



City Research Online

City St George's, University of London

Citation: Iosifidis, P. (2005). Digital switchover and the role of the new BBC services in digital television take-up. *Convergence*, 11(3), pp. 57-74. doi: 10.1177/135485650501100305

This is the unspecified version of the paper.

This version of the publication may differ from the final published version. To cite this item please consult the publisher's version.

Permanent repository link: <https://city-ref-test.eprints-hosting.org/id/eprint/1858/>

Link to published version: <https://doi.org/10.1177/135485650501100305>

Copyright and Reuse: Copyright and Moral Rights remain with the author(s) and/or copyright holders. Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge, unless otherwise indicated, provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way. For full details of reuse please refer to [City Research Online policy](#).

Title of paper: 'Digital Switchover and the Role of BBC Services in Digital TV Take-up'

Author: Petros Iosifidis, City University London

Published in: *Convergence – The International Journal of Research into New Media Technologies* 11(3): 57-74 (published by Sage; ISSN: 1354-88565).

Introduction

In September 2001, Tessa Jowell, Secretary of State for Culture, Media and Sport, gave conditional approval to the BBC's proposals for the re-launch of its digital services, *BBC Knowledge* and *BBC Choice*, as *Cbeebies* (a service for children under 6), *CBBC* (another service for children aged 6-13), and *BBC 4* (aiming at 'anyone interested in culture, arts and ideas'). A year later conditional approval was also given to a further proposed new digital television service for young adults, dubbed *BBC 3*. Issues taken into account in approving the services were, among others, the compatibility of each new service with the BBC's primary public service role, and the BBC's role in promoting digital take-up leading to switchover. It was considered that the new services will provide additional choice and that they will contribute to the general promotion of digital broadcasting. In May 2004 an independent reviewer was appointed to assess whether the BBC has fulfilled the above obligations. The review, led by Professor Barwise, said that the new services have all largely met their remits and that their market impact is limited relative to their public value. However, it concluded that because of their low viewing figures, *BBC 3* and *BBC 4* are providing poor value for money as well as doing little to connect BBC with viewers or drive digital take-up.

The purpose of this paper is neither to consider the performance of the new BBC services, nor to assess the level of distinctiveness of these services in the multi-media channel market. Rather, it aims to discuss the process of digital switchover and assess the role the BBC services have played in driving overall digital take-up and therefore bringing forward the likely date of analogue switch-off. The first part examines the advantages and drawbacks of digital switchover, and identifies a number of challenges and policy dilemmas of making switchover an achievable objective. Part two presents an overview of current developments of digital television in the UK and outlines various measures proposed for encouraging digital take-up. The third and final part deals with the contribution of the new BBC services to digital take-up, considers free terrestrial platform *Freeview*'s likely effect on commercial rivals, and assesses the effectiveness of the proposed free satellite platform *FreeSat* to accelerate digital adoption.

The Switchover Process

Following the introduction of digital broadcasting, 'switchover' is defined as the progressive migration of households, from analogue-only reception to digital reception. 'Analogue turn-off' or 'switch-off' refers to the termination of analogue broadcasting, which is considered to be possible when most households are equipped to receive digital signals (BIPE, 2002, p. 2). Digital switchover is largely seen as an inevitable result of technological progress. It is an unpopular policy that people often see as coercive. This is partly because the national governments' rationale and motives for switchover are not entirely understood and trusted, and partly because people think analogue television will be 'taken away' and therefore they will have to

incur costs to be able to continue to watch television (Klein, Karger and Sinclair, 2004, pp. 8, 14).

In fact, large parts of the population see little or no reason to adopt digital television (DTV). For some DTV is too confusing or just too difficult to use. For others, converting their TV sets seems to incur a significant financial investment which they are not prepared to take. There are also millions of viewers who are simply satisfied with the programming available on the analogue channels and who do not see the merits of the multi-channel era. In many European Union (EU) countries the established analogue terrestrial channels still get the lion's share of television viewing. For example, despite the entry of a number of pay-TV networks, public television channels in Italy, France, Germany and the UK still hold audience shares close to a very respectable 40 per cent. Also traditional free-to-air commercial broadcasters attract large audiences. In spite of inevitable losses (for example, in the period between 1993 and 2002 the British ITV lost an audience share of 15.9 per cent, followed by the French TF1 which lost 8.4 per cent), these private broadcasters still get shares of over 30 per cent each in their respective highly competitive and fragmented broadcasting markets (Screen Digest, 2004).

It then comes as no surprise that in 2003 the European digital television landscape has not reached stability. In fact, the availability of DTV remained partial and penetration rates differed substantially among EU Member States. Whereas the Scandinavian region had quite successfully developed DTV, with penetration rates in Sweden and Denmark both close to 30 per cent in 2003, in certain countries, particularly the smaller and Mediterranean markets, DTV has not secured a significant share of the

television market (Iosifidis, Steemers and Wheeler, 2005, p. 115). In the UK, arguably the most advanced country in terms of DTV penetration,ⁱ about half of households have not yet decided to take-up DTV services (see below). Converting these households will be a huge marketing and communications task.

However, completing the switch to digital will bring significant benefits both to consumers and broadcasters. National economies as a whole are also expected to benefit. More specifically digital broadcasting brings (BIPE, 2002; Jowell, 2004):

- ♦ Increased choice and quality for viewers (as there will be more channels and the opportunity to provide a better image, including wide-screen aspect ratio, high definition and sound quality);
- ♦ Lower transaction costs or the ability to transmit more channels or services for the same cost. Broadcasters will no longer have to incur the costs of transmitting signals in both formats, releasing sources for investment in programming and other services for consumers;
- ♦ Better efficiency in spectrum use (as more data can be transmitted within the same bandwidth). Spectrum will be released to allow the development of more television and other services for consumers. Digital terrestrial television signals are also expected to reach the population who live in areas that cannot currently receive them because of spectrum limitations; and
- ♦ The ability to transmit associated data allowing for enhanced television or fully interactive applications when associated with a return-path facility.

