EBU VIEWPOINT

The future is hybrid

The issue

Hybrid systems are a set of new devices and services that bring the online world to the TV set. Hybrid services can radically change the viewer's experience by matching the vitality and flexibility of the Internet with the quality and accessibility of broadcast TV. One great way to use them is to make a TV programme pull in material from the Internet, so you can view both together.

Imagine watching your favourite show on TV and being able to instantly access previous episodes that you have missed. Or, while watching the weather forecast, being able to immediately access your local weather information. Wouldn't it be great to get all the statistics from your favourite sports club or player without having to get up and go to a PC? How about voting for your favourite performer without having to make a phone call? Social networking about the TV show that's on would be no problem. You could even choose your programmes based on recommendations and comments from other viewers.

Joining together the forces of broadcasting, Internet companies, and major manufacturers in this new environment brings a whole host of challenges. Since there are a number of stakeholders involved, it is necessary to agree on common, harmonized, and open standards to ensure the success of hybrid services.

Furthermore, as the Internet is regulated differently from broadcasting in most countries, it could be difficult to mix 'content' coming from both. The integrity of the broadcast picture should also be respected in this new environment, and any change of content on the screen should only be made with the consent of the broadcaster or should be the result of an active decision by the viewer. If we can achieve this, hybrid techniques will really deliver on their promise to enhance the viewing experience.

European broadcasters, which are the driving forces of this new technology, are calling for hybrid systems to be designed in a way that respects some basic principles that will make full use of modern technology yet remove potential risks.

EBU Principles

Adopt common solutions for hybrid systems

It is important for hybrid systems to use common standardized technical solutions (e.g. HbbTV, MHEG-5, YouView, etc.) to allow broadcasters to link their traditional broadcast content to their broadband offers. Using different systems in the same market can be a major barrier to the success of this new technology.

Ensure that broadcasters' content is displayed unaltered and is easily accessible by all viewers

Broadcasters make considerable investments in programmes and services, so they have a vital interest in ensuring that the content they provide can easily be seen by viewers unaltered, without unwanted overlays, and in high quality.

Provide a safe viewing environment, especially for minors

Although hybrid systems offer great opportunities, they may also provide access to Internet content that is hardly regulated at all and is therefore unsuitable for children. EU broadcasters call upon providers of hybrid services to protect the quality and safety of the viewing environment on hybrid platforms.

Modernize copyright and address data protection

A modern, easy and coherent rights clearance system needs to be adopted for all broadcasters' services in the digital era, so that audiences can access content wherever and whenever they want. This is fundamental for the future development of hybrid systems. Adequate safeguards against copyright infringement and data protection concerns should also be taken into account when hybrid systems are being developed.

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Background

The hybrid revolution

Hybrid is a generic term for services and devices that use both the broadcast and broadband network, merging the two worlds of TV and Internet on one screen and using only one remote control. A hybrid device has a digital broadcast receiver, a broadband connection to a home network and a software platform that enables services to link the two networks together. A hybrid service is different from IPTV, which is a managed service offered on broadband only by an Internet provider, similar to a cable subscription. Hybrid services rely on the open Internet, much as a standard PC does.

Hybrid devices can vary greatly: a set-top box, a television set, a radio set, a games console, or a PC. The most customary devices are Internet-connected TV sets that hook up to the Internet directly without the need for an additional set-top box.

