

Analogue switch-off in Europe

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Analogue

Switch

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Throughout Europe, countries are preparing for an all-digital broadcast environment.

Traditionally, television services on the terrestrial platform have been delivered using analogue technology. However, digital terrestrial television (DTT) using the DVB-T standard makes it possible to deliver the same services in digital quality.

Digital services allow for clearer and sharper pictures and possibilities for widescreen format. They provide the necessary flexibility to introduce new services, such as increased programme choice, mobility (DVB-H) and high-definition (HDTV). Digitalisation also makes convergence with other digital environments, such as telecommunications, possible. And because of the more efficient use of the radio frequency spectrum in comparison with analogue, it is possible to offer more services.

But these benefits are only possible once the analogue platform is shut down and replaced by DTT. Already, DTT services have proven successful in parts of Europe with over 25 million receivers sold. The improved service offering on the DTT platform, in comparison with analogue, has encouraged viewers to voluntarily convert to DTT services. However, this conversion will soon become a necessity as governments prepare to switch-off analogue terrestrial television.

Off

in Europe

The decision to end analogue services has been made by national administrations but also encouraged by factors beyond country borders. In the Geneva 2006 (GE-06) Agreement regulating frequency usage in the VHF and UHF bands for Europe, Africa and parts of Asia, national administrations have agreed to stop their analogue services along their borders by 2015.

Given the different television markets within Europe, each country will formulate a unique timetable for analogue switch-off. Current proposals suggest that analogue switch-off will take place between 2008 and 2015 with most countries ending analogue terrestrial television around 2012. This date aligns well with the European Commission's recommendation that Member-States complete analogue switch-off by 2012.

Factors

To predict when a country will be ready for analogue switch-off, the present size of the terrestrial market and the penetration of DTT services must be considered.

Viewer dependency on the terrestrial platform varies across Europe, from 3% in Belgium to over 80% in Italy. Given that households relying on the analogue

terrestrial platform will need to find alternative means of accessing television after analogue switch-off, it can be expected that the time needed to convert will be greater in markets with a high proportion of terrestrial-only households.

In an open market, viewers ultimately determine the speed of DTT penetration. In countries that have launched DTT services, the appeal of the service offering (content) and the cost of the service (price of the set-top box / monthly subscription) have proven to be the most important factors influencing viewer adoption of DTT services.

While the market for DTT services is generally small in countries with few terrestrial households, an attractive offer and successful marketing can lead to DTT success and modest overall growth in the use of the terrestrial platform as has been the case in Germany.

Switch-off

In Europe, analogue switch-off has begun in Germany, Sweden and Switzerland while other countries, such as the United Kingdom, have undertaken detailed planning. Different approaches to analogue switch-off have been developed depending on the needs and size of the terrestrial markets.

Germany has taken a fast-paced approach to analogue switch-off. In most regions, the time between the launch of DTT services and the end of analogue services has varied between three to six months.

However, some regions have eliminated this period altogether with analogue switch-off taking place the same day as the launch of DTT services. Such an approach reduces the cost associated with the dual transmission of digital and analogue services (simulcast).



Like Germany, Sweden has also followed a regional approach to analogue switch-off. Although its DTT services have been available nationally since 1998, the analogue switch-off process began in September 2005 and is expected to be completed by February 2008 according to the timetable agreed upon by the government and broadcast community. The United Kingdom will follow a similar regional approach with its switch-off set to take place between 2008 and 2012.

Finland, on the other hand, is taking a national approach to analogue switch-off. On 31 August 2007, analogue services will end throughout the country to allow all viewers to benefit simultaneously from the advantages of digital switchover.

A bold approach was used in Switzerland, when two analogue channels were switched off in 2003, prior to the launch of DTT services. It was possible for Swiss broadcasters to do so given the low number of households relying on the terrestrial platform.

Implications for PSBs

In general, the terrestrial platform has been the leading television delivery platform for public service broadcasters (PSBs) for the past 50 years. The move from analogue to DTT services provides PSBs with opportunities to offer more and improved services while simultaneously enhancing their public service mission.

In many countries with DTT services available, governments have allocated a full frequency channel (multiplex) to PSBs to provide a variety of new television programme services. In Sweden, SVT has launched 5 services on the DTT platform, including a children's thematic service. The delivery of HDTV services is possible and may be necessary to compete effectively with cable and satellite platforms offering these services.



But PSBs also face increased competition in an all-digital environment. New broadcasters may enter the terrestrial market or existing broadcasters may provide new services. This, in turn, can lead to a dilution of market share and a reduction in advertising revenue.

Switching off analogue services will allow broadcasters to save the costs associated with analogue transmissions. However, these savings will be offset by the cost of new digital transmissions.

PSBs will want to ensure that viewers on the terrestrial platform continue to access their services. It is for this reason that they will want to work closely with the government, other broadcasters and network operators to help ensure that analogue switch-off is handled carefully.

Hurdles ahead

Analogue switch-off is not a simple process. A poorly managed process can have dire ramifications and serve as a liability to both the government and broadcasters, should some households be left without television services. It is for this reason that careful planning is necessary to ensure that possible negative consequences are avoided.

Some viewers may resent having to buy a digital converter in order to continue receiving television services, especially if they feel satisfied with the existing analogue platform. For some, especially the vulnerable, social assistance will be necessary.

The size of the conversion task should not be underestimated. Considering that the typical household has several TV sets, the task of converting all analogue equipment becomes more daunting. In the United Kingdom, while 70% of households have access to digital services on at least one television, only 20% of households have fully converted all of their TVs.

As it may be necessary to replace existing masts at some transmission sites or install masts at new locations, any delays in obtaining planning permissions could jeopardise the analogue switch-off timetable. Similarly, bad weather could prevent the installation of new equipment and also cause delays.

Achieving success

Analogue switch-off will require the support and active participation of all stakeholders in terrestrial broadcasting. Working together will help minimize disruption for viewers. Already, many countries have set up organizations to coordinate analogue switch-off with all stakeholders represented.

Leadership is required to support and affirm when and how analogue switch-off will take place in order to provide the necessary credibility to the process and help avoid unnecessary delays.

Viewers will need to have access to adequate information in a timely fashion. They will need to be informed about the launch of DTT services, the availability of other television platforms and the date when analogue terrestrial television will end.

Adequate funding will help ensure maximum preparedness. It can be used for communication and marketing campaigns as well as the purchase of set-top boxes for vulnerable segments of the population.

Preparedness and careful planning can dilute some of the negative consequences of analogue switch-off. The process may be difficult at times, however, it offers tremendous opportunity at its conclusion.

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