Alongside these tremendous economic and social benefits, the analogue switch-off entails drawbacks, notably it may result in social exclusion in so far as DTV is unavailable to some parts of the population. The British government's objective, first announced in September 1999, is to achieve full switchover from analogue to digital only when the following tests are satisfied:

- ♦ To ensure that everyone who can currently get the main public service broadcasting channels can receive them on digital systems;
- ♦ To ensure that switching over is affordable for the vast majority; and
- ♦ To ensure that 95 per cent of consumers have access to digital equipment (see Digital Television Action Planⁱⁱ, 2001).

The satisfaction of the above main criteria of availability, affordability and accessibility were until recently considered unrealistic. The digital switchover policy was conceived at the end of the 1990s, in the middle of the dotcom euphoria. The take-up of DTV services was then relatively high, but following the collapse of digital terrestrial pay-TV platform *ITV Digital* in 2002 and the financial difficulties the cable operators were facing, the initial high rate was not maintained as digital television failed to meet some customers' expectations. In particular, in April 2002 *ITV Digital*, jointly owned by commercial broadcasters Carlton Communications and Granada Media Group,ⁱⁱⁱ filed for bankruptcy. This financial crisis was mainly caused because the consortium failed to attract viewers. It was launched with a target of winning 2 million viewers by 2003, but it only signed 1.23 million before its closure. Many of the customers left the company, resulting in a 25 percent churn rate every financial year.

The problem was that ITV Digital offered limited number of channels compared to rival BSkyB, most of them with unattractive content. The service was launched with a handful of its own channels, a few old favourites such as UK Gold, and a smattering of BSkyB channels. BSkyB had, with Carlton and Granada, been one of the service's original backers, but was forced to pull out over competition concerns. ITV Digital found itself competing in the same market with BSkyB which had already established a large subscriber base by giving out set-top boxes. The pay satellite broadcaster continued its successful campaign of winning customers with dropping to zero charges for decoders and waiving connection charges and ITV Digital was forced to emulate this strategy. But BSkyB had a history of profits and an existing subscriber base to lean on.

In an effort to sign up more subscribers, in 2001 ITV Digital completed a three-year £315 million deal to show Nationwide League (First Division) games, the largest broadcasting contract in the League's history. No doubt the intention was to compete with BSkyB, which had previously acquired the rights to show live Premiership matches. The problem was that ITV Digital attempted to copy BSkyB's strategy by using less appealing football matches (Nationwide is a lower league), attracting fewer football fans and viewers. While many regarded BSkyB's live Premiership rights as its killer application, ITV Digital's acquisition of lower division Nationwide League games and overbidding for them revealed a poor management policy and eventually led to its collapse.

Following the break up of ITV Digital, Secretary of State for Culture, Media and Sport Tessa Jowell defended the government's decision not to bail out the consortium by saying that 'this is a failure of a company, not a technology' (Neal, 2002). However, in addition to commercial failure, the closure of the digital terrestrial broadcaster was also a policy failure as the UK government did not affect appropriate regulatory controls. Its handling of ITV Digital collapse was poor. The government's 'platform neutral' approach (i.e. encouraging development of all three platforms – terrestrial, cable, satellite) in effect gave the green light to BSkyB to continue monopolising the market for digital televisual offerings. The lack of competition between broadcasters made the government's vision of a digital Britain look like a pipe dream, rather than a reality. At the time, the vision seemed possible only by extending Murdoch's BSkyB's service. Combined with public apathy concerning the merits of digital television, former Cultural Secretary Chris Smith's time limit for the final introduction of the 'digital revolution' in 2006 sounded unrealistic.

The problem was exacerbated by the financial trouble of the main cable operators NTL and Telewest, which had expanded into digital television and in 2002 had 1.25 and 0.73 million digital subscribers respectively. More specifically, in May 2002 NTL filed for bankruptcy protection because of a £16 billion debt,^{iv} while Telewest was under pressure to restructure in order to cover its own £5 billion debt burden. With the collapse of *ITV Digital* and the financial problems of the UK's largest cable television providers, one platform emerged as a clear winner – satellite. Murdoch-controlled BSkyB confirmed its dominance over DTV, standing as the leading pay television operator with 6.6 million subscribers in September 2003 (just under 7 million in the first quarter of 2004). But even the steady growth of the pay satellite television

platform could not secure a wide range of customers. A new strategy was needed to target more viewers.

Encouraging uptake

Free-to-air DTV

Until 2002 the economic model for DTV had been largely based on pay television services offered by private consortia. These consortia have acquired exclusive popular programming (particularly sports and film rights) and require subscribers to buy a decoder (and, in the case of satellite, a dish) to access it. While pay television has driven the initial uptake of DTV in Europe, saturation of the pay television market in terms of penetration may be occurring. Already the market may have arrived at a situation in which those consumers prepared to sign-up to digital pay television services have already done so. In the advanced UK digital pay television market, about 37 per cent of homes had taken up digital television by 2002, leaving more than 60 per cent of homes unconvinced. Attention was focused on the free-to-view market and with the launch of the BBC-led *Freeview* service in September 2002, digital terrestrial television (DTT) in the UK has turned into a free-to-air only platform. As will be shown below, the re-direction of DTT towards a primarily free-to-air system has proved compelling to many households which are negative about pay television. Evidence of this is that from the third quarter of 2002 (the time *Freeview* was launched) until the first quarter of 2004 DTT showed a strong increase in share of the digital television market from 10.6 per cent to 26.5 per cent, whereas over the same period digital cable saw a slight decline from 21.1 per cent to 18.4 per cent, and digital satellite showed a drop from 68.1 per cent to 55 per cent (Ofcom, 2004b).

