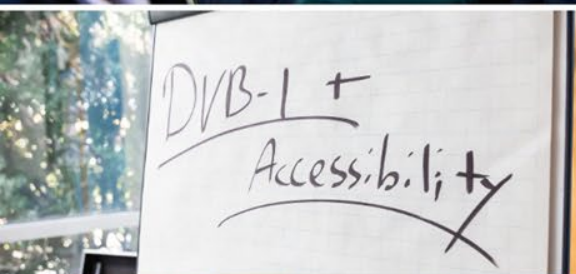




DVB[®] WORLD 2024

What happened next?

DVB Webinar • 12 November 2024, 14:00 CET



The logo for DVB World 2025 features the letters 'DVB' in a bold, black, sans-serif font. To the right of 'DVB' is a circular graphic composed of two concentric, slightly offset lines, creating a sense of motion or a globe. To the right of this graphic, the word 'WORLD' is written in a smaller, black, sans-serif font, followed by the year '2025' in the same font style.

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WIEN ++ VERSAILLES ++ PORTO + HELSINKI 20 DANZIG 30 DUBROVNIK 20 MONTENEGRO 20

10:00-11:00
10:10-11:00

ADBD
HDMI
Lowest
WebTV Apps TA
JASON

What can DVB learn from 5G-MPEG?
Peter Mac

Andrew Tai
DVB-I + Accessibility

Gullanes Bichst OPEN CASTING
WHAT about an open API for Accessing Multicast/Broadcast operation? Distribution powered by CBS
DVB-HBR DVB-MIP

A. Fleuter Estrel
DVB-MIP
Content Protected
signalling & distribution over broadcast
Query-Interoperability

DVB SIS V&V
Dusan Stattelor

Codes sleeping dogs or elephants the room
jan

11:00-12:00
11:10-12:10

IP Transition: Socio-Technical Barriers
- Rajant (DVB)

S. PEROLA
HD or UHD?
How multi-layer can solve the dilemma

ELLEN
WHAT IS A DVB-I Service?
(and is this as useful too)

T. WARE
DVB-MIP
Commercialisation & Market Introduction
- Identify end-user services and market segments!
- Identify what DVB support is required?
- Engage industry!

Extend the concept of "Postcode" in DVB-I to companies & individuals
Alexander Leschinsky

Do we need LCN
Rainer Horkner

12:00-13:00

LUNCH

13:00-14:00

ROOM FOR REGULATION
WHY? HOW? COOPER, SUR
WHAT CAN DVB-I OFFER
MEDIA REGULATORS AND
WHAT DO SERVICE PROVIDERS
WANT FROM REGULATION?

ACCESSIBILITY
SUBTITLES.
INTEROPERABILITY
ISSUES ON HOBBY
SMARTTV
FRANCESCO MAS CAT

DVB-I + of APP
BEST OF FRIENDS?
GORDON HARTMAN
ROD PATE

IS REACHING MOBILE
DEVICES PART OF THE BROADCAST
FUTURE? HOW TO GET
THERE?

DVB-I, DVB-DASH
& COMMON
MEDIA CLIENT DATA
RUFANEL/TUDMAS

Film grain synthesis
Zeljko Schufar

SECURITY OF DVB SYSTEMS
MAKE VS BUY
KEN LANGRICE

14:00-15:00

SUSTAINABILITY.
What could be the
scope for cooperating
with ETSI/MPEG
P. NECK

DVB, DASH-IF
and SVTA
Thomas Stockner

DVB-I Comparison
What's next step
to make it a success
?

Should Timing & Positioning
become part of a
terrestrial BC standard?

