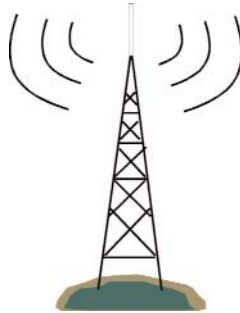


Co-existence of MHEG-5 and MHP



MHEG



MHP

What is the aim of this work?

Investigate the potential relevance of the DVB Multimedia Home Platform (MHP) to Digital Terrestrial Television (DTT) in the UK.

What have we been doing?

Practically addressing questions such as how MHP-capable receivers might be able to run interactive services authored as MHEG applications, and whether MHEG and MHP applications could practically co-exist in the broadcast stream.

Why have we been doing this?

Interactive services have been available on DTT in the UK since its public launch in 1998. Such services are transmitted in accordance with the UK Profile of MHEG-5 (MHEG), which has recently been standardised in ETSI. This technology has successfully allowed a diverse range of interactive services to be delivered by a number of broadcasters. The multiplex operators (collectively known as TDN) have committed to the use of MHEG and it is explicitly referenced in the ITC licence awards for the commercial multiplexes. It will remain an essential aspect of the DTT transmissions for the foreseeable future.

MHP has emerged as a front-runner to become a pan-European or even worldwide standard for support of interactive services. One possible future is that MHP becomes a standard part of many DTV receivers for economic and/or regulatory reasons. This may extend to some receivers being deployed for the reception of DTT in the UK.

What is the output from this work?

The project is due to finish in autumn 2004 and a written report of the findings will be published later this year. However, practical investigation is essentially complete and the results of this are being demonstrated at IBC. (See over for details). In addition the results so far have been fed into both the DVB MHP and ETSI-MHEG standardisation activities in order to maximise the potential for co-existence.

Who is involved in this project?

- BBC - info@rd.bbc.co.uk
- Endurance Technology - amoyler@endurancetech.co.uk
- Philips
- Strategy & Technology Ltd - david.cutts@s-and-t.com

The project is being undertaken with support from the UK Government Department of Trade and Industry.

Endurance
Technology

PHILIPS

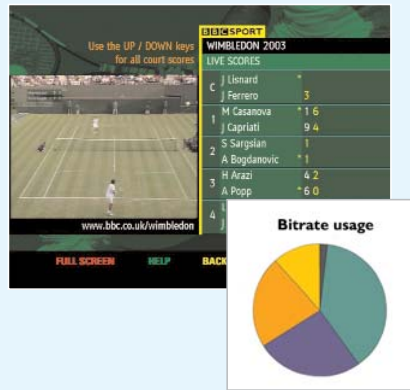


BBC

Co-existence of MHEG-5 and MHP

Demonstration: Efficient simulcast of MHP services with existing MHEG services by shared use of a single set of assets

Where: BBC (Research & Development)
Stand 10.411



In this approach to supporting co-existence an MHP service is simulcast along with an existing MHEG service. In the simplest scenario the MHP service simply replicates the MHEG service. However, depending on how it is deployed, MHP has the potential to offer advanced features that are not supported by MHEG at the present time, which could make this approach more attractive.

The practicality of this approach is an issue given the limited broadcast capacity available in DTT in the UK. Fortunately, both MHEG and MHP use the same standard (the DVB Object Carousel) for the delivery of data in the broadcast stream. This allows an MHEG application and an MHP application to be delivered in the same broadcast stream along with other assets such as text and images that can be used by both.

Two example services are being demonstrated, representing extremes of service design. The first is an Enhanced Television service offering a visually rich viewer experience but only limited content. The second is a simple Text service offering a visually simple viewer experience but a large amount of accessible content.



Demonstration: Presentation of existing MHEG transmissions by an MHP receiver via use of an MHP interoperable plug-in

Where: Strategy & Technology
Stand 1.220



The MHP system allows for a 'plug-in' application to be written that interprets interactive content authored according to another interactive television standard, e.g. MHEG-5. On an appropriate future MHP platform, the 'plug-in' could either be downloaded over air or built into the receiver by the manufacturer.

This demonstration is of an MHP application (XLET), written using MHP 1.1, which allows the MHP platform to emulate an MHEG receiver. The 'plug-in' is running a selection of interactive games as broadcast on the UK's Freeview DTT platform.