The popularity of free-to-air digital service *Freeview* has contributed in DTV take-up from previously sceptical groups (affluent, older customers) and helped in rebuilding public confidence in DTV (see Quest survey below). As it is a free-to-view platform, it helped to combat the common misconception that DTV is necessarily pay-TV. Since the launch of *Freeview*, DTV has become considerably more affordable as competition between manufacturers and retailers of *Freeview* receivers resulted in significant price reductions (in mid-2004 digital adapters were sold for about £50 to £120).

Subsidising set-top boxes

BSkyB has also played a significant role in making DTV more affordable as it continues to subsidise digital set-top boxes, offering them for free to new subscribers. Cable operators also offer incentives to convert to digital as customers can access telephony, DTV services and broadband Internet with a single subscription. In addition to the direct, spontaneous actions from market players, a number of other options have been put forward to make DTV more affordable. James Purnell (2001, p. 3), the Prime Minister's policy adviser on Culture, Media, Sport and the Knowledge Economy from 1997 to 2000, argued that one such measure would be for the government to help subsidise the cost of set-top boxes.

However, as digital conversion is occurring on a voluntary basis, any government plans to subsidise digital take-up might cannibalise the market momentum for voluntary purchase of DTV. But the government (and the broadcasting industry) will

probably have to pay to convert the households which are refusing to buy any DTV services. According to Klein, Karger and Sinclair (p. 14), in the UK these households account for 5 per cent of the total. As Wells (2003) argued, nobody knows how much this will cost, and policy makers dare not voice the issue publicly for fear of dissuading people from paying even *Freeview*'s relatively moderate switchover costs.

The Setting up of a Switchover Fund?

A BIPE study for the European Commission recommended the setting up of a so-called 'Switchover Fund', which would consolidate the macro-economic transfers (BIPE, p. 11). The funds raised from some of the players that will ultimately benefit from the analogue turn-off (terrestrial broadcasting players, other spectrum users, governments themselves) would be used to finance some of the measures that will help accelerate the process. Compared with financial transfers through the general public budget, a dedicated Fund would provide some specific advantages: higher guarantees of transparency, platform neutrality and proportionality, consensual private/public decision-making (ibid).

Fixing a date for the Switchover?

As mentioned elsewhere, current conversion to digital broadcasting is occurring on a voluntary basis and is being driven by the perceived benefits of digitisation. Households' plans for converting their televisions are voluntary because they do not take a definite switchover timetable into account. A few EU countries have committed to a fixed date for switchover,^v and in the UK the government had until recently given

a vague timetable at between 2006-2010. However, research undertaken in the UK shows that the announcement of a switchover timetable will trigger many people who would otherwise not have converted any televisions before 2010 to make a plan (Klein, Karger and Sinclair, p. 3). The study goes on to show that without a timetable for switchover, uptake is likely to plateau at between 70 and 80 percent of households. If switchover is announced, then the vast majority of households will convert at least one television by the date of switchover (p. 11). Those people who would only convert 'if pushed' to do so by the impending switch-off of analogue television will tend to leave conversion until the last possible year. However, the research concludes that about 5 per cent are unlikely to convert because of the costs and complexity of DTV (p. 14).

A report from the new UK regulator Ofcom also argues that digital switchover is achievable provided that there is a greater certainty over the timing of switchover. An announcement of a timetable would significantly extend digital penetration in the UK and would help allow digital switchover to be achieved between 2007 and the end of 2010 (Ofcom, 2004a). Following Ofcom's suggestion the government finally gave the year 2012 as the likely date for digital switchover, a little longer than originally scheduled. However, consumers would like to see some guarantees over the affordability and availability of DTV before any commitment on the switch-off is fixed. As Malkani (2004, p. 11) has put it, consumer groups are lobbying against the firming up of the switchover target until the coverage criteria are met, whereas industry bodies are seeking firmer commitments on the switchover target before investing further in the infrastructure for DTV coverage.

Active management

According to Ofcom (2004a), active management is required to complete switchover effectively. For this purpose the regulator suggests the setting up of a body, dubbed ‘SwitchCo’, which would be responsible for ensuring switchover by the set date. This idea of a properly staffed body with a significant marketing budget, to manage the considerable task of switchover has also been supported by the BBC. The Corporation believes that this body must be in place before the switchover process starts and should have two, consecutive objectives (BBC, 2004, pp. 2, 5):

- Driving digital take-up of primary sets; and
- Driving conversion of secondary sets and preparing viewers for switchover.

The achievement of the latter objective in particular will require a fundamentally different approach and marketing messages, for many viewers who have already adopted digital for their primary TV sets do not equate this with consent for losing the analogue services from their secondary sets. Perhaps the key to encourage conversion of secondary sets would be to concentrate on the promoting of free-to-air digital television services. Ofcom (2004b: 9) estimates that 15 per cent of sales of *Freeview* adapters over the last quarter of 2003 and the first quarter of 2004 were bought for use on second sets by people who already have digital (either *Freeview* or *Sky* or cable) on their main set.

