



# DVB update

## Inter-SDO call

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13 October 2021

# Agenda

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Next Generation Video Codecs (NGVC)

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DVB-I Central Service List Registry (CSR) - PoC

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DVB-I for 5G (or for any future distribution standard)

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DVB Workplan

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DVB DEMOS

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# Next Generation Video Codecs (NGVC)



DVB prepares the way for advanced 4K and 8K broadcast and broadband television

01.07.2021

[News](#) ↗

- ❑ In July, DVB endorsed Commercial Requirements (CRs) for NGVC to pave the way for 4K and 8K services.
- ❑ During this phase 1, three codecs have been identified as candidates for addition in the DVB toolbox: AV1, AVS3 and VVC.
- ❑ The work has started to investigate their technical compliance with the CRs and develop draft specifications, subject to their IPR policy meeting the criteria of DVB's Policy on normatively referenced materials.

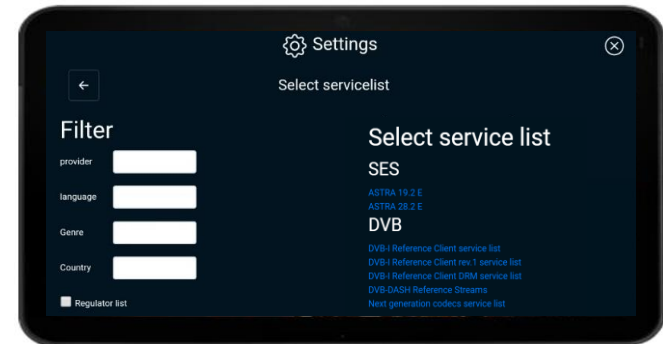


# DVB-I Central Service List Registry (CSR) - PoC



[News](#) 

- ❑ A DVB-I CSR will enable **fast and efficient access to the Service Lists**, which may be created by content providers, service operators, national regulators or others.
- ❑ This summer, Sofia Digital has been selected to build a skeleton DVB-I CSR
  - The first phase is a PoC, to validate the technical approach taken in the DVB-I standard
  - Under the second phase, the implementation will be made freely available for others to test their own DVB-I services and clients.



[DVB-I Reference application](#)

*“Relevant services can be found among thousands”*

*“A CSR opens the door for existing closed platforms to a huge new variety of alternative content.”*

# DVB-I for 5G (or for **any** future distribution standard)



[News](#) 

- ❑ In July, Commercial Requirements (CRs) for the use of **DVB-I as the service layer on top of 5G** were published ([DVB BlueBook C100](#))
  - Support Rel-16-based 5G operation modes: 5G Broadcast, unicast-based 5G Media Streaming
  - Collaboration with 3GPP to monitor the work beyond Rel-16 and harmonize technologies to the extent possible
- ❑ DVB-I services over 5G will support integrated DVB-I hybrid services, whose basic broadcast distribution is augmented with unicast for extended service coverage, lower distribution costs, improved quality and additional user experiences.



**DVB-I can serve as the “service aspect” of any IP centric distribution** platform, creating interfaces and APIs to distribute services over any IP network

Specifications

2019

2020

2021

2022

Targeted Advertising

DVB-TA

Watermarking

Verification & Validation

Service Discovery via Internet

DVB-I

Update

Maintenance

DVB-I Phase 2

Updates for 5G delivery

DVB-DASH (Low Latency)

DVB-DASH

Alignment with MPEG DASH 3<sup>rd</sup> and 4<sup>th</sup> editions

Updates for DVB-TA support

Updates for 5G delivery

Multicast Adaptive Bitrate Streaming

DVB-MABR

Update

DVB-MABR Phase 2

Updates for 5G delivery

Native IP over Broadcast

DVB-NIP

Native IP (DVB-I, DASH, MABR, GSE, S2/T2)

Updates to relevant specs

DVB-S2X Beam Hopping

DVB-S2X

Clarifications

Beam Hopping Signalling

Home-based Broadcast-to-IP

DVB-HB

Specification

Verification & Validation

Video & Audio Coding

DVB-AVC

Next Gen Video Codecs (Commercial Requirements)

