# INNOVATIVE WAYS TO USE HBBTV OPERATOR APP CONCEPT

NOVEMBER 2022 – HBBTV SYMPOSIUM - PRAGUE

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OUR KEY POINTS

- Digital TV services without STB
  - Free-to-air services and PayTV services
  - HbbTV OpApp approach
  - Connected and non-connected concepts

- Building affordable DVB+OTT services with modern technologies
  - Webservices/HTML5
  - DVB-I and HbbTV/DVB-TA

- Increase the value of TV advertisement inventory with targeting
  - Online/Digital business models on TV

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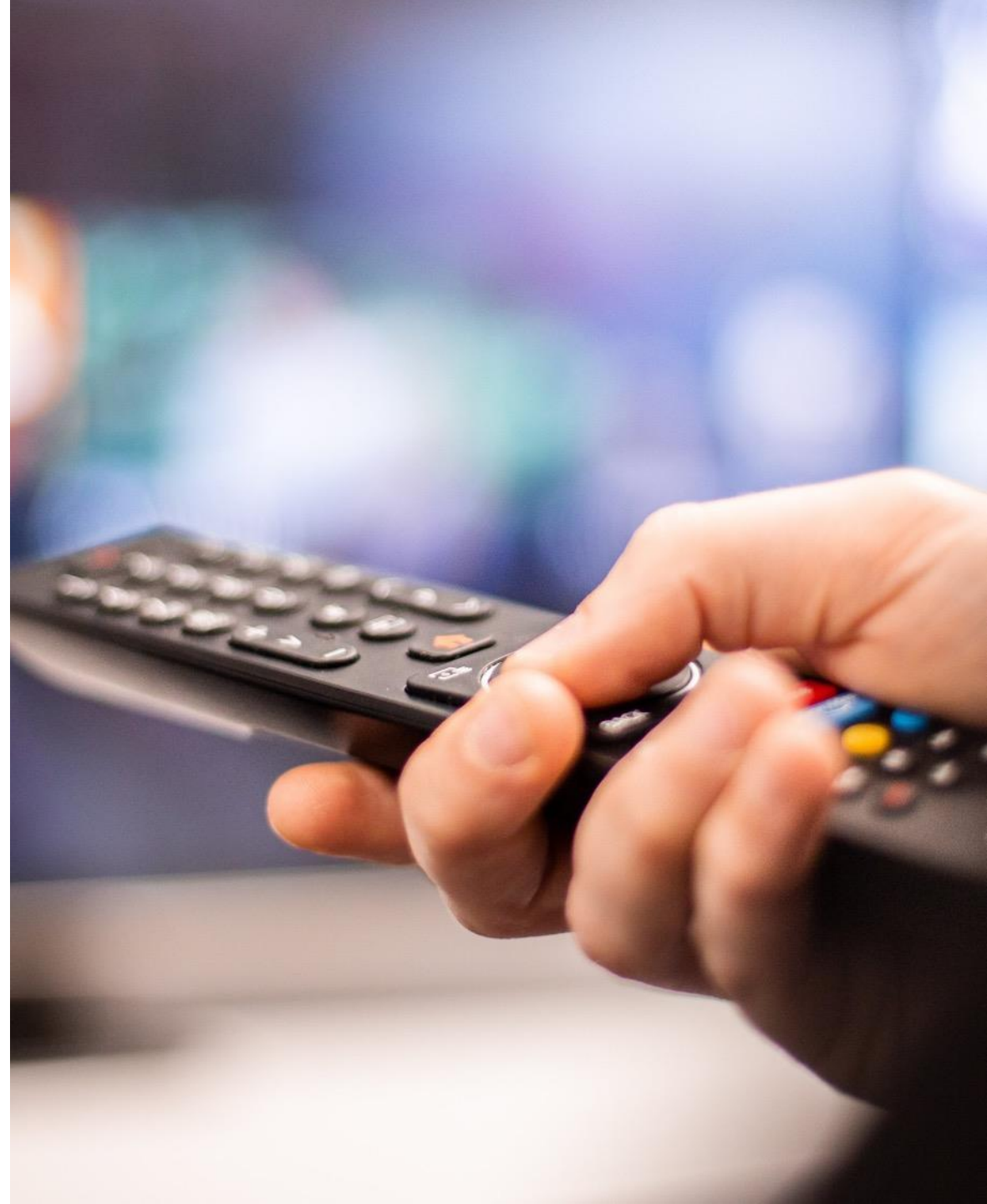
HBBTV OPERATOR APP

