IBC FIRST: COMPLETE DVB-H SUITE OF STANDARDS ON-AIR

Demo Illustrates Interoperability & Multi-Vendor Support For Complete DVB-H Chain

8 – 12 September 2006, Amsterdam RAI Stand No. 1.481

Amsterdam – 8th September 2006 – This year IBC is witnessing the coming of age of Mobile TV and to facilitate product and service demonstrations at the exhibition, DVB is broadcasting a live unencrypted DVB-H service utilising the DVB-IPDC (IP Datacast) specifications. The multiplex is transmitted from the Tlc Tower adjacent to the RAI Centre, and available throughout the exhibition halls and conference centre on UHF Channel 24 (498MHz) with a fully DVB-IPDC compliant Electronic Service Guide (ESG) (ETSI TS 102 471). The multichannel offering consists of the live output of Nederland 2, CNN International, BBC World and The Discovery Channel.

In the DVB Pavilion, a range of DVB-H enabled devices from a variety of vendors is being exhibited receiving the service. Throughout IBC, demonstrations are illustrating the interoperability and multi-vendor support for all elements of the DVB-H chain that includes DVB-IPDC. DVB-IPDC is essential to the convergence of broadcast networks and mobile telecommunications networks that will almost certainly be central to the majority of commercial launches of DVB-H services. It covers the overall system architecture, ESG, content delivery mechanisms, and the all-important service purchase and protection systems that will make the establishment of convergent networks possible.

“Following the successful roll-out in Italy of two DVB-H services in time for the FIFA World Cup, we should soon see commercial services available in Finland, Germany, the Russian Federation and the US. These business offerings demand maturity from systems and the standards that underlie them, and DVB’s IBC ’06 service is designed to facilitate just that – showcasing the various elements of the complete DVB-H suite of standards at IBC for the first time.

“Additionally, DVB has begun work on the development of SSP (Satellite Services to Portable devices), which will build on the existing DVB-H and DVB-S2 specifications to exploit opportunities in S-Band,” commented Peter MacAvock, DVB’s Executive Director.

For the DVB-H IBC transmission, SIDSA is providing and operating the broadcast platform. National Grid Wireless is supplying the modulator, transmitter and antenna, and Mier Communications is providing additional technological expertise.
DVB-H is now the recognised leading technology for digital Mobile TV. The unparalleled support of network operators, broadcasters, content owners, and silicon and equipment manufacturers for the non-proprietary, open standard is hastening the commercial launches of DVB-H Mobile TV services around the world. Extensive trials and pilot services across five continents have already confirmed and continue to endorse the technical capabilities and economic advantages of DVB-H over competing proprietary systems.

Some of the advantages of DVB-H over other Mobile TV technologies are:

- DVB-H is a non-proprietary, open standard, with public access to independent evidence regarding real world performance records
- Offers a lower network investment opportunity
- DVB-H offers 4 times more capacity with 30+ channels per multiplex
- Offers the lowest power consumption with the highest data throughput
- Channel switching time of 1 – 2 seconds
- DVB-H is uniquely specified for an Electronic Service Guide, for service purchase to generate revenues, and a protection system allowing suitable controls over content viewing for ensuring viable parental control when needed
- Offers greater bandwidth management with statistical multiplexing adjusting the bitrate of channels according to those channels' needs
- Is fully IP based (IPDC) to facilitate easy integration into the GSM/UMTS world
- Receiver chips available from multi-vendors (ATI Technologies, DiBcom, Freescale, MicroTune, PacketVideo, Philips, Samsung, Siano, ST, Texas Instruments, etc.) leading to lower costs
- Headend equipment commercially available from over 50 vendors
- Handsets available from LG Electronics, Motorola, Nokia, Sagem, Samsung, Siemens/BenQ, Sony Ericsson offering consumer choice
- DVB-H spectral efficiency is scalable with 16QAM and 64QAM options
- DVB-H can share spectrum (and investment) with DVB-T with hierarchical modulation or multiplexing. It can be implemented without switching off any existing services
- DVB-H has been an ETSI standard since November 2004

Background

The DVB Project
The Digital Video Broadcasting Project (DVB) is an industry-led consortium of over 250 broadcasters, manufacturers, network operators, software developers, regulatory bodies and others in over 35 countries committed to designing global standards for the delivery of digital television and data services. The DVB standards cover all aspects of digital television from transmission through interfacing, conditional access and interactivity for digital video, audio and data. The consortium came together in 1993 to create unity in the march towards global standardisation, interoperability and future proofing.

To date, there are numerous broadcast services using DVB standards. There are hundreds of manufacturers offering DVB compliant equipment, which is already in use around the world. DVB dominates the digital broadcasting world. A host of other services is also on-air with DVB-T, DVB-S and DVB-C including data on the move and high-bandwidth Internet over the air. Further information about DVB can be found at: www.dvb.org.

DVB-H (Handheld)
DVB-H is defined as a system where the information is transmitted as IP datagrams. Time-slicing technology is employed to reduce power consumption for small handheld terminals. IP datagrams are transmitted as data bursts in small time slots. The front end of the receiver switches on only for the time interval when the data burst of a selected service is on air. Within this short period of time a high data rate is received which can be stored in a buffer. This buffer can either store the downloaded applications or playout live streams. The achievable power saving depends on the relation of the on/off-time. If there are approximately ten or more bursted services in a DVB-H stream the rate of the power saving for the front end could be around 90 percent. Information on DVB-H can be found at: www.dvb-h.org.

DVB is registered trademark of the DVB Project.