HEVC for 8K

WVC

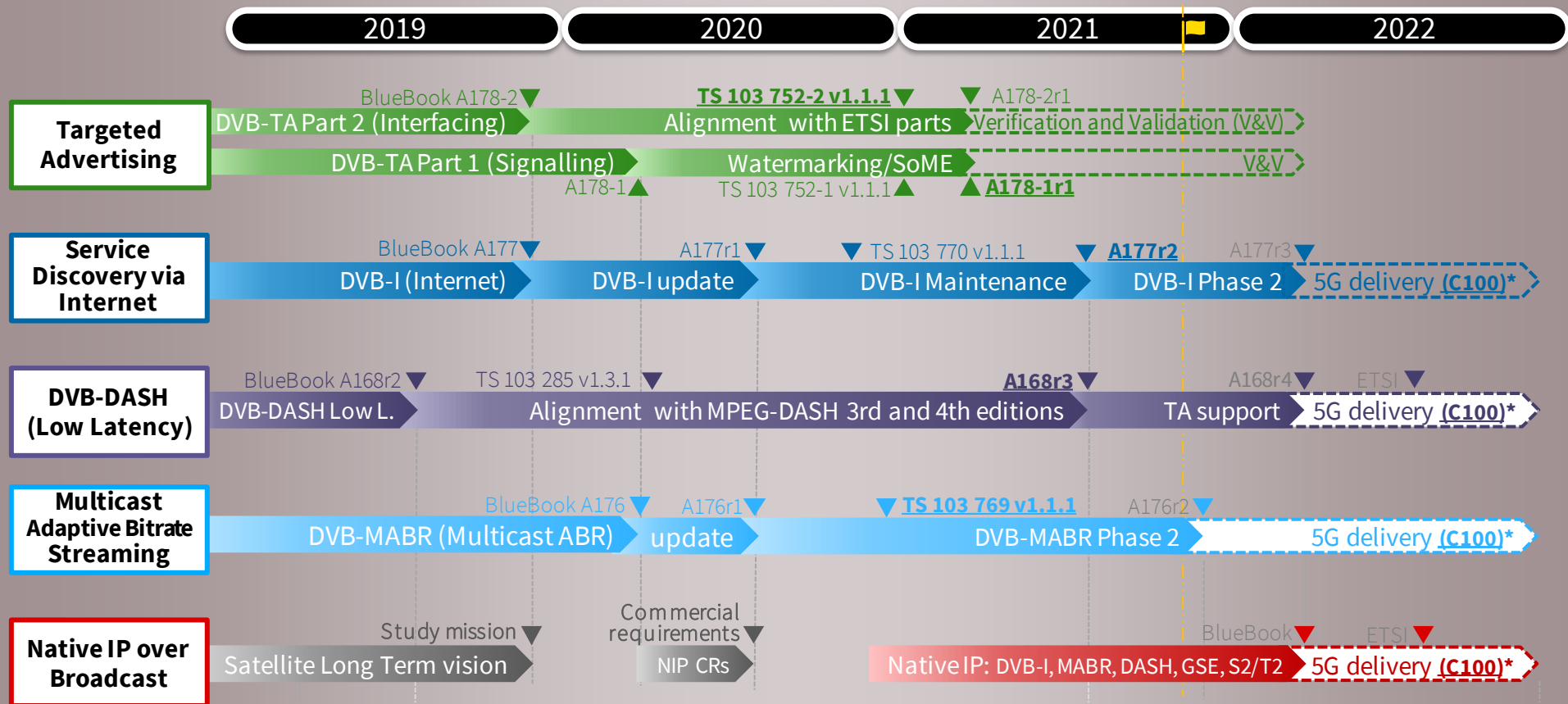
AV1 AVS3

HDR Dynamic Mapping

HDR Dynamic Mapping (3rd techno)

Phase 2 CRs

# DVB's IP-centric specifications

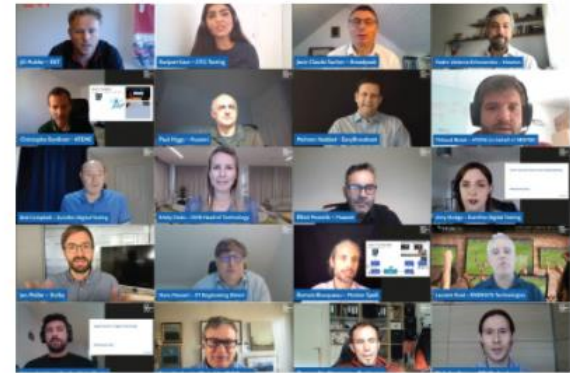


\*Commercial Requirements for *DVB-I over 5G*, published as [C100](#) in July 2021



Direct links to each demo... (More information on DVB-I at: [dvb-i.tv](http://dvb-i.tv))

- TPV Technology – <https://youtu.be/X1p-7uP17UY?t=338>
- NESTED (ATEME, ENENSYS Technologies, Orange, Viaccess-Orca) – <https://youtu.be/X1p-7uP17UY?t=758>
- Kineton – <https://youtu.be/X1p-7uP17UY?t=1287>
- ENENSYS Technologies – <https://youtu.be/X1p-7uP17UY?t=1666>
- Dolby – <https://youtu.be/X1p-7uP17UY?t=2151>
- Native IP multi-vendor demo introduction – <https://youtu.be/X1p-7uP17UY?t=2588>
- Broadpeak – <https://youtu.be/X1p-7uP17UY?t=2781>
- ST Engineering iDirect – <https://youtu.be/X1p-7uP17UY?t=3319>
- EKT – <https://youtu.be/X1p-7uP17UY?t=3716>
- EasyBroadcast – <https://youtu.be/X1p-7uP17UY?t=4041>
- Huawei – <https://youtu.be/X1p-7uP17UY?t=4578>
- Qualcomm – <https://youtu.be/X1p-7uP17UY?t=5018>
- Eurofins Digital Testing – <https://youtu.be/X1p-7uP17UY?t=5540>
- DTG Testing – <https://youtu.be/X1p-7uP17UY?t=5966>
- Wrap-up from Emily Dubs – <https://youtu.be/X1p-7uP17UY?t=6482>



## DVB-I and Native IP to the fore at DEMOS 2021

08.10.2021

Last week's second edition of the online DVB DEMOS event provided ample evidence that DVB's new IP-centric solutions are well placed to drive the future of media delivery. Fifteen DVB Member companies showcased their latest products and services based on new or forthcoming DVB specifications, including several multi-vendor... [Read More](#)



# Thanks!



*DVB is an industry-led consortium of the world's leading media & technology companies designing open technical specifications for digital media delivery.*



# DVB's Native IP solution: Media streaming over broadcast

...A vision for the future

1990s-20xx

> 20xx

**DVB NIP**<sup>®</sup>

(Linear MPEG-TS video)

File-based IP-delivered video

