

10 things you need to know about...

Hybrid Broadcast Broadband - HBB



1 – HBB is a set of new devices and services which combine broadcast and broadband media

The most obvious of these new devices is a set of Internet-connected TV sets from vendors such as LG, Philips, Panasonic, Samsung, Sharp and Sony. But HBB isn't restricted to this and a range of set-top-boxes exist which combine a DVB broadcast receiver and permit a connection to a home network via an Ethernet cable or Wi-Fi dongle.

2 – HBB is not an extension of IPTV

Although some of the techniques employed in HBB will come from the IPTV domain, HBB is likely to be more closely related to the online open Internet offerings than the traditional closed IPTV networks. IPTV is sometime considered a competitor for cable television networks. HBB will provide enhancements to the broadcast television offering.

3 – HBB is not all about platforms

Whilst the technology platform that will combine the broadcast and broadband delivery mechanisms in a consumer device is important, HBB services have implications for all elements of the broadcast and Internet media delivery chains. This is important, but harmonising platforms will be difficult, but there is useful harmonisation work to be done on IP distribution networks, Internet protocols, signalling, content security, content search and selection, etc.

4 – EBU's view is that a single HBB platform will not exist in the short term

A pity perhaps, but it's the reality. The UK and Italy already have extensive "interactive" TV offerings on MHEG-5 and MHP, respectively. Any HBB offerings in these markets will need to co-exist with the current set-up. On the other hand, there are the "green-field" markets such as France and Germany where no free-to-air interactive broadcast services are on offer. In these markets, HBB needs to address both a short-term broadcast-only interactive solution as well as a hybrid one.

5 – There are four major industry activities you should be aware of ...

UK – CANVAS (BBC, BT, ITV and partners) is designed to be both a technical platform and an operational model to foster the development of innovative applications. Since it operates in MHEG-5 country, the services offered on CANVAS will need to be sophisticated and therefore probably running on high performance consumer devices.

HbbTV (ANT, APS, IRT, Philips, French HD Forum, and others) considered by a Franco/German industry grouping is a combination of an OpenIPTVForum (OIPF) platform and DVB application signalling. It targets device which should appear in time for the Christmas '09 market. HbbTV therefore targets integrated TV sets and set-top-boxes.



HBB with MHP – MHP 1.1.3 is proposed for HBB services in Italy. Comprising a presentation engine (DVB-HTML or other browser) and the traditional Java platform from MHP with support of an Internet interactive channel, MHP 1.1.3 is the DVB's platform for HBB services.

Widgets: LG, Samsung and Sony are currently deploying a Yahoo/Intel Widget HBB platform seen at Consumer Electronics Show (Las Vegas, January 2009). Yahoo supplies the all-important application development and verification environment for widgets, which are downloaded from manufacturers' portals. Widgets currently operate in an Internet only environment, but could draw upon broadcast content in the future.

6 – Nobody knows what the killer application for HBB will be yet

EBU broadcasters have successful Internet media portals in each of their markets. The killer application for these has been catch-up TV (e.g. BBC iPlayer, ARD/ZDF Mediathek). It remains to be seen what will drive the uptake of HBB. Not really knowing what the killer-application will be makes defining requirements and interesting use-cases more complex.

7 – EBU Technical is at the centre of HBB work

EBU Technical has two main groups working on HBB: The Technical Committee's Task Force on HBB and the Distribution Management Committee's Web Media Technologies group (D/WMT). Aside from this internal work, EBU Technical is seeking to harmonise the work being done in France, Germany, Italy, Spain and UK in particular. The hope is that we could all agree a common set of standards for HBB. EBU Technical is working towards that aim.

8 – HBB technology should interoperate with existing interactive platforms

Sounds obvious doesn't it? A fundamental requirement is that HBB services and devices should not cannibalise existing interactive TV services. Further, HBB should provide an appreciable enhancement to the viewing experience available on broadcast or interactive platforms.

9 – And HBB technology should be cheap and accessible to all

Traditionally, broadcasters have relied on open standards to guarantee the accessibility of technology to the developments carried out by the manufacturers and content providers who will drive the industry. Given the difficult route to standardisation that IPTV has had, industry initiatives have sprung up in the HBB domain that could provide the winner technologies. But these must be accessible and reasonably priced.

10 – HBB is all about applications

Platforms, networks and signalling technology will facilitate, but HBB's success is going to ride on the development and deployment of exciting applications. Broadcasters will have to work to provide application development tools for their platforms of choice and innovative means of deploying these in the market.