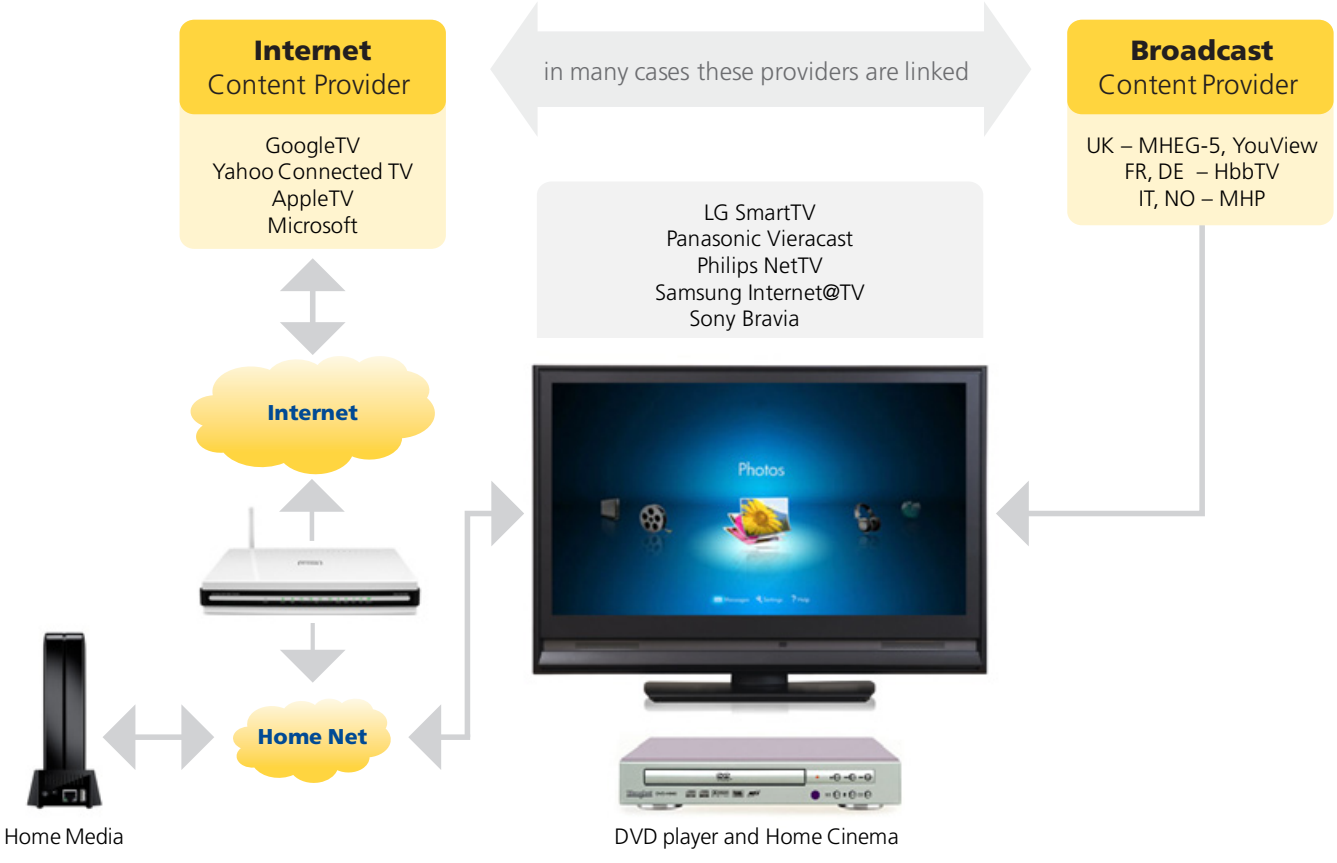
The benefits for viewers are considerable. In addition to conventional TV, hybrid systems provide viewers with catch-up TV services, a host of new attractive, interactive and personalized services as well as easy access to Internet services, comfortably all in one.

Linkage between broadcast and broadband

Almost all TV manufacturers offer at least one TV set with Internet access, and most TVs sold will be web-connected by 2014. However, simply putting a television receiver and an Internet browser in the same device does not automatically create hybrid systems. Although a user could access Internet sites, TV and Internet content would remain separate. Viewers could not therefore directly access Internet content associated with the broadcast content while watching a TV programme.

The greatest potential derives from the combination of both media worlds, but it has not been used so far in Internet TV sets on the market. Currently hybrid systems are difficult to implement as the industry lacks a harmonized solution. Each manufacturer uses its own technology, and broadcasters have to offer separate services for each and every manufacturer, with targeted applications. This could lead to a situation where the broadcaster's content is available only on certain devices and the services offered are not the same.