In sum, both the government and industry must work together if switchover is to be achieved with the set timeframe (up to 2012). If left entirely to the market, the British

Broadcasting Corporation predicts that it will take until 2013 for 95 per cent of households to have DTV (BBC, p. 1). Market players are aware of the benefits associated with analogue turn-off for as spectrum users, television broadcasters would be interested in using released spectrum to support services and programmes. However, if left to the market the switch to digital is likely to happen at a moderate speed, which will be determined by transmission and switching costs (like the upgrade of networks to support digital broadcasting; the equipment of every household with digital-compliant receivers) (BIPE, p. 6).

However, switching-off the analogue frequency depends on the level of DTV penetration. The examination of DTV adoption in the UK will provide a clearer picture of how realistic the government target is.

Digital Television Adoption in the UK

The April 2004 BBC report, *Progress towards achieving digital switchover*, describes progress so far as ‘astonishing’ for since autumn 2003 UK DTV penetration passed the psychologically important milestone of 50 per cent of households. As stated, this ‘puts the UK in an enviable position’ (BBC, p. 1). Indeed, by the end of 2003 about half of the UK’s 24.9 million homes had access to digital multi-channel television – either via satellite, cable or terrestrial means, notably *Freeview*.^{vi} However, the latest updates examining figures published by operators and providers, combined with Ofcom’s own research on DTV reveal that DTV penetration continued to increase in the first quarter of 2004. In particular, by 31 March 2004, DTV penetration was estimated to have increased to 53 per cent of UK households, up from 50 per cent

from the previous quarter. This represents an increase of 2.8 per cent, with an additional 710,000 households adopting DTV during the quarter, bringing the total number of households to more than 13 million (Ofcom, 2004b).

As Table 1 shows, the digital satellite consortium BSkyB is the market leader and continued its consistent growth, adding 66,000 paying subscribers over the quarter, to bring the total number of UK subscribers to just under 7 million subscribers. The total number of subscribers to digital cable television accounted for around 2.4 million (3.3 million if analogue cable is also considered). Digital terrestrial platform *Freeview* uptake has increased by 18.6 per cent on the previous quarter, with household numbers estimated to have grown to around 3.5 million (544,000 added during the quarter).

BSkyB's share of digital homes was 53.2 per cent (a drop from 55.8 per cent in Q4 2003), while cable also saw a slight decline in share of DTV homes in Q1 2004, now at 18.4 per cent from 18.9 per cent in Q3 2003. However, digital terrestrial television showed the strongest increase in share of the DTV market from 23.7 per cent in Q4 2003 to 26.5 per cent at the end of Q1 2004. Therefore, although satellite has so far been the undisputable winner, it is already evident that digital terrestrial will dominate in the future. The figures will be a boost to the BBC's *Freeview*, which has been in the market for less than two years and already makes BSkyB's biggest competitor by giving consumers access to up to 26 TV channels and 21 radio stations for a price of a set-top box (£50-120).

Table 1: Digital Television Uptake

Platform Figures for Q1 2004 & Q4 2003

PLATFORMS	Q1, 2004	Q4, 2003	QUARTERLY GROWTH RATE	SHARE (Q1, 2004)	SHARE (Q4, 2003)
DST (Sky)	6,956,000	6,893,000	0.9%	53.2%	55.8%
DCT (NTL, Telewest)	2,408,530	2,324,857	3.6%	18.4%	18.9%
DTT (Freeview)	3,929,200	3,287,000	19.5%	26.5%	23.7%
ADSL	8,664	8,887	-2.6%	0.1%	0.1%

Source: Ofcom, 2004b

Key: DST = Digital Satellite Television; DCT = Digital Cable Television; DTT = Digital terrestrial Television; ADSL = Asymmetric Digital Subscriber Lines

The BBC's Role in Digital Take-up

The BBC has general obligations to promote DTV, notably, to develop the market for consumers who want DTV but do not want to subscribe to pay-TV services (Starks, 2001). It is required to provide an attractive free-to-view package, appealing enough to motivate consumers to invest in the necessary receivers. For this purpose it has proposed and obtained approval for a new set of digital services, including *BBC 3*, *BBC 4*, *CBBC*, *Cbeebies*, alongside *BBC News 24* and *BBC Parliament*. It is also required to offer affordable free-to-view receivers which consumers can buy with no subscription strings attached. As already mentioned, in mid-2004 digital terrestrial television set-top boxes were sold from as little as £50.

In addition, the BBC is committed to promoting and marketing its digital services and catering for consumer awareness and information over digital services. According to a 2004 BBC report, the Corporation's investment in its digital channels and promotions for them 'has played a strong role in exciting consumer interest in digital, tackling consumer confusion and assuaging fears', and that the continuing consumer enthusiasm for DTV during 2003 'makes achieving UK-wide digital switchover with the Government's timetable an achievable objective' (BBC, p. 1). However, the report also acknowledges that, despite the high profile digital marketing to date, principally from BSkyB and the BBC's digital campaigns, many viewers remain confused about digital and unwilling or unable to migrate to DTV (p. 6). Converting these households will require more efforts, particularly towards raising customer awareness and knowledge about the likely benefits of DTV.