ATSC 3.0
Q&A
DASH/TA/DCM/Securities

15:00-15:15

BREAK

15:15-16:15

DVB SPONSORED
REFERENCE TEST
LIVE STREAMS
JON PIESING

ELLEN
CAN DVB-I
BE USED
FOR OSM

D PEROLA
REMINDING THE
WORLD THAT DVB
EXISTS AND HAS THE
TOOLS FOR NEW SYSTEMS
AND SERVICES

What can DVB
do next with Ultrahigh
Video
Paul Hilly

WHAT CAN DVB
DO TO HELP DVB-I
IMPLEMENTATION?
GORDON HARTMAN

DVB Demos
at IBC 2024
EMILY

16:15-17:00

CLOSING CIRCLE

HIGHLIGHTS



New group developing DVB-I accessibility guidelines

Commercial requirements for CMCD completed

New momentum around DVB-NIP promotion, incl. session and demos at IBC2024

DVB commercial group on security (CM-SEG) brought back into action

Valuable input brought back to four on-going DVB study missions

Renewed focus on how DVB is perceived by and presented to the wider world

ADB2 Watermarking for HbbTV Interactive Apps + Targeted Advertising

Session goals:

- Discussed concrete next steps to bring ADB2 (Application Discovery over Broadband phase 2) watermarking to market in Europe
- Demo with HbbTV interactive applications from ARD, RTL Deutschland & ZDF shown at exhibition

What happened next?

- Looking for broadcasters willing to start embedding broadcast signals on a 24/7 basis even while waiting for TVs to start detecting
- First TV maker is licensed and ready to start implementing detection



What can DVB learn from 5G-MAG?

Proposed by:

Peter MacAvock (DVB)

Session goals:

- Discussion on the potential relevance of the 5G-MAG Reference Tools approach to DVB, including for Verification & Validation

What happened next?

- Continuing discussions within DVB Project to improve and enhance V&V tools
- OSMART Workshop #3 in December



DVB-I and Accessibility

Proposed by:

Andreas Tai (SWR/ARD), Jan Müller (Dolby)

Session goals:

- Aimed to list of activities like pilot projects, PoCs, guidelines that were planned or necessary
- Coordination of these efforts

What happened next?

- A new group was created – TM-I-a11y, led by Andreas Tai – that started working on implementation guidelines for accessibility in DVB-I
- Draft guidelines (A185) were finalized ahead of IBC2024



Open Casting

Session goals:

- Check whether the idea of having an API for provisioning (and monitoring/getting logs from) a broadcast/multicast network powered by DVB-MABR or DVB-NIP makes sense
- What should we pay attention to in this API?

What happened next?

- Via Guillaume Bichot
- SVTA work item on Open Casting API (an iteration of the Open Caching API dedicated to multicast delivery) with a reference to DVB-MABR
- A formal joint task force is unlikely as the API abstracts the multicast delivery solution
- A demo or some form of joint prototyping relying on the future MABR reference software and an open caching/open casting reference software.



Content protection solution for DVB-NIP receivers not connected to broadband network – broadcast only

Session goals:

- Presentation of the non-connected use case: encrypted services and security assets are conveyed through the broadcast link (unidirectional).
- Did this use case still require making the assumption that a broadband connection is always available for the target market?
- How could this question be solved thanks to VSAT (satellite return path) links?

What happened next?

- via Régis Moulin
- Feasibility of the solution was confirmed during the session
- Device vendors are now looking to integrate the solution
- TM-NIP remains open for any specific requirements



Codecs – sleeping dogs or elephants in the room

Session goals:

- Discussion concerned anything to help deployment and to maintain the relevance of DVB specifications for audio and video codecs
- Need for a common reference document for guidelines on UI
- Could PCM maintain a database of where codecs are deployed?
- Action required on dynamic switching between codecs

What happened next?

- Via Anand Kotra



Verification and Validation for DVB-SIS

Proposed by:

Dušan Stelov (MAINDATA), Ralph Edeine (Eutelsat)

Session goals:

- Enhance DVB-SIS standard: investigate whether further DVB-SIS work should be taken over by the DVB working groups on satellite (rather than the terrestrial group)
- Fix errors and enhance the “hard to read” standard, and eventually work out implementation guidelines.
- Investigate creation of official DVB web page showing solutions that passed V&V testing, (as has been done with the DVB-I directory).

What happened next?