Even Internet providers, such as Apple, Google and Yahoo offer solutions for connecting a broadcast receiver (TV set) to the Internet and access a range of online services, including their own of course.



Adopt common solutions for hybrid systems

Broadcasters and other stakeholders (e.g. device manufacturers, content providers, etc.) are trying to develop common solutions that provide integrated linkage between TV and the Internet. With a harmonized approach across the broadcasting and consumer electronics industry, there will be a rapid deployment of hybrid services that are likely to change the viewing experience for the better.

Different markets, different hybrid platforms

With successful online services, European broadcasters are uniquely placed to bring the broadcast and broadband worlds together. Indeed, the hybrid services launched initially in the UK and Germany seek to bring catch-up TV and sophisticated data services to hybrid devices, but this is just the beginning.

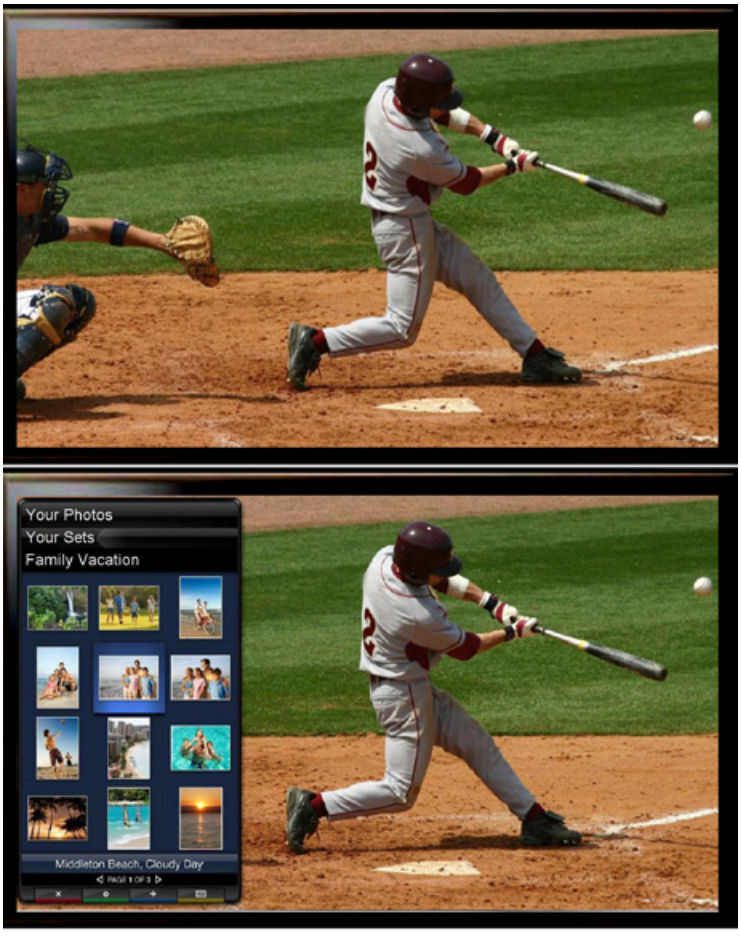
Some broadcasters have already worked on different hybrid solutions for different markets, for example MHP in Italy, MHEG-5, Connected TV, and YouView in the UK, HbbTV in France and Germany. The EBU's aim is to maximize the number of common elements across these platforms for a given region.

Common solutions encourage more competition between suppliers, lower costs and more choice for consumers. The more stakeholders use common solutions across the world, the greater the potential for the success of hybrid services.

Ensure that broadcasters' content is displayed unaltered and is easily accessible by all viewers

Content integrity

Broadcasters have a vital interest in ensuring that the content they provide is displayed on screen unaltered, without unauthorized and unwelcome overlays. Broadcasters need to ensure they do not detract from the viewing experience with hybrid services – but instead enhance it.
While it is technically possible to overlay broadband delivered content on top of broadcast content, this may make viewing the broadcast content more difficult, and lead to the exploitation of broadcasters' programmes and audiences by third parties.



