

IMPORTANT NEW DVB SPECIFICATIONS GET APPROVAL FROM STEERING BOARD

UHDTV HEVC Delivery Profile - Content Identification & Media Synchronization For Companion Screens & Streams - MPEG-DASH Profile – All Get Green Light For Standardization

Geneva – 03 July, 2014 – A significant step in the road to Ultra High Definition TV services was taken today with the approval of the DVB-UHDTV Phase 1 specification at the 77th meeting of the DVB Steering Board. The specification includes an HEVC Profile for DVB broadcasting services that draws, from the options available with HEVC, those that will match the requirements for delivery of UHDTV Phase 1 and other formats. The specification updates ETSI TS 101 154 (Specification for the use of Video and Audio Coding in Broadcasting Applications based on the MPEG-2 Transport Stream).

The new DVB-UHDTV Phase 1 will allow images with four times the static resolution of the 1080p HDTV format, at frame rates of up to 60 images per second. Contrast will be drastically improved by increasing the number of bits per pixel to 10 bit. From the wide range of options defined in the HEVC Main 10 profile, Level 5.1 is specified for UHD content for resolutions up to 2160p. For HD content, HEVC Main profile level 4.1 is specified for supporting resolutions up to 1080p.

The DVB-UHDTV Phase 1 specification takes into account the possibility that UHDTV Phase 2 may use higher frame rates in a compatible way, which will add further to the image quality of UHDTV Phase 1.

“HEVC is the most recently developed compression technology and, among other uses, it is the key that will unlock UHDTV broadcasting,” said DVB Steering Board Chairman, Phil Laven. “This new DVB-UHDTV Phase 1 specification not only opens the door to the age of UHDTV delivery but also potentially sets the stage for Phase 2, the next level of UHDTV quality, which will be considered in upcoming DVB work,” he continued.

Content Identification & Media Synchronization For Companion Screens & Streams

Also approved at the 77th meeting of the DVB Steering Board was the specification for Companion Screens and Streams, Part 2: Content Identification and Media Synchronization. Companion Devices (tablets, smart phones) enable new user experiences for broadcast service consumption. Many of these require synchronization between the Broadcast Service at the TV Device and the Timed Content presented at the Companion Device. This specification focuses on the identification and synchronization of a Broadcast

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Service on a TV Device (Connected TV or STB and screen) and Timed Content on a Companion Screen Application running on a Companion Device. Part 2 outlines the enabling factors for the identification of, and synchronization with, broadcast content, timed content and trigger events on TV devices (for example a Connected TV or STB) and related content presented by an application running on a personal device.

MPEG-DASH Profile

Another specification to gain approval from the Steering Board was the MPEG-DASH Profile for Transport of ISO BMFF Based DVB Services over IP Based Networks. This specification defines the delivery of TV content via HTTP adaptive streaming. MPEG-DASH covers a wide range of use cases and options. Transmission of audiovisual content is based on the ISO BMFF file specification. Video and audio codecs from the DVB toolbox that are technically appropriate with MPEG-DASH have been selected. Conditional Access is based on MPEG Common Encryption and delivery of subtitles will be XML based. The DVB Profile of MPEG-DASH reduces the number of options and also the complexity for implementers. The new specification will facilitate implementation and usage of MPEG-DASH in a DVB environment.

The three new specifications will now be sent to ETSI for formal standardization and the relevant BlueBooks will be published shortly.

About DVB

Digital Video Broadcasting (DVB) is an industry-led consortium of over 200 broadcasters, manufacturers, network operators, software developers, regulators and others from around the world committed to designing open interoperable technical standards for the global delivery of digital media and broadcast services.

DVB standards cover all aspects of digital television from transmission through interfacing, conditional access and interactivity for digital video, audio and data.

DVB dominates the digital broadcasting environment with thousands of broadcast services around the world using DVB's standards. There are hundreds of manufacturers offering DVB compliant equipment. To date there are over a billion DVB receivers shipped worldwide.

Further information about DVB can be found at: www.dvb.org, www.dvbservices.com and www.dvbworld.org.

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