AGENDA

➢ Update HbbTV
➢ Operator Applications: What? Why?
➢ Status Operator Applications
➢ Summary
Update HbbTV

- 35 HbbTV Countries
- >300 HbbTV Apps
- >44 Mln HbbTV Devices
- >120 Mln HbbTV Homes Reach
Update HbbTV
Update HbbTV

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

• HbbTV 2.0.2 (ETSI under preparation)
  – 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 on-demand functionality from an Operator and can substitute the STB.

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 white-label STBs
- Replaces all of the STB-UI by an Operator UI
- Assumes bilateral agreement Operator / TV manufacturer
OpApps: What?

Applications

Middleware

Hardware

Proprietary API

Vertical Operator Defined
OpApps: What?

Applications
Middleware
Hardware

Applications
Middleware
Hardware

Horizontal Operator Defined
Manufacturer Defined

OPEN API
OpApps: Why?

**HbbTV**
- Expands customer base for HbbTV Platforms
- Enriches HbbTV Ecosystem
- Makes life easier for consumers

**OPERATORS**
- Mature and well-deployed 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 content
- Less cables / equipment at home
- More content at home 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

STANDARD (in operation)

PRIVILEGED (PoC)

OPERATOR-SPECIFIC

* Plan: in operation end 2018
Summary OpApps

- 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 here.
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