

### **HbbTV Operator Applications**

9<sup>th</sup> May 2018, DTVP / Smart Media Heinrich E. Haase, Project Coordinator HbbTV







#### AGENDA



- ➤ Update HbbTV
- ➤ Operator Applications: What? Why?
- ➤ Status Operator Applications
- ➤ Summary



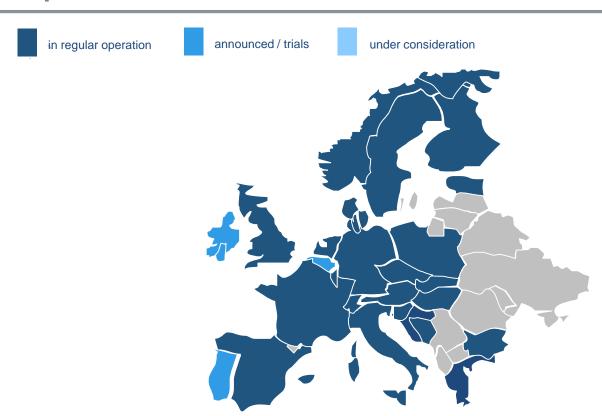














- HbbTV 2.0.1 (ETSI: TS 102 796 V1.4.1)
  - UK + Italy features added



 Support for HDR, HFR Video and Next Generation Audio added





 Operator Applications (OpApps)
 Specification has been published as an extension to the Core Specification



## OpApps: What?



 OpApp is an HbbTV Application that provides access to live channels and ondemand functionality from an Operator and can substitute the STB.

## OpApps: What? – Use Cases



#### **STANDARD**

- No spec work required
- Example: RED starts
   Broadcaster App,
   GREEN Operator
   environment



#### **PRIVILEGED**

- Runs directly on a TV, replaces TV-UI partially with a branded Operator experience
- Like another "Source"
- Assumes bilateral agreement Operator / TV manufacturer



#### **OPERATOR-SPECIFIC**

- Intended for whitelabel STBs
- Replaces all of the STB-UI by an Operator UI
- Assumes bilateral agreement Operator / TV manufacturer

HbbTV

## OpApps: What?

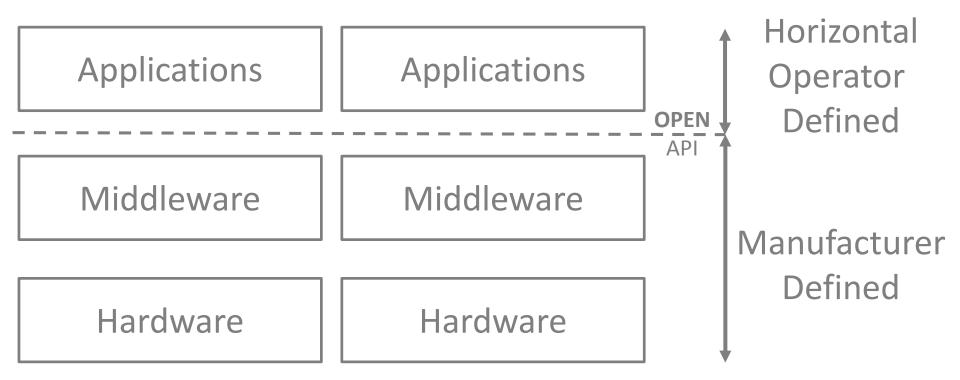


**Applications** Proprietary **API** Middleware Hardware

Vertical Operator Defined

## OpApps: What?





## OpApps: Why?



Expands customer base HbbTV for HbbTV Platforms Enriches HbbTV Makes life easier for consumers

#### **OPERATORS**

- Mature and welldeployed standard!
- Compatible with existing Specification and Broadcaster Apps
- More Content; reduces complexity & cables
- Branded experience to their customers
- Consistent customer support

```
CONSUMERS
     Reduces complexity
    Full control of TV
  Less cables /
  equipment at home
 More content by
 accessing to all
Operator's services
```

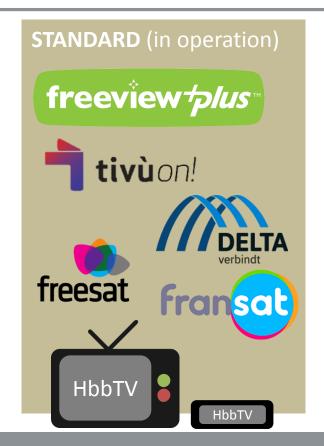
## Status OpApps



- HbbTV ordered OpApps Test Cases in Jan 2018 to support adoption and to secure excellent implementation quality!
- Reviewing of the Test Cases is ongoing by members and external resources!
- OpApps Specifications have been published!
- Integration of OpApps into the HbbTV Test Suite is planned for mid 2018 – thus products could appear in the market in 2019!

## Status OpApps









# **Summary OpApps**



in HbbTV



HbbTV = Mature and well established



OpApps can reduce costs and enhance viewing experience for Consumers



Specifications have been published



Market has started to work with OpApps



### **HbbTV** Association

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## Appendix



 Further Information can be found on the HbbTV website

### www.hbbtv.org

 A document "OpApps Explained" can be found <u>here</u>.

## Discovery of OpApps



- Broadcast: AIT reference to DVB Service
- IP based: DNS Lookup
  - Standardised Domain Name
  - Domain Name from Descriptor in Broadcast NIT/BAT
  - Domain Name hard-coded in Terminal
- URL:
  - Hard-coded in Terminal
  - From CI-Module