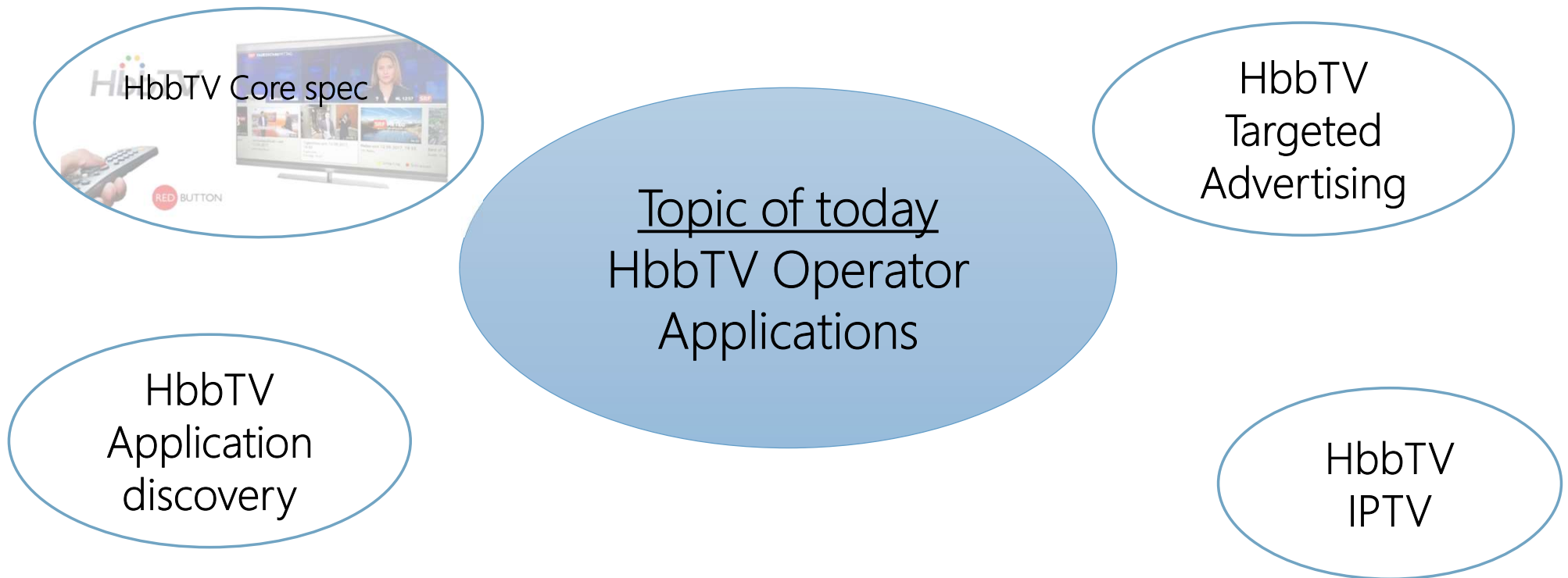
› OpApps ecosystem developments

DTVE Industry Survey 2021 :
 "TV as an app has strong appeal"

STANDARDS ESSENTIAL IN THE COMPLEX TV ECOSYSTEM

› Standards are essential to enable multiparty ecosystems such as TV and video
  › Improve scalability and reach of solutions
  › Provide freedom of choice among supporters of the standards

› Standards improve collaboration between competing parties
  › Establish a common ground for technical solutions
  › Help including new technologies in products

› Standards lower cost and complexity
  › Reduce vendor lock-in
  › Enable modular solutions
  › Create economy of scale

