Digital switchover refers to the UK-wide programme of replacing conventional (analogue) television broadcasts with digital signals from terrestrial (ground-based) transmitters. The latter are being converted, by ITV region, over a five-year period: work is already underway and by April 2010 nearly a quarter (6.4 million) of UK homes were receiving only digital broadcasts. It will end with Tyne-Tees and Ulster in the second-half of 2012. Consumers who have not already done so will have to convert or replace their existing equipment to continue to receive television via at least one of the following: digital terrestrial (through an aerial), satellite, cable or DSL (telephone). So far the take-up of the digital switchover help scheme, funded by the BBC to provide financial and technical assistance for qualifying vulnerable individuals, has been significantly lower than anticipated.
1 Digital television

Conventional television broadcasts use radio waves to carry an analogue (continuously varying) signal. The development of digital broadcasting allows more efficient use of radio frequencies, thus enabling more or better services to be made available such as more channels, more interactivity or high definition TV. At present, digital terrestrial television (DTT) can reach 73% of all UK households via the “Freeview” service. This percentage cannot be increased significantly without switching off the powerful analogue transmissions that compete for radio spectrum.

The main alternative platforms for delivering digital television are satellite and cable. Apart from 600,000 homes that receive free-to-view (FTV) satellite services, including “Freesat” and “Freesat from Sky”, these alternative platforms all involve subscription payments. About 9.2 million households pay for satellite TV, while 350,000 homes receive television through other pay TV services, such as from Talk Talk TV (formerly Tiscali TV) along broadband (asymmetric digital subscriber line, ADSL) telephone lines, or through the BT Vision package.¹

The BBC and ITV launched their “Freesat” service in May 2008 as a free-to-view alternative to Freeview. This was in line with recommendations in the Culture, Media and Sport Committee’s first report of 2004-05, *A public BBC*, and a successor Committee’s second report of 2005-06, *Analogue Switch-off: A signal change in television*.

Ofcom produces the authoritative guide to digital TV take-up in its quarterly *Communications Market: Digital Progress Report*. According to this, at the end of December 2009 91.4% of the 25.4m TV households in the UK received digital television services on their primary set. A detailed breakdown is given in the table below, along with the potential coverage. On completion of digital switchover in 2012, digital terrestrial television should be able to reach

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¹ BT Vision combines access to Freeview via a TV aerial with access to demand films, programmes and music via Broadband
98.5% of the population, achieving coverage on a scale comparable with digital satellite today.

<table>
<thead>
<tr>
<th>Platform</th>
<th>Digital households</th>
<th>Coverage&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>million</td>
</tr>
<tr>
<td>DTT (Freeview)</td>
<td>39.6</td>
<td>10.1</td>
</tr>
<tr>
<td>Satellite (pay)</td>
<td>35.8</td>
<td>9.2</td>
</tr>
<tr>
<td>Satellite (FTV)</td>
<td>2.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Cable</td>
<td>12.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Other pay TV</td>
<td>1.4</td>
<td>0.4</td>
</tr>
</tbody>
</table>

In the UK there are approximately 60m TV sets in total, including “secondary” sets in bedrooms etc. Of these, 79% are now able to receive digital services.

In April 2006 Ofcom and Digital UK (the body charged with overseeing switchover) launched a continuous tracking study to monitor the UK’s conversion to digital TV for switchover. Since 2006 between 6,400 and 16,500 households have been surveyed each year and quarterly results are published on the Digital UK and Ofcom websites.

Respondents are questioned on the following four aspects of readiness for digital switchover:

1. Awareness of digital TV and the switchover
2. Understanding of what the ‘switchover’ is and what individuals need to do
3. Attitudes toward the switchover
4. Conversion rates for primary and other TV sets

Public awareness and understanding of switchover continues to improve. The most recent Survey reports:

- Awareness and understanding of switchover improved across the remaining switchover regions in the course of 2008. With more than nine out of ten people already aware of switchover, bigger improvements were recorded during 2008 around understanding how to convert than awareness growth. During the year switchover awareness improved slightly to 90% across the remaining switchover regions (up 2 percentage points from the end of quarter 3 2008). More than seven out of ten respondents (72%) understood the need to convert their remaining analogue sets to get ready (up 4 percentage points from September).