- Via Ralph Edeine
- DVB-SIS interoperability workshop organized by Eutelsat
- Feedback used in the deployment of DVB-T2 UHD HEVC for the Paris Olympic Games
- Renewed interest in DVB-SIS in certain markets



Socio-technical barriers to the IP transition

Proposed by:

Ranjeet Kaur, Simon Fell & Simon Jones (DTG)

Session goals:

- Discussing ways to ensure a seamless and inclusive transition to IP for all stakeholders

What happened next?

- Via Ranjeet Kaur



HD or UHD? How multilayer could solve the dilemma

Session goals:

- Discuss benefits, use cases, challenges and opportunities around use of multilayer to solve the HD vs UHD dilemma

Proposed by:

Simone Ferrara (V-Nova)

What happened next?

- TM-AVC continues to study multilayer solutions as part of the NGVC Phase 2 work



What is a DVB-I service?

Session goals:

- Discuss ways of guiding the promotion of DVB-I services, or signalled services, to specific audiences, liaison partners and operators who are deploying DVB-I

What happened next?

- Now preferring usage of the term “DVB-I signalled service”
- On-going work on architectural picture
- Discussion on DVB-I compliance remains a live topic (plugfests are helping)



DVB-NIP: How to achieve a successful market introduction and commercialization?

Session goals:

- Identify end-user services and markets where DVB-NIP will deliver a tangible unique selling proposition.
- Discuss what needs to happen for respective services to be successful and what actions DVB and its members should take.

What happened next?

- PCM is identifying key markets and actions to promote DVB-NIP
- IBC2024 conference session on DVB-NIP use cases and market introduction



Do we need Logical Channel Numbers?

Session goals:

- An open discussion on the role of LCNs and whether they are still necessary and useful

What happened next?

- The session concluded that the answer was a solid “yes”



Extending the postcode in DVB-I

Session goals:

- Overcome (perceived) challenges during the German DVB-I pilot related to the use of the postcode

What happened next?

- No extension or modification of the concept of “Postcode” was necessary
- Participants agreed to think about the necessities of a system where different members of the ecosystem can manage their specific information, which then is merged by the system on the server side, to provide a consistent, current service list to clients.



Room for Regulation

Session goals:

- To understand the perspectives of media regulators , identify gaps in the gaps in how this is signalled, how can trials and pilots get regulatory approval, how does DVB deal with regulation

What happened next?

- The German regulators have convened a Round Table to consider business and regulatory preparations towards regular operation of DVB-I in Germany
- This could form a blueprint for others considering DVB-I



Accessibility subtitles – interoperability on smart TVs

Session goals:

- Discuss ways to improve interoperability on subtitling accessibility services for HbbTV / DVB-I / DVB-DASH

What happened next?

- 3Cat demonstrated new functionalities at IBC2024 on the EBU booth



DVB-I and HbbTV OpApp app: best of friends?

Proposed by:

Gordon Maynard (OnScreen Publishing), Raj Patel (Yotta Media)

Session goals:

- Can DVB-I and the HbbTV Operator App coexist?
What are the potential benefits?

What happened next?

- via Gordon Maynard
- Successfully raised awareness of the complementarity of DVB-I and HbbTV (bidirectionally!)
- HbbTV Symposium session this week



Is reaching mobile devices part of the future? How to get there?

Proposed by:

Graziano Casale (Rohde & Schwarz)

Session goals:

- Broad discussion of the topic

What happened next?

- NAB 2024 paper and several further presentations on DVB-I and 5G
- Demos of 5G Broadcast integration with DVB-I at IBC2024 and Media Web Symposium



DVB-I, DVB DASH, CMCD

Proposed by:

Rufael Mekuria (Huawei), Thomas Stockhammer (Qualcomm)

Session goals:

- CMCD = Common Media Client Data
- Are the CMCD use cases of interest for the DVB community?
- What would DVB have to do to add this technology?
- Concerns – privacy, et al.

What happened next?

- Commercial Requirements were completed for addition of CMCD to DVB-DASH (BlueBook C109)
- Technical work is proceeding



Security of DVB Systems – Make vs. Buy

Session goals:

- Ideas to encourage more participation in CM-SEG work



What happened next?

