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For Immediate Release

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DVB issues MPEG-2 Implementation Guidelines - HDTV and/or SDTV, 50- or 60-Hz

SMPTE Conference, Sydney, 1st July 1997 – the Digital Video Broadcasting Project (DVB) has issued the DVB Blue Book, "Implementation Guidelines for the use of MPEG-2 Systems, Video and Audio in Satellite, Cable and Terrestrial Broadcasting Applications". This specification allows for both Standard Definition (SDTV) and High Definition Television (HDTV), optimised for both "50-Hz" and "60-Hz" countries.

The new DVB Blue Book was produced by the Technical Module of the DVB Project, to commercial requirements issued by the DVB Commercial Module and has been approved by the DVB Steering Board. It now goes forward to ETSI for publication as a revision to ETR 154.

The Implementation Guidelines detail the MPEG-2 parameters that baseline SDTV and HDTV decoders should support. As before, the baseline SDTV decoder is based on MPEG-2 Main Profile at Main Level (MP @ ML). The HDTV baseline decoder uses MPEG-2 Main Profile at High Level (MP @ HL), ensuring backwards compatibility with existing DVB/MPEG-2 bitstreams.

While the DVB MPEG-2 Data Container gives a flexible range of service options, the Implementation Guidelines recommend HDTV broadcasters use the so-called Common Image Format (CIF) proposed by the ITU and DAVIC (i.e. 1080 lines by 1920 pixels). They also detail the implementation requirements necessary for Integrated Receiver-Decoders (IRDs) to be used in countries which for historical reasons have either 60 Hz or 50 Hz field-refresh rates.

When HDTV broadcasts are directed towards populations of DVB-compliant IRDs of which some are not HDTV-enabled, the DVB Implementation Guidelines recommend multiplexing SDTV programme streams into the MPEG-2 bitstream alongside the HDTV programme, in an approach known as Simulcasting.

Although the DVB project started, in 1993, with the objective of harmonising European Digital Broadcasting standards, the standards meet broadcasters' and manufacturers' demands the world over. Because of the phenomenally successful rollout of DVB technology, end-to-end and specialised DVB-compliant solutions are readily available on the market, and broadcasts in DVB format are on the air, world-wide.

Theo Peek, DVB chairman said: "In the context of the low-key commercial interest in HDTV from the European broadcasters, and a wave of concern around the globe that the transition to digital should offer a future proof path into High Definition, the DVB MPEG-2 Guidelines are a strong indication that the DVB Project is looking well beyond the European market to determine its commercial requirements."

Background

The Digital Video Broadcasting Project (DVB) is a consortium of over 200 broadcasters, manufacturers, network operators and regulatory bodies in more than 30 countries worldwide. Standards have been promulgated for all television delivery media. Numerous broadcast services using DVB standards are now operational, in Europe, North and South America, Africa, Asia, and Australasia.