- Following the date announcements in the early switching regions, and the start of the programme with the Scottish Borders switchover in November 2008, there is improving awareness of regional switchover start dates. By the end of 2008, 35% of people knew the year when switchover starts in their region (up 5pp from September 2008). Understanding of when switchover happens at each transmitter group tends to only improve in the last few months before switchover, as the sense of imminence grows and communications intensifies.

- Almost nine out of ten people feel comfortable getting ready for the change (89%, up 3 percentage points year on year from the end of 2007). This suggests that the positive experience of switchovers to date (e.g. in Scottish Borders) provides reassurance to consumers elsewhere in the country awaiting their switchovers.<sup>3</sup>

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2 Figures for coverage are taken from Ofcom, *The Consumer Experience 2009*, December 2009, pp. 19-20. This Report does not include data on the availability of TV through Broadband, although press reports in 2008 announced that Tiscali TV would provide 50% UK coverage by Summer 2008. BT Vision has the same coverage as Freeview.

2 Coverage

In pursuing digital switchover the Government’s objective was that every home should be able to enjoy the benefits of digital television, be those an increased choice of channels or picture quality or free-to-air interactive services such as home shopping, banking, email and internet access. Further justification came from the economic value associated with more efficient use of radio spectrum.

The *Digital Television Action Plan* said that Government was committed to ensuring that terrestrial analogue broadcasting signals were maintained until:

- Everyone who can currently get the main public service broadcasting channels in analogue form (BBC 1 and 2, ITV, Channel 4/S4C and Channel 5) can receive them on digital systems;

- Switching to digital is an affordable option for the vast majority of people;

- As a target indicator of affordability, 95% of consumers have access to digital equipment.\(^4\)

The absolutist nature of the first of these conditions, coupled with the vagaries of television reception, cast a legitimate doubt as to whether it can be fully satisfied. In a Westminster Hall debate on 5 July 2005,\(^5\) the then Parliamentary Under-Secretary of State for Culture, Media and Sport, James Purnell, stated that, taking into account technical definitions of what it means to receive television, the Government now has a coverage guarantee of 98.5%. However, this is not the same as saying that the same 98.5% will be covered by digital signals as presently receive analogue. The Culture, Media and Sport Committee drew attention to this in its report on analogue switch-off:

114. Overall, the aim is for DTT to reach 98.5% of the population, the same percentage adjudged to receive analogue terrestrial TV today. However, some people are likely to lose some television services post-switchover, and others will gain, as confirmed by Clive Jones of ITV during oral evidence on 6 December: "The digital map will not completely follow the analogue map. There might be small regional variations. That 1.5% of the population which do not get analogue signals might be a different 1.5% which do not get digital signals." In oral evidence on 13 December, the Chief Executive of Ofcom, Stephen Carter, guessed that a few thousand households would find themselves no longer able to get a terrestrial TV picture after switchover.

115. In May 2004, Ofcom published a report which quantified current levels of coverage achieved by the four main analogue public service channels, BBC One, BBC Two, ITV1 and Channel 4 or S4C. The analogue coverage report gave a value of 98.5% of households with this core coverage. This percentage coverage should be substantially replicated following switchover. It compares to a figure of 99.4% of the population in receipt of free-to-air analogue channels that was cited by the former Secretary of State Chris Smith in 1999. A still lower coverage figure of 90% is expected for commercial multiplexes, which do not carry public service channels.\(^6\)

The latter point made by the Committee was also referred to in a National Audit Office report, *Preparations for Digital Switchover*:

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\(^4\) *Digital Television Action Plan*, Version 6.0, April 2003, deposited paper 03/1094. See also the Appendix to Version 12 of the Plan (October 2004)

\(^5\) HC Deb 5 July 2005 c58WH

\(^6\) Culture, Media and Sport Committee, *Analogue Switch-off*, 29 March 2006, HC 650 2005-06
2.9 The Departments estimate that after switchover, 98.5 per cent of households, matching existing analogue coverage, will have the option of receiving around 20 terrestrial television services, including all those funded by the licence fee. These channels will be broadcast from all 1,154 existing transmitter sites. A further 20 channels will be broadcast from 80 of these sites, covering 90 per cent (22.5 million) of UK households. The choice of channels will, therefore, vary according to location. For example, 20 terrestrial channels are available in the Copeland flagship area. In Border region, the next area to switch, 50 per cent of homes should be able to receive around 40 channels but the rest will only be able to receive around 20. Coverage of the 40 terrestrial channel line up is also likely to be patchy in areas that rely heavily on relay transmitters. Ofcom are currently carrying out work to identify which areas will be affected and plan to publish further information in March 2008.  