OPERATOR APPLICATIONS: ONE OF HBBTV'S INTERACTIVE TV STANDARDS

HbbTV Core spec

HbbTV Targeted Advertising

Topic of today
HbbTV Operator Applications

HbbTV Application discovery

HbbTV IPTV

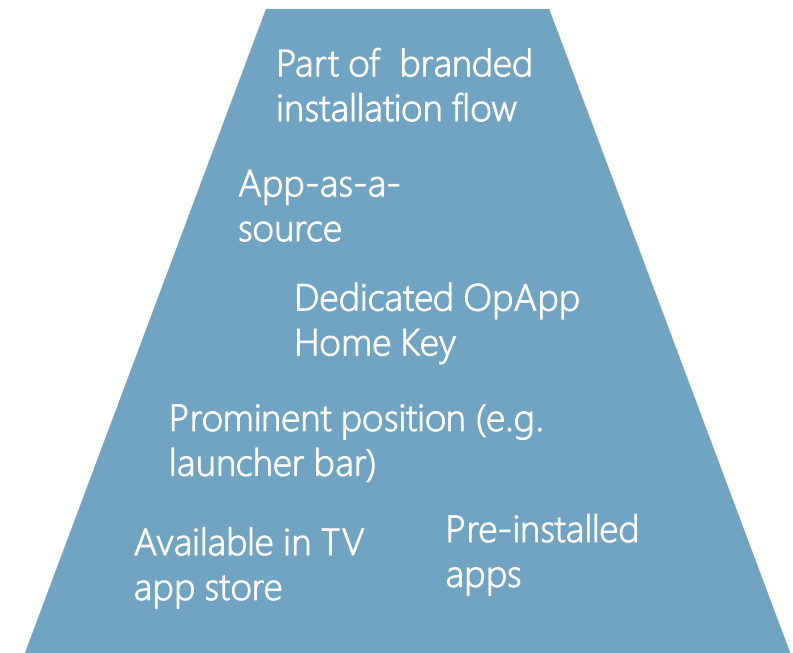Takeaway: An OpApp is quite different from a regular HbbTV App!

HBBTV OPERATOR APPLICATIONS: STANDARD FOR SMART TV APP INTEGRATION

❯ HbbTV OpApp is designed to deliver a **branded operator experience** to the TV set

❯ Improving User Experience compared to regular apps by **deeper integration**

❯ Attractive features specified by HbbTV OpApp

HbbTV Operator App:
Allowing an operator to control the (part of) the TV UI

Schematic view:
Increasing levels of technology and feature integration

Part of branded installation flow

App-as-a-source

Dedicated OpApp Home Key

Prominent position (e.g. launcher bar)

Available in TV app store

Pre-installed apps

SAMSUNG TIZEN

androidtv

Linux

LG webOS

VEWD BROWSER

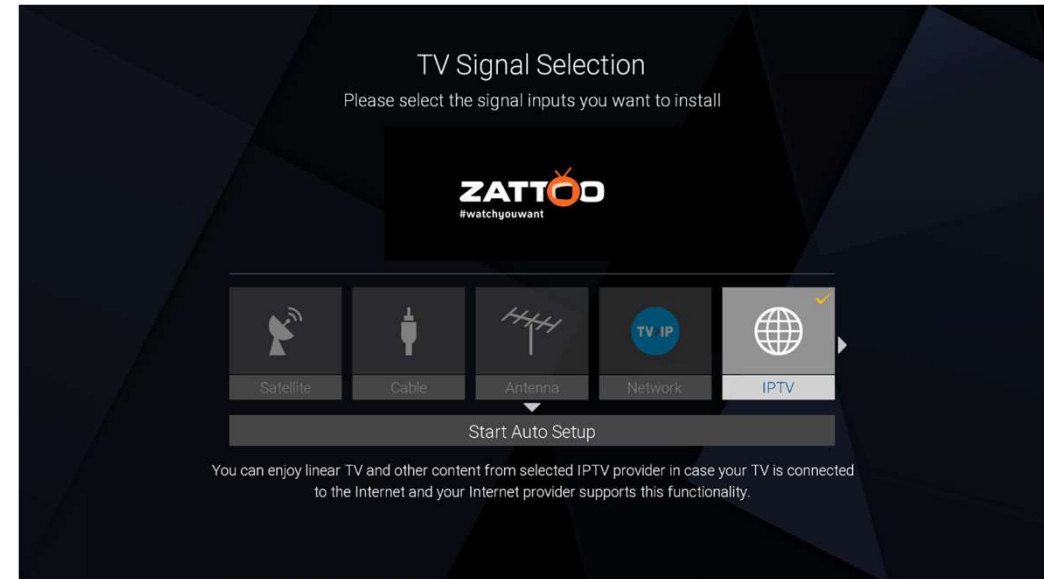# › HOW OPAPPS WORK

› **Discovery and installation**

  › User turns on new TV automatically finds the OpApp

  › Operator brand is part of TV installation flow

› **Easy to access & control the app**

  › App-as-a- source (virtual HDMI)