Widget bars overlaying free-to-air content. These are likely to undermine the experience the broadcaster wants to provide with its content. (picture below)

Easy access

Broadcasting is a simple offer based on the viewer's ability to access TV content via a remote control. Hybrid services will greatly enrich this viewing experience, but should do so without jeopardizing the simplicity of the television offer. It should thus be easy for viewers to navigate back to the channel they were watching prior to engaging the hybrid services on their device.

On-line applications associated with the broadcaster's linear content should be easy to find and easily accessible for users watching the programme, e.g. by pressing the red button on the remote control. At the same time, it should be equally easy to go back to the TV channel the viewer was originally watching.

Provide a safe viewing environment, especially for minors

Protection of minors

Hybrid systems may provide access to Internet content that is not subject to the same strict regulations as broadcasting, or that is hardly regulated at all, apart from general rules on illicit content, defamation, etc.

In this new environment, viewers should be clearly informed about the content standards applicable to all services in order to keep children safe.

Finally, if broadcasters that provide direct access to online content, whether programme-related or not, ensure that content standards apply to on-line content, the same must apply to providers of hybrid portals.

Modernize copyright and address data protection

Modernize copyright clearance

Hybrid systems allow viewers to enjoy both traditional broadcasting and on-demand or time-delayed programming (e.g. catch-up TV) on the same screen. However, current copyright clearance rules are not adapted to a dynamic, developing media environment, as different rights-clearance systems apply to such programming. So broadcasters must also clear the on-demand rights for all materials in their own productions, even if they have already been used for linear broadcasting.

This takes a lot of time and effort, gives rise to considerable administrative costs, and is in many cases impossible to achieve (i.e. only a few seconds of background music not cleared can jeopardize the entire rights-clearance process of a programme). As a result, viewers cannot access their favourite programmes online.

It is therefore time for Europe to modernize copyright rules to embrace all audiovisual media services on all platforms. The EBU is proposing an extension of the rights clearance rules – which have worked well for traditional broadcasting services – to the online and on-demand world. For more information, please *www.ebu.ch/copyright.*

Protection from copyright infringement

With their increased flexibility, hybrid services and devices will need to protect broadcasters and other rightsholders against unlawful activities. Hybrid systems may in fact constitute new ways for those wishing to exploit viruses, malware, or copyright infringement.

As an industry, hybrid stakeholders should not facilitate the illegal distribution or sharing of copyright-protected content, and they should therefore implement certain minimum safeguards. Such safeguards however should not restrict the viewers' access to lawful hybrid content.

Data protection

Hybrid systems must ensure full transparency with regard to any collection, processing and use of personal data including any viewing, usage or search data and user profiling.

It is essential for viewers to know exactly what kind of data is collected via hybrid systems, by whom and for what purposes. Broadcasters also have a legitimate interest in not being excluded from access to usage data regarding their own services that may be collected by third parties.

The EBU

The **European Broadcasting Union** (EBU) is the leading association of national media organizations in the world, bringing together 85 national media organizations in 56 countries in and around Europe.
The EBU represents its Members and promotes the values and distinctiveness of public service media in Europe and around the world. The Eurovision and Euroradio networks deliver news, sports, events and music to EBU Members and other media organizations.
Services to Members range from legal advice, technical standardization and development to coproduction and exchange of quality European content.
For more information about the EBU: http://www.ebu.ch

Did you know?

- EBU Members reach a total audience of **650 million** people weekly.
- **75% of EU citizens** regularly watch EBU Members' main channels.
- EBU Members' invest in genres and programmes – documentaries, culture and social cohesion programmes – that would otherwise be underserved. Audiences turn to public service media for accurate and trustworthy news and information.
- Members invest **EUR 10 billion** annually in new European TV productions.
- EBU Members play a key role in bringing Europe into the digital age by adopting groundbreaking developments and being at the forefront of new media technologies from the take-up of DTT, to hybrid broadcast/broadband and television beyond HDTV.

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