Research undertaken by Oliver & Ohlbaum (2004) confirms that the new BBC services have contributed greatly to overall digital take-up, which has increased by 2.1 million households since *BBC 4*, *CBBC* and *Cbeebies* were launched at the beginning of 2002, and 1.1 million since *BBC 3* launched in February 2003. While pay-TV take up has experienced some upheavals (particularly with the collapse of *ITV Digital*, but also with the financial problems of the two main cable operators NTL and Telewest) over the period, free-to-view DTV penetration has increased from 0.5 million households to about 3 million. The vast majority of these free-to-view households receive their services through *Freeview*, the BBC-led free-to-air digital terrestrial platform that was launched in late 2002 (see Table 1), while a minority (about 200,000) are ex-BSkyB subscribers who continue to use their decoders for viewing channels.

The BBC services have been the lead driver of *Freeview* penetration. The extra BBC services available through *Freeview* and digital satellite and cable, have played an important part in the take-up of free-to-air digital reception and the rapid adoption of *Freeview*. The BBC services make up over one quarter of the extra channels on *Freeview* and the presence of the new BBC digital services (the four being studied in here, plus 24 hour news and parliamentary coverage) are an important reason for consumer adoption of free-to-air digital services (Oliver & Ohlbaum, p. 48). This is reinforced by the fact that the extra BBC services gain about 5.5 per cent of *Freeview* household viewing. In particular, BARB figures show that in 2003 in *Freeview* households only the combined viewing share of *BBC 3*, *BBC 4*, *CBBC* and *Cbeebies* was 4.9 per cent, whereas the combined share of *BBC News 24* and *BBC Parliament* was 0.6 per cent, making a total of 5.5 per cent. However, the overall share of the new BBC services in all multi-channel homes was lower at 2.7 per cent.

Perhaps more importantly, evidence suggests that *Freeview* penetration has been largely additional to, rather than a substitute for, digital pay TV take-up (Oliver & Ohlbaum, p. 17). Those considering getting subscription television services continued to do so, as evidenced by the rise of pay-TV (both cable and satellite) following the launch of *Freeview*, albeit at a slower rate than before (see Table 1). Without doubt, the healthy growth of *Freeview* reinforced competition between different platforms and established free-to-air digital reception as a viable alternative to pay-TV services. This may have reduced the share and reach of other digital platforms more rapidly than otherwise might have been the case. However, the relatively slow growth rate of subscription services may also be explained by the closure of the high profile digital

terrestrial pay service *ITV Digital* in April 2002, as well as the stagnation and financial difficulties that the two main cable operators NTL and Telewest were facing at the time. It may also be explained by the notion that pay-TV has probably reached a saturation point as many of those willing to buy subscription services (most likely football fans) have already done so.

Analysis of the demographics of *Freeview* subscribers reinforces the notion that free-to-air digital customers are largely additional to pay-TV subscribers. A Quest survey in March 2003 gave demographic data on the types of households that were using each platform. It found that *Freeview* had a different profile to other platforms. In particular, the findings suggest that many of *Freeview*'s customers are affluent, older people who have no interest in purchasing satellite or cable pay-TV services. Many of *Freeview* homes comprise of an age group of over 45, compared to satellite subscription television take up which is heavily skewed to the under 45s. The fact that the free-to-air package includes far less available channels made no difference to this group who have no interest in multi-channel TV (Quest Survey, 2003).

In sum, *Freeview* appeals to those who reject satellite and cable pay-TV services and to whom, as a 2004 BBC report states (p.10), 'a terrestrial free-to-air service is a welcome bonus'. It follows that the broad platform impact of BBC services on different types of commercial channels and networks was modest. The evidence presented here suggests that the growth of the new BBC services has not achieved at the expense of pay-TV penetration. On the contrary, the new BBC services have probably made a small contribution to the take-up of digital pay-TV platforms by enhancing the overall offer. They may have also contributed to the financial viability

of some new thematic channels, by providing an alternative route to homes (i.e. free-to-view digital distribution in addition to carriage in the BSkyB or cable packages). Overall, the evidence suggests that the new BBC services have made a significant contribution to bringing forward the likely idea of analogue switch-off and the release of large amounts of spectrum' (Oliver & Ohlbaum, p. 9).

FreeSat

Alongside the BBC's general obligations to promote DTV, the regulator Ofcom argues that the UK government, as part of the review of the BBC's Royal Charter, should add specific obligations to the current general ones. They should include obligations on rolling-out digital transmission nationwide, providing public information, providing on-air marketing of DTV on a platform-neutral basis, and continuing to provide its channels on the free-to-view satellite platform (Ofcom, 2004a).

Regarding this last point, an attractive, viewer-friendly free-to-air satellite option available to everybody without having to pay a subscription would contribute to universal digital coverage and would certainly push forward the withdrawal of analogue services. In fact, in its progress report submitted to the government, the BBC noted that it was planning to start a free digital satellite service. Its launch, according to the corporation, would play a key part of the move to analogue television's switch-off (BBC, p. 7). This is true because, unlike digital terrestrial television, satellite signals are technically available to every UK household. At switch-off, only an estimated 75 per cent of the population will have access to digital terrestrial

television, well short of the 95 per cent target set by the government. The reason for the gap is the shortcoming of the digital terrestrial signal, and once the network reaches a certain coverage there are diminishing returns from adding new transmitters. Getting digital terrestrial television to small villages is not economically viable (Robinson, 2004, p. 4). A digital satellite platform with its wide reach and universality in which services are aired unencrypted would certainly contribute to the achievement of the government's switchover timetable.