  › Dedicated OpApp Home key can be assigned

  › Other keys available to the app P+/ P-, guide

› **Compatible with all TV platforms**

  › As a standard it is independent from Smart TV OS: Linux, AndroidTV, Samsung Tizen,…

  › Operators and TV manufacturers still need a bilateral agreement

Virtual STB functionality for an improved and operator-branded UX

IMPROVED STANDARD BASED ON MARKET DEMAND AND FIELD EXPERIENCES

> Operator apps version 2 is in the pipeline

> > To be published after test assertions are available later this year*

> New features for different use cases in v2:

> > CAM module support: Will allow OpApp distribution via smartcard

> > Parental control functionality: Important feature with broadcast content (DVB-S/-C/-T)

> > IPTV Operator Profile: Easier implementation for IPTV use case

> Further improvements

> > HbbTV has added & improved OpApp tests in the HbbTV Test suite

> > Bugs fixed that were discovered during operational implementation

Status: Stable draft awaiting test assertion process

Exact timing depends on effort put in by volunteering companies

ETSI TS 103 606 V1.1.1 (2018-05)

ETSI

TECHNICAL SPECIFICATION

Hybrid Broadcast Broadband Television:
Operator Applications

"version 2"

EBU
OPERATING EUROVISION

STAKEHOLDERS VIEWS OF THE OPAPP STANDARD

Consumers

- One remote, easy sign-on and access to content
- Less hassle with boxes and cables
- Lower energy usage, lower ecological footprint

TV manufacturers

- New business models with operators
- Joint marketing opportunities
- Dealing with many TV operators

TV operators

- Uniform branded experience on all devices
- Reduction of capex
- New strategic option, fit with smart TV strategy

HbbTV

- Strengthening HbbTV ecosystem
- Opening up new markets
- Coexistence with regular HbbTV apps

HBBTV OPAPP ECOSYSTEM IS DEVELOPING

BROADBANDTV NEWS
INDEPENDENT. SINCE 2003.
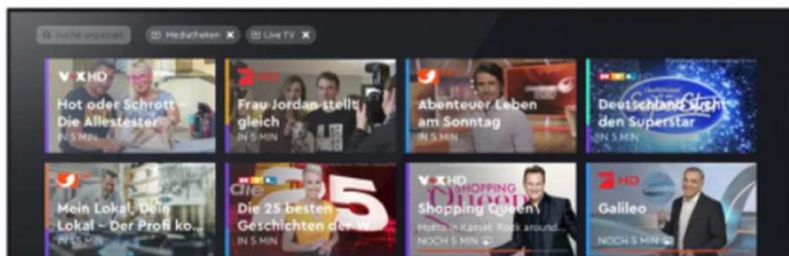
Samsung to add direct HD+ access to Tv sets

MARCH 6, 2019 08.00 EUROPE/LONDON BY JÖRN KRIEGER

Samsung will offer integrated access to German DTH satellite platform HD+ on all new QLED and Ultra HD TV sets sold in Germany from the end of March 2019.

Vestel integrates HD+ into TV sets via HbbTV OpApp

JULY 23, 2020 09.00 EUROPE/LONDON BY BROADBAND TV NEWS CORRESPONDENT

Panasonic offers M7 HbbTV OpApp for Diveo and HD Austria

OCTOBER 25, 2019 23 07 EUROPE/LONDON BY BROADBAND TV NEWS CORRESPONDENT

Digital TV Europe

Panasonic deploys HbbTV OpApp for HD+ access in Germany

Written by Andrew McDonald | 20th March 2019 @ 12:28

The benefits of HbbTV OpApp for operators and vertical models

The open standard for a unified TV experience across different platforms

This whitepaper was created thanks to contributions from TNO (editor), Deutsche Telekom, HD+, Yotta Media Labs, SERAPHIC, KPN and Vewd.