As a very general rule, households that today receive good analogue television reception should be able to receive digital terrestrial television when switchover takes place (at which point frequencies currently used for analogue broadcasts can be assigned to digital television).

3 Timetable

Back in September 1999, the Government said digital switchover could start as early as 2006 and be completed by 2010. In July 2004, the Secretary of State announced after consultation with the broadcasters that 2012 was the most appropriate date for completion of switchover, a date reiterated in the 2005 Labour manifesto, and on 15 September 2005 the Secretary of State for Culture, Media and Sport confirmed that national switchover to digital terrestrial television would be completed by 2012. The process would take place in stages, with individual ITV regions turning off their analogue broadcasts, beginning with the Border region in 2008. By April 2010 nearly a quarter (6.4 million) of UK homes had completed digital TV switchover. Details of the switchover timetable are given in the table below:

<table>
<thead>
<tr>
<th>TV Region</th>
<th>Switchover Timetable</th>
<th>Households Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border</td>
<td>Completed 2009</td>
<td>398,000</td>
</tr>
<tr>
<td>West Country</td>
<td>Completed 2009</td>
<td>781,000</td>
</tr>
<tr>
<td>Wales</td>
<td>Completed 2010</td>
<td>1,298,000</td>
</tr>
<tr>
<td>Granada</td>
<td>Completed 2009</td>
<td>3,041,000</td>
</tr>
<tr>
<td>West</td>
<td>Completed 2010</td>
<td>913,000</td>
</tr>
<tr>
<td>STV North (formerly Grampian)</td>
<td>2010</td>
<td>602,000</td>
</tr>
<tr>
<td>STV Central (formerly Scottish)</td>
<td>2010 (completes 2011)</td>
<td>1,733,000</td>
</tr>
<tr>
<td>Central</td>
<td>2011</td>
<td>4,189,000</td>
</tr>
<tr>
<td>Yorkshire</td>
<td>2011</td>
<td>2,652,000</td>
</tr>
<tr>
<td>Anglia</td>
<td>2011</td>
<td>1,897,000</td>
</tr>
<tr>
<td>Meridian</td>
<td>2012</td>
<td>2,172,000</td>
</tr>
<tr>
<td>London</td>
<td>2012</td>
<td>4,858,000</td>
</tr>
<tr>
<td>Tyne Tees</td>
<td>2012</td>
<td>1,418,000</td>
</tr>
<tr>
<td>Ulster</td>
<td>2012</td>
<td>649,000</td>
</tr>
</tbody>
</table>

7 National Audit Office, Preparations for Digital Switchover, HC 306 2007-08, 27 February 2008
8 The Labour Party Manifesto 2005, p.98
9 DCMS Media Release 116/05, Tessa Jowell Confirms Digital Switchover Timetable and Support for the Most Vulnerable, 15 September 2005
The regional sequence for switchover has been determined by three technical factors: interference management, infrastructure and engineering resources, and international spectrum negotiations. The Channel Islands, not formally part of the UK’s digital switchover plan, are due to switch over from analogue to digital broadcasts in 2010.11

4 Implementing switchover

Digital UK, the organisation charged with co-ordinating the country’s switchover to digital television, was launched as SwitchCo on 13 April 2005. It was formed at the Government’s request by the public service broadcasters, BBC, ITV, Channel 4, Five, Teletext and S4C, and multiplex operators National Grid Wireless12 and SDN, all of whom are represented on its management board and provide funding. Also on the board are two positions representing the interests of the supply chain: television equipment manufacturers, retailers and aerial manufacturers and installers.

As part of its inquiry into analogue switch-off, the Culture, Media and Sport Committee took detailed evidence on the technical implementation of the switch over to digital transmissions.13 A section of the Committee’s report on project management considered the variety of roles that different organisations would be playing:

104. Annex E of Digital UK’s written evidence provided an overview of the digital switchover programme structure. Implementation of switchover involves nine work streams, six of which are led by Digital UK (the Government and Ofcom lead the others which cover regulation and targeted assistance). The Digital UK Programme Office will develop monthly progress reports for a switchover steering group comprising representatives from Digital UK, Government and Ofcom. Overall, we have been impressed by the work Digital UK has undertaken, particularly in view of its limited resources. However, we are concerned that the complexity of the management structure leaves lines of accountability blurred. There need to be clearer chains of command with precise responsibilities specifically defined. We also believe that there is a danger that Digital UK will lack the authority and resources to manage the interests of a diverse group of industry stakeholders should their bonds of mutual self-interest come under strain. In the event of any dispute, the Chairman of Digital UK, Barry Cox, told us: "the people who resolve it would be either Ofcom or Government because they are the people to whom the broadcasters are accountable."