- Control of the user experience, "UI Branding"
  - Control remote controller keys
  - Channel Up/Down, Info + TV-Guide/EPG

- Operator's own Channel Lists
  - Combine broadcast and OTT channels
  - With Rich EPG Data

- Co-existence of broadcasted Apps
  - Maintain access to "Red Button" services

- Possibility to launch without broadcast signal
  - Reach households who do not have access to Antenna/Satellite RF signal (pure OTT)

- Build Set-Top box alike Apps without a STB
  - Applications available directly from Smart TV
  - OpApp is an alternative to vendor-specific Smart TV Apps
  - Support for Hybrid TV content delivery over any DVB networks

Operator tier applications are already introduced in Google Android TV environment and thanks to HbbTV Operator App, non-Android based connected televisions can also be reached
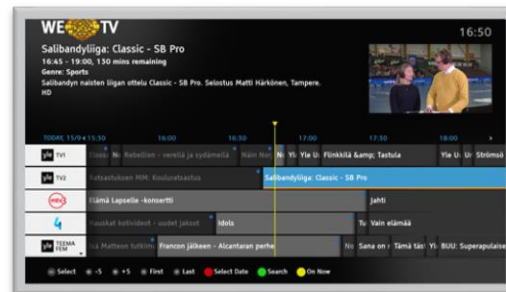
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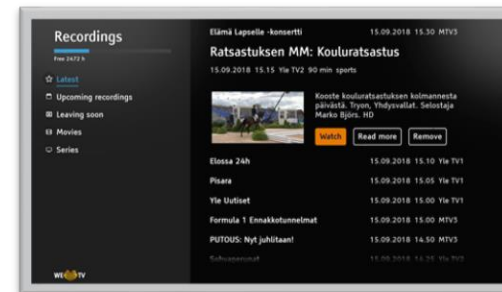
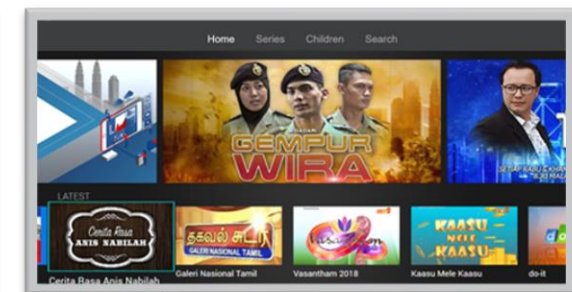# OPERATOR APP UI-SCOPE