Changing viewing behaviour is a challenge for TV Operators
We have seen in the past years that consumer viewing behaviour is changing. On-demand watching via new online services such as YouTube and Netflix is rising, and some viewers are less willing to pay for "traditional" TV

HbbTV Whitepaper "The benefits of the HbbTV OpApp for operators and vertical models" v2.0

This whitepaper is an update to v1.1 and was created thanks to contributions from TNO (editor), Deutsche Telekom, HD+, Yotta Media, SERAPHIC, KPN and Vewd.

RAPIDTVNews
media smart business ready

Tivù claims world-first with HbbTV Operator App deployment
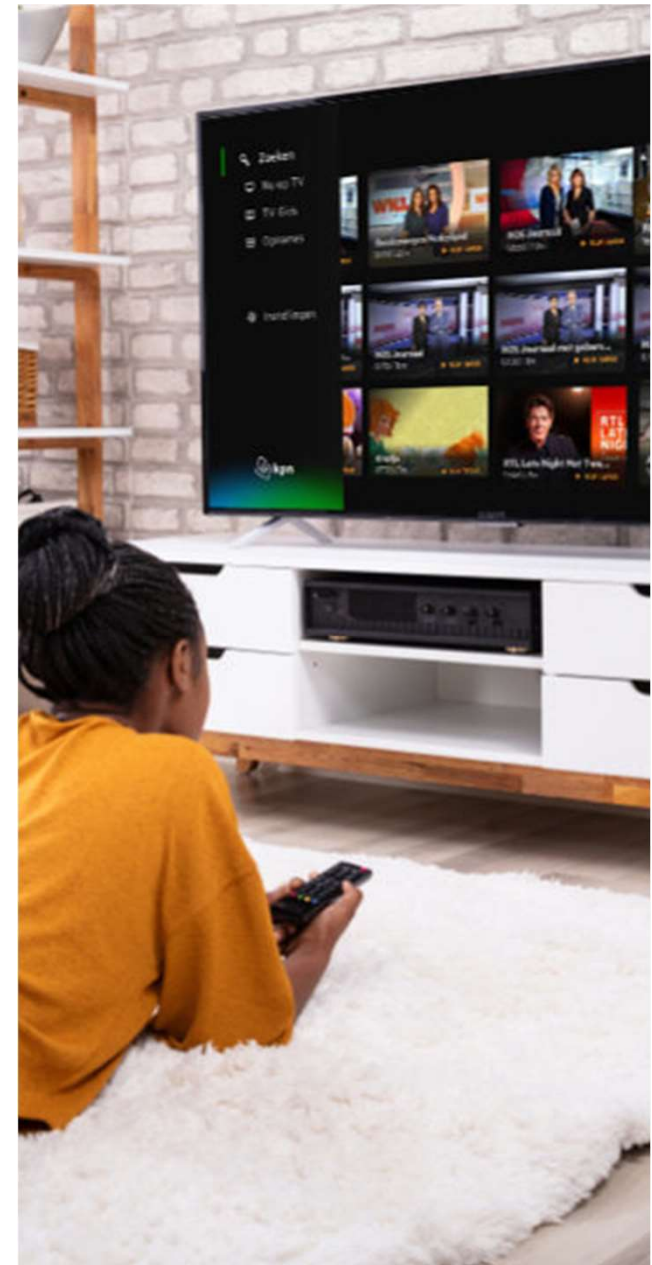
Joseph O'Halloran | 11 September 2018

Italian free-to-view satellite TV platform provider Tivù, working with OTT platform enabler Vewd, is claiming to have become the world's first operator to deploy an HbbTV Operator App (OpApp).

HBBTV OPERATORS APPS: THE ONLY OPEN STANDARD FOR SMART TV APPS

HbbTV OpApp:

❯ Virtual STB: Standard for integration of operator TV service in TV sets

❯ Offers attractive UX features and benefits for all stakeholders in the TV ecosystem

❯ OpApp v2 standard in the pipeline

HbbTV Operator Applications: Strategic option for Smart TV app deployments

TNO innovation for life

TNO innovation for life

Teun van der Veen
+31 6 537 43 590
teun.vanderveen@tno.nl
https://www.tno.nl/en/smart-society/

› THANK YOU FOR
YOUR ATTENTION