

DVB-H Progresses To ETSI For Formal Standardisation

Work on the DVB-H specification began in 2002 and came about from the recognition of the excellent mobile performance of DVB-T owing to its sophisticated multi-carrier COFDM modulation. The work carried out has been driven by market studies and advancements in receiver technology.

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%.

DVB equipment manufacturers are already gearing up for the implementation of DVB-H. One such manufacturer, ProTelevision, has released a DVB-H firmware update for its popular PT5780 DVB-T modulator. The modulator, adapted for DVB-H, is currently being used in a number of the above mentioned trials. The company has addressed the issue of power conservation in the mobile handset by utilising a time division multiplexing scheme so that the receiver will receive data in bursts. This enables the handset to shut down the receiver in between bursts thereby minimising power consumption and preserving battery life.

Morten Simonsen, Managing Director of ProTelevision Technologies A/S, remarked "We feel that DVB-H enables a valuable service for handheld devices which is not viable through other technologies. We have noticed tremendous amount of activity concerning DVB-H as well as a healthy interest in our modulator. We are currently participating in several pilots on several continents".

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.

European Telecommunications Standards Institute (ETSI)

ETSI is a non-profit making organisation whose mission is to produce the telecommunications standards that will be used for decades to come throughout Europe and beyond. Based in Sophia Antipolis (France), ETSI unites 889 members from 54 countries inside and outside

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Europe, and represents manufacturers, network operators, administrations, service providers, research bodies and users.

ETSI plays a major role in developing a wide range of standards and other technical documentation as Europe's contribution to worldwide standardisation in telecommunications, broadcasting and information technology. ETSI's prime objective is to support global harmonisation by providing a forum in which all the key players can contribute actively. ETSI is officially recognised by the European Commission and the European Free Trade Association (EFTA). Information on ETSI can be found at: www.etsi.org.

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