Info / Mini Guide
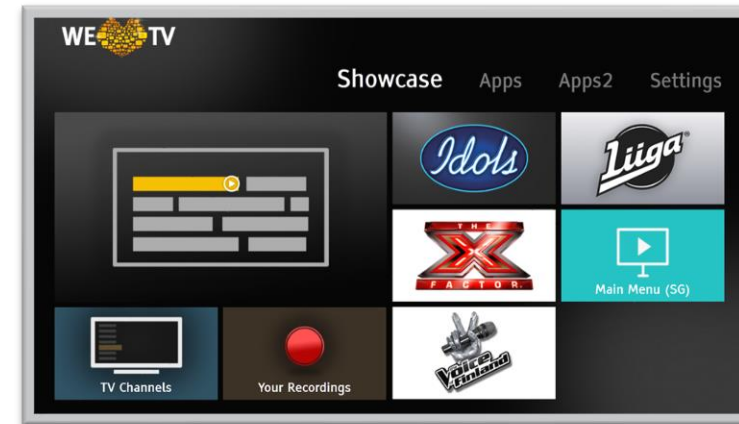
HOME SCREEN

Channel List

TV Guide

(Cloud) DVR

Video on-demand

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DVB-I AS AN APPLICATION

Sofia Digital & TWISE Demonstration @IBC 2022 in Panasonic TV

OpApp based on DVB-I service list and TV-guide metadata (also CSR)

App triggered by a CI Plus Conditional Access Module

Convert any HbbTV 2.0.x receiver to a DVB-I client

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TWO OPTIONS FOR SECURE CONTENT DELIVERY

Option 1 – CI+ Module

- HbbTV OpApp build into the CA-module
  - Application installation initiated from CAM insertion
  - Small & optimized application footprint essential
  - Allows use in non-connected broadcast-only environment (OpApp stored in AFS)
  - Both new USB and old PCMCIA form-factor
- Alternative approach: Application downloaded from Internet or using HbbTV-AIT signal
  - App detects the CA-Module and launch the UI

Option 2 – Embedded CAS / Soft-CA

- HbbTV Operator Application with CA-API
  - HbbTV Application enabling user to subscribe the PayTV channel on-demand
  - Application also implements the video player that enables viewing the channel with Interactive contents
- Delivery of EMM/ECM to the receivers is managed by the HbbTV Application client
  - As for example Intertrust ExpressPlay XCA

> **There should be bilateral agreement between TV-manufacturer and content provider that also enables the revenue share models**

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BENEFITS FOR INDUSTRY

▪ TV-manufacturers

- Smart TV will get more users and make TV more attractive against the STB
- Consumers buying new TV will choose TV-sets that is promoted with relevant Content and Applications
- Encourage audience to buy higher-end TV instead of low-end TV as "display panels"

▪ Content providers

- Reach new audiences
- Save app development cost and time
- Use best of Broadcast and Broadband together in same application
- Can use to use both Video-DRM and DVB-CA for content security

▪ Better monetization

- Support new ways of Advertising
- HbbTV enables monetization in both, PayTV and Advertizing business models

1. TV Ad spot targeting
2. Interactive TV commercials
3. Analytics and tracking
4. Access to premium content

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STILL NOT CONVINCED ABOUT HBBTV OPAPP AND DVB-I ?

To summarize, the solution offers...

- Open standards (DVB-I and DVB-/HbbTV-TA) working together reduce the time to market and App development costs

- HbbTV based services with local marketing efforts offers opportunity to stand out and differentiate from the OTT market

- Offer local/national content libraries with common technology platform shared across markets and various TV models

- Deliver OTT application as an operator-branded and localized hybrid service

- Can use DVB-I to standardize service metadata to reach more devices

- Provide more options to consumers to access the content

- Increase advertisement opportunities

- Retain control and ownership of brand in modern OTT/TV environment

Create IPTV-alike services using Smart TVs with HbbTV OpApp and DVB-I

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WHY SOFIA DIGITAL

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WORLD CLASS REFERENCES

Successful deployments to many different customer environments all around the world

EXISTING INTEGRATIONS

Tested integrations to a wide number of backend platforms already available

FLEXIBLE BUSINESS MODEL

Support for OPEX and CAPEX models as needed

SUPPORTS ALL MONETIZATION MODELS

All advertising and subscription models based on customer's selected backend

EXTENSIVE RECEIVER LABORATORY

Over 130 televisions in the laboratory, which facilitates the whitelisting of devices and generates maximum reach for the OTT service

EXPERIENCE

Over 20 years of experience in interactive television technologies and worldwide pioneer in reception and distribution technologies

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THANK YOU!