In early June 2004 BSkyB also announced plans to launch a subscription-free satellite service by the end of the year, a move that deepens its involvement with free-to-view services (the satellite operator is also a partner in *Freeview*). The development basically pre-empts the April 2004 announcement from the BBC that it was planning to start a satellite service. The new digital proposition from BSkyB, dubbed *FreeSat*, will enable customers to receive about 200 television and radio channels for a one-off fee of £150 that will include a satellite dish, a set-top box and installation (see Table 2). The launch of *FreeSat* seems to be a response to the runaway success of *Freeview* and can perhaps be seen as a defensive move given the success of the digital terrestrial package (Shah, 2004). The strategy is expected to enable BSkyB to target a wider range of potential customers, notably those who do not wish to pay subscriptions, but either cannot receive *Freeview* (rural UK households), or are not satisfied with the limited channels available on it (just 26 television and 21 radio channels).

The news is part of an evolving strategy being formulated under the new chief executive of BSkyB, James Murdoch, to target a wider range of potential customers

(ibid). The *FreeSat* announcement was welcomed by both the media regulator, Ofcom, which sees it as an important step to achieving a fully digital UK, and the BBC, as it provides another route to all the BBC's digital services without subscription.

Table 2: BSkyB's Free-to-air Satellite Package

115 television channels
81 radio channels
13 interactive services
All BBC digital services
All other terrestrial channels
Sky News
Other include the God Channel, the Wrestling Channel, the Horror Channel

Source: BSkyB; Reuters

Critic on BBC's Digital Services

A criticism often put forward regarding the new BBC services is that only a minority of viewers enjoy the full benefits of all BBC digital channels, whereas everybody pays the licence fee. As already noted, at the end of 2003 the four BBC services had a share of about 2.7 per cent of all day multi-channel viewing. However, this has increased compared with 1.9 per cent for the *BBC Choice* and *BBC Knowledge* services that predated the BBC's new digital strategy. Overall the BBC services have gained 0.8 per cent of multi-channel share since their launch (BARB; Oliver & Ohlbaum analysis, p. 3).

Despite this moderate increase in viewing shares, there is a widespread perception that the BBC is spending disproportionate amounts of money on channels to which few people have access. In fact, in 2003 the BBC spent £271 million on its digital channels, which represented about 9 per cent of its total budget of £2.5 billion. Professor Barwise, responsible for the Independent Review of the BBC's Digital Television Services, concluded that 'although the BBC has made a huge contribution to digital take-up through the success of Freeview, the four services' contribution to this success has been small relative to their combine programme budget of £271 million in 2003' (Independent Review of the BBC's Digital Services, 2004, p. 6). The review goes on 'the role of the BBC digital services in the take-up of digital pay TV has been minimal. The BBC should allocate resources on free-to-air DTV programmes for all age groups, but, if anything, more for the over-35s than for the under-35s. The BBC has weighted its resource allocation precisely the other way' (ibid).

Critics' concerns date back in the early 2000s when the corporation announced the portfolio of BBC services backed by an unprecedented 30 per cent increase in spending on programmes and services over the three-year period 2001-2004. The then BBC Director-General Greg Dyke expressed concerns about 'the danger of the emergence of a digital underclass, a world where some are information rich while others are information poor' and underlined the importance in the future of universal access, underpinned by the licence fee (Dyke, 2000). Universality has been one of the core principles of public service broadcasting in the past and should remain so in the digital age, but so far the new BBC services have not been widely available. This has led influential people, such as Barry Cox, visiting professor of broadcast media at

Oxford University, to argue that the debate over renewing the BBC Charter in 2006 should see the ending of the BBC's privileged position as the sole recipient of the licence fee (Cox, 2003). Cox's critic has two fronts: first, that there is little justification for a compulsory licence fee in an era of an abundance of channels; and second, that few BBC programmes have a truly distinctive cultural and social value. Along similar lines, Labor politician and member of a parliamentary committee conducting the debate leading up to the 1996 BBC Charter renewal, argued a decade earlier that the BBC has become 'too commercial' and that it spends too much money on online and new services (Heilemann, 1994). Back in 1985 the Peacock Committee, set up by the Thatcher government to look at alternatives to the licence fee recommended that the BBC should rely to a great extent on voluntary subscription (Peacock Report, 1985).

It can be seen that the unique method of funding the BBC has always been subject to suggestions for radical reformation, but recently these have taken a new dimension to include BBC's digital expansion. Although the licence fee may be viewed as a regressive tax, it is a guarantee that the corporation will not be compelled by commercial pressures to cater to the lowest common denominator. This is particularly true in the digital era, which is producing a sea change in what the average household can watch on television. In this environment, it is normal for the BBC to lose a growing number of its once loyal viewers. It should also build on the strategy of launching new services to meet increasing audience fragmentation and fulfil its public service remit. However, the BBC cannot afford to have digital ambitions with stagnant resources. It is true that the 1999 licence fee settlement gave the BBC a RPI + 1.5% increase in the licence fee per year. This will have delivered an additional £1

billion in revenue by the end of 2006. But the 1999 licence fee settlement was set at a level which could facilitate the development of new digital services only if complemented by significant financial self-help within the organisation. As Wells (2004) reminds us, critics forget that in 1999 the government refused to accept a recommendation from a commission led by the economist Gavin Davis – later the BBC chairman – that multi-channel viewers should pay a £5 licence fee supplement to fund the digital expansion. By rejecting the digital surcharge, then culture secretary Chris Smith asked the BBC to generate the extra money through efficiency savings, cutting bureaucracy, being more commercially competitive, and being more accountable over spending.