The Committee also noted that the BBC would be a “key agent for the delivery of switchover.” Previously, the Government’s Green Paper, A strong BBC, independent of Government, published on 2 March 2005, had stated: “One of the conditions of the new licence fee settlement will be that the BBC should play a leading role in the process of switching Britain over fully from analogue to digital television.” The subsequent White Paper, A public service for all: the BBC in the digital age (Cm 6763, March 2006) confirmed the BBC’s role in digital switchover:

A key outcome of digital switchover will be to ensure that all licence fee payers can receive the BBC’s digital services. It is therefore right that the BBC should take a leading role in making digital switchover happen.

Under the new Charter and Agreement, the BBC’s contribution will fall into three key areas: extending the digital network, informing the public and help for the most vulnerable TV viewers.

11 Digital UK, Switchover Begins: Report for the year to 31 March 2009, p.11
12 National Grid Wireless is also a transmission company – the other being Arqiva.
13 Culture, Media and Sport Committee, Analogue Switch-off: A signal change in television, 29 March 2006, HC 650 2005-06
A targeted assistance scheme, established and funded by the BBC, will provide extra help with switchover for people over 75 and for those who are registered blind or partially sighted or who have a significant disability.

5 Digital Switchover Help Scheme

The effects of a digital switchover on the elderly or other vulnerable groups were raised as concerns during the initial development of digital television services in the UK. In early 1998 the Government was questioned on the provision of subsidised set top boxes for certain groups and it became clear that some form of assistance would be required to provide everyone with access to digital television after the analogue switch-off. To this end a digital switchover help scheme has been drawn up, to be administered by the BBC with a total of £603m ring-fenced funding being provided from the most recent television licence fee settlement.

5.1 Eligibility

An outline of the scheme appears in a Switchover Progress Report published by Digital UK and Ofcom on 4 March 2008:

The Digital Switchover Help Scheme has been set up by the BBC at the request of the Government to offer eligible people help to make the switch to digital television on one of their TV sets. The BBC has set up a subsidiary, DSHS Ltd, to operate the scheme.

People are eligible for the Help Scheme if they are aged 75 years or more, or if they are registered blind or partially sighted. Also eligible are people who get (or could get) attendance or constant attendance allowance (AA), mobility supplement, or disability living allowance (DLA).

It is estimated that about 7 million people in the UK will be eligible for the scheme through the switchover period.

The scheme will be rolled out in each region as switchover approaches. In each ITV region eligibility opens eight months before the first transmitter switches, and ends a month after the last transmitter switch. Every eligible person will be contacted directly at their home.

Those who apply receive a choice of equipment, installation, help with using the equipment, a new aerial (if needed) and after care.

Equipment provided by the Help Scheme such as set-top boxes meets higher usability requirements: easy set up/use, access to audio description, functional remote control design, easier rescanning.

Most people will contribute £40 to the cost of the scheme. For those eligible people who are receiving income support, the Help Scheme is provided free.

Two earlier digital television trials provided information on, among other things, the kind of assistance required by vulnerable groups. A pilot in Llansteffan and Ferryside trial was set up to gauge the technical issues for broadcasters and all consumers associated with the switch from analogue to digital television transmissions. Digital transmissions were switched on at the end of November 2004. This trial subsidised the provision of digital equipment to households, to convert or replace their existing TVs and VCRs to become digitally ready. Householders installed this equipment themselves to simulate the reality of digital switchover.

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14 HC Deb, 21 Jan 1998, c538W.
as realistically as possible. About 20% of the community, including some elderly and disabled people, were given some assistance with this installation.

The aim of a second trial, this time in Bolton, was specifically to investigate what type of support would be needed at digital switchover by people aged 75 and over. This looked at the issues around installing equipment, how help could be best provided and the cost of implementing any help schemes. The trial was started in July 2005 and over 400 households took part.

On 4 May 2007 the Government published the Scheme Agreement setting out the detailed eligibility criteria and governance rules under which the Digital Switchover Help Scheme will operate. Supporting legislation in the shape of the Digital Switchover (Disclosure of Information) Act 