

NAPLES SYMPOSIUM

# HbbTV and the national DVB-I market trial



# WHAT ARE WE UP TO

**2020 – April 2023:** DVB-I PoC → tech tests to bring the new standard to life in collaboration with other European broadcasters and all stakeholders in the value chain (Manufacturers, standardization bodies, broadband network operators, system integrators, HbbTV app developers)

**May 2023:** Mediaset main channels are ready in production environment for DVB-I Market Trial

**November 2023:** first TV sets validated and deployed on the market for the test (OTN is now ramping up).



# WHAT IS DVB-I ITALIAN MARKET TRIAL?

Broadcast  
channels  
over IP



Full HD quality: 1080p50  
DASH / HEVC  
Low latency  
Parental Control / EPG info  
LCN 505,506,504,520  
Bband/Bcast handover  
DRM content protection  
m-ABR ready  
QoE and QoS monitoring

Broadband  
+ Broadcast  
Network



Open to any CDN  
provider / ISP /  
broadband network /  
broadcast network  
operator

CSR  
Central  
Service List  
Registry

**kineton**  
High-Tech Humanity

Technical Management  
Operation & Security  
Broadcasters access  
TV set Validation  
TV set Access

DVB-I Ready  
TV sets

**VESTEL**  
**TELEFUNKEN**

First manufacturer to  
join the trial  
with new TVs on sales  
and with OTN updates  
of 2022/2023 models

Actual  
viewers



Full Integration  
with TV native  
UX/UI

## TV SETS and Trial numbers

53 millions TV sets

19 millions HbbTV

Estimated 200.000 DVB-I ready

Estimated 80/100K connected

Expected 50K opting in for the trial



## RULES OF ENGAGEMENT FOR OPEN PARTICIPATION

Any broadcaster can participate with their authorized channels and only on authorized/assigned LCNs

No interference with any DTT channel of any broadcaster not participating to the trial nor with any other linear/non linear service available on the TV set (FAST)

Broadcaster has full editorial responsibility: schedules are those of the authorized broadcast channels, same warranties for the audience (e.g. parental control)

Broadcaster is fully responsible on quality of service (no intermediation)

Viewers willing to participate need to activate DVB-I functionality on their TV sets, others will maintain the exact same actual experience.

# OBJECTIVES

## **Bringing the new open standard in the real world**

- Any standard tested in the lab needs a dry run in the real world for scalability and reliability
- Only by facing the real market environment we can find and solve corner cases

## **Testing a full operational model for deployment**

- Open standards need the collaboration of all actors along the value chain with a secure and efficient operational model that only a real world scenario can grant.
- Market trial is intended as real market test on progressively growing numbers

## **Gathering data and information on QoE and QoS**

- Providing highest audio video quality in low latency on free TV needs a constant check on Quality of Service and Quality of Experience.

# HbbTV

## Information and analytics gathering needs HbbTV

- QoE and QoS KPIs can be monitored in realtime only through HbbTV
- We need such data to understand if and where the broadband network quality has to be improved.
- Analytics are also needed to evaluate how fast the IP services grow and at what pace.

## Essential for delivering our channels at the highest quality

- Full HD quality or higher needs the highest content protection standards
- Free content when distributed through open internet need to be protected with DRM security
- Ready to support m-ABR through HbbTV for peak QoS and broadband network offloading

**... more details in tomorrow unconference**

# What's next

**DVB-I Trial is now up and running:** an open environment for any broadcaster to learn how to take the best advantage of the new European standard.

Italy is leading the way for DVB-I development in Europe: **everything is now ready to follow regulator's guidance.** There is no open standard or an open market without common rules.

We expect **HDForum** will soon publish a new updated version of the **HDBook** according to the latest European DVB-I and HbbTV specifications so that **usual certification regime** can be started to grant common technical implementation of the new standard.

As a broadcaster, in 2024 our development efforts will be focused on testing new **HbbTV 2.0.4 on DVB-I services.**



THANK YOU