Distinguishing between output offered by public and pay-TV consortia

Regardless of audience share, a distinction should perhaps be drawn between services offered by public channels, required by their statute to address a wide range of public interest criteria, and those provided by private pay television consortia, driven by audience ratings. The BBC offerings entail more innovative and distinctive programmes than those supplied by rivals. At the risk of simplifying what is a complex issue, a number of key things emerge from comparing the programming offered by commercial pay broadcasters with that of the BBC. First, the publicly-funded BBC has invested more on public service programming genres, such as news in peak, regional news, current affairs and other factual programming, original UK-made drama and comedy, children's shows, science, arts, religion and other minority programming. Second, the BBC provides a balanced TV diet of trusted and familiar programming with innovative, quality, original and high-risk output.

The assessment carried out by Oliver & Ohlbaum demonstrates the BBC's strong commitment to investing on original high quality, national and regional UK programming on its new DTV channels, which reflects and strengthens cultural identity. The study shows that each BBC television service is offering something distinctive to UK multi-channel audiences when compared with other thematic channels – and often to a distinct demographic. For example, the absence of advertising and imported animation on the BBC children's services is likely to have been attractive to families with children. This is evidenced by the relatively high levels of consumption of the *CBBC* and *Cbeebies* children channels, which had the highest absolute impact. The study goes on to show that *Cbeebies* utilises far less animation and shows more educational programming than its nearest rivals. *CBBC*'s schedule has far more UK originated factual and current affairs programming than any near rival, and also more educational programming than its rivals except *Discovery Kids* whose educational output though is mostly non-UK originated.

In contrast to the channels addressed to children, the study found that the proportionate impact on digital adoption from *BBC 3* was relatively low as digital penetration in 2003 was already high among the 25 to 34 year old age group. Still, in terms of content, *BBC 3* has greater amounts of news, current affairs and factual programming than *E4*, *Sky One*, *ITV 2* and *Paramount*, and a greater variety of programme types and genres across the whole schedule. The vast majority of its schedule is made up of UK originated material. Finally, according to the Oliver & Ohlbaum analysis, *BBC 4* has a far greater range of programme genres and types than any factual, arts or performance focused thematic channel. In sum, the BBC digital

channels content is qualitatively different to that offered by private pay television operators.

This is not to say that pay television consortia cannot provide programmes that meet public service purposes. In addition to the *Discovery Kids* service mentioned above, other channels like *Sky News*, *Arts World* and the *History Channel* deliver value through stimulating learning and engagement in society. However, these examples are the exemption rather than the rule. Even in today's multi-channel digital world, there is under provision of quality, original, innovative and hence high-risk programming, as pay operators often adopt a risk-averse approach in reducing innovation and marginalizing the specialist content that audiences tend to value less.

On a more general note though, the current delivery of public channels such as the BBC does not always meet the defined public service criteria. A May 2004 Ofcom review of public service broadcasting found that taken as a whole the UK terrestrial free-to-air broadcasters, including the BBC, have *partially but not completely* met the collective remits as set out in the 2003 Communications Act. In particular, the analysis identified the following weaknesses (Ofcom, 2004c):

- A risk-averse approach is reducing distinctiveness and minority content; and
- Range within some genres has narrowed, for example in drama where soaps now account for 55 per cent of the output while the proportion of new drama titles has declined steadily over the past five years; and in factual, where factual entertainment such as reality shows and docu-soaps have displaced some serious factual programming.

However, the Ofcom study concluded that overall the traditional free-to-view broadcasters deliver many of the public policy objectives and often do so with class and style. A key finding of the analysis is that the last five years have seen increased investment, and the five channels as a whole have consistently produced a broad range of varied programmes that audiences value and enjoy (ibid).

Conclusion

In considering to adapt to DTV, people look at a number of aspects, ranging from practical issues like cost and usability, through to social issues such as the effect of DTV on society. They assess the relevance and attractiveness of different DTV platforms as well as the content and try to make rational and informed decisions as to whether to convert to digital. Some consider DTV as ‘more television’ and/or ‘better television’ with a superior sound and picture, and greater interactivity potential. Others see little reason to convert to digital and would perhaps only consider it if there was a fixed date for the analogue turn-off. In any case the majority of viewers show a greater attachment to the traditional analogue channels and still settle down for a limited number of traditional unencrypted television services.

Given these observations it becomes a huge task to convince people to switch to digital. Both the industry and the government should make strenuous efforts to promote and vigorously market the new digital services. This paper showed that the new digital BBC services have played a significant role in at least three areas: to enhance consumer interest in DTV services and address confusion and ‘fear’ over

them; second, to drive the take-up of DTV in general and *Freeview* in particular; and third, to make the target of analogue switch-off seem more achievable than before. Based on evidence from market research analysts, it was also argued that *Freeview* penetration has been largely additional to, rather than a substitute for, digital pay-TV take-up. The figures show that *Freeview* viewers have a different profile to viewers using other platforms. Finally, the launch of a digital satellite free-for-all service with its wide reach and universality would tackle the technical inability of *Freeview*'s signal to cover more than 75 per cent of the country and would therefore push further the digital agenda. In light of these, the UK government's stated intention to turn-off the analogue television signal before 2012 may be realistic.

References

British Broadcasting Corporation (BBC), *Progress Towards Achieving Digital Switchover*, Report to the Government (London: April 2004).

BIPE, *Digital Switchover in Broadcasting*, Study for the European Commission, Directorate General Information Society (Brussels: 12 April 2002).

Barry Cox, 'The Reformation of the BBC', *The Guardian*, <http://media.guardian.co.uk/broadcast/comment/0%2C7493%2C888678%2C00.html> (4 February 2003).

Digital Television Action Plan, Department for Culture, Media and Sport. <http://www.digitaltelevision.gov.uk> (first published in December 2001 and updated quarterly), accessed February 2005.