- Clear decision not to 'buy'.
- CM-SEG is now functioning again, with ToRs updated.
- Update to Harmonized Security Framework is imminent
- Ongoing support for security considerations on TM-I and TM-AVC for NGVC2
- Also engaging with EBU with regard to Security4Media



Film Grain Synthesis

Session goals:

- Show film grain synthesis demonstrations and collect feedback. Session was a complement to the CM-AVC-FGS online workshop

What happened next?

- Results of the discussion were passed back to DVB CM-AVC-FGS study mission group
- Work is on-going



Sustainability in DVB

Session goals:

- Define how the wider DVB community could help the new CM-EE (Energy Efficiency) group

What happened next?

- The notes from the discussion were shared with CM-EE and discussed there in the context of development of use cases
- DVB Members: join the group!



DVB, DASH-IF and SVTA

Proposed by:

Thomas Stockhammer
(Qualcomm)

Session goals:

- Provide an overview of the activities in DASH-IF, DVB, and SVTA on Internet Delivery
- Identify common and complementary topics look at organizational topics
- Create a vision on what such a joint organization would bring to the Industry

What happened next?

- DASH-IF and SVTA merger has been completed
- DVB has open and ongoing communication with the new entity



DVB-I common profile: next steps?

Session goals:

- To understand what is needed for the future of the DVB-I common profile

What happened next?

- Via Remo Vogel
- Bluebook A185 on Accessibility is being finalized
- In parallel, there is a work item for the implementation profile within the German TV Platform.
- This implementation profile will be the basis for the DVB-I Common Profile extension.



Ask Me Anything on ATSC 3.0

Proposed by:

Raj Patel (Yotta Media Labs), Jason
Patton (Verance)

Session goals:

- Answer questions and bring people attending up to date on what is going on in the USA.

What happened next?

- No follow-up needed
- Session was useful and should be repeated at DVB World 2025
- Consider further input from other SDOs and regions



Should Timing & Positioning become part of a broadcast standard?

Proposed by:

Thomas Loichinger (Rohde & Schwarz)

Session goals:

- To gather different opinions and ideas on this topic

What happened next?

- Discussions ongoing with DVB CM chair



DVB sponsored reference/test live streams

Session goals:

- Create a proposal for what DVB should do and how it should do it

What happened next?

- Via Jon Piesing
- TM Chair updated the previous proposal based on the discussions
- Reviewed among TM participants
- “Bring your own channel”
DVB-I showcase for IBC2024



Can DVB-I be used for object-based media?

Session goals:

- To discuss whether and how DVB-I could be utilized to help the discovery and carriage of object-based media

What happened next?

- Discussion was brought back into the DVB study mission on OBM
- Report due by end of 2024



Reminding the world that DVB exists and has tools for new systems and services

Session goals:

- Understand if the perception of DVB as being “legacy” is commonplace and suggest some ways to address this.

What happened next?

- Ongoing discussions at PCM and SB level on how to remind the world how strongly DVB performs
- Remains a live topic



What can DVB do next on volumetric video?

Session goals:

- Following the publication of the DVB Study Mission report on Volumetric Video, discuss what DVB can do next

What happened next?

- Discussion was brought back to study mission
- The Volumetric Media Interoperability group within the Metaverse Standards Forum have similar ambitions, and rather than have competing activities, we will work together on these topics



DVB demonstrations at IBC2024

Session goals:

- Discuss ideas for what DVB could or should show at IBC2024

What happened next?

- First commercial DVB-I service shown
- New Irish DVB-I PoC demonstrated
- DVB-NIP commercial use cases and devices shown
- “Bring your own channel” DVB-I showcase
(see: dvb-i.tv/demonstrator)



What can DVB do more to help DVB-I implementers?

Proposed by:

Gordon Maynard (OnScreen Publishing)

Session goals:

- Identify actions that DVB could take to help DVB-I Implementors

What happened next?

- DVB-I website has been refreshed
- More resources needed for implementers – remains a live discussion within DVB



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