Greg Dyke, MacTaggart Lecture 2000, <http://www.bbc.co.uk/info/news/news264.htm>

European Commission (EC) *Communication on Digital Switchover - Transition From Analogue to Digital Broadcasting, From Digital Switchover to Analogue Switch-off* (Brussels: 22 September 2003).

John Heilemann, 'Can the BBC Be Saved?', <http://www.wired.com/wired/archive/2.03/bbc.html> (March 1994).

Independent Review of the BBC's Digital Services, *The Barwise Report into BBC3, BBC4, CBeebies and CBBC*.
http://www.culture.gov.uk/global/publications/archive_2004/review_bbc_digital_tv_services+.htm (October 2004), accessed December 2004.

Informa Media Group, *No Country in Europe to Achieve Full Digital TV Penetration by 2010*, Press Release (18 October 2004).

Petros Iosifidis, Jeanette Steemers and Mark Wheeler, *European Television Industries* (London: British Film Institute, 2005).

Tessa Jowell, *Digital Switchover: The Next Steps*, Ministerial Written Statement (London: 19 May 2004).

Christina Jutterstrom, 'Public Service Broadcasting in Sweden Takes Up the Digital Challenge,' *Diffusion*, 2003/04, pp. 3-5.

Jeremy Klein, Simon Karger and Kay Sinclair, *Attitudes to Digital Switchover: The Impact of Digital Switchover on Consumer Adoption of Digital Television* (The Generics Group in Association with Ipsos UK, 30 March 2004).

Gautam Malkani, 'Let's Join the Big Free-for-all,' *Financial Times* (Creative Business), (27 April 2004), p. 11.

Office of Communications (Ofcom), *Progress Towards Digital Television Switchover*, April 2004a.

David Neal, 'ITV Digital: Lessons to be Learned', *IT Week*, (8 May 2002) <http://www.itweek.co.uk/print/it/1131588>, accessed February 2005.

Office of Communications (Ofcom), *Digital Television Update – Q1 2004*, <http://www.google.com/search?hl=en&ie=ISO-8859-1&q=Digital+Television+Update+-+Q1+2004> (2 June 2004b), accessed June 2004.

Office of Communications (Ofcom), *Review of Public Service Broadcasting*, http://www.ofcom.org.uk/codes_guidelines/broadcasting/tv/psb_review (May 2004c), accessed June 2004.

Oliver & Ohlbaum, *An Assessment of the Market Impact of the BBC's Digital TV Services*, Report for the BBC's submission to the DCMS Review, (Oliver & Ohlbaum Associates Ltd, March 2004).

Report of the Committee on Financing the BBC - The Peacock Report, <http://www.bopcris.ac.uk/bopall/ref19676.html> (London, HMSO, 1985).

James Purnell, 'It's not all Over for the Digital Switchover', *Financial Times (Creative Business)*, (16 October 2001), pp. 2-3.

Quest Survey, *Multichannel Quarterly*, Q2 2003,

[http://www.itc.org.uk/uploads/ITC_Multichannel_Quarterly - Q2 2003.doc](http://www.itc.org.uk/uploads/ITC_Multichannel_Quarterly_-_Q2_2003.doc)

(London: ITC, 2003), accessed December 2003.

Paul Robinson, 'How About a Slice of the Pie, Sky?' *Financial Times (Creative Business)*, (11 May 2004), pp. 4-5.

Screen Digest, *Observatory of Public Service Broadcasting in Europe*, Report by the Istituto Italiano per l'Industria Culturale, May 2004 (a summary can be downloaded at:

<http://www.lombardiacultura.it/osservatorio/libreria/IsICult%20Screen%20Digest%200broch.pdf> (accessed 22 June 2004).

Saeed Shah, 'BSkyB Tightens Grip with Launch of Free-to-air Satellite Service', *The Independent*, (10 June 2004).

Michael Starks, 'Digital Television: The Lesson from Watership Down', Speech given at the Voice of the Listener and Viewer Conference (London: 28 November 2001).

Strategy Analytics, *UK Dominates European Digital TV*, January 2002.

Matt Wells, 'Digital TV at Turning Point as Converts Top 50%', *The Guardian*, 17 December 2003.

Notes

ⁱ As early as 2001 the UK was storming ahead in Europe's transition to digital television, as 37 per cent of UK households had DTV compared to a European average of 16.3 per cent at the time (Strategy Analytics, 2002).

ⁱⁱ The Digital Television Action Plan was formulated by the government in partnership with stakeholders who have an interest in DTV. These include broadcasters, manufacturers, retailers, platform operators and consumer groups. Its objective is 'to ensure that the criteria set for switchover are met so that Ministers can, if they so choose, take the decision to proceed to full switchover by ordering the switching off of analogue terrestrial transmission'. The Action Plan was first published in December 2001, and is updated quarterly.

ⁱⁱⁱ In late 2003 the two groups decided to merge their operations in a £2.6 billion deal.

^{iv} NTL has now come out of Chapter 11 bankruptcy protection in the US.

^v In Europe, although the switchover is a prime objective of the EU's e-Europe action plan, it is only Berlin which has completed the switchover from traditional terrestrial television to DTT. In Sweden the switchover to digital television is scheduled for February 2008, while the Finish government has proposed that all television broadcasting in Finland be digital as of August 2007. Other countries, such as Italy and Spain have asserted that they expect to switch-off the analogue frequency well before 2010.

^{vi} ADSL (Asymmetric Digital Subscriber Lines) represents another DTV network but it is (and is likely to remain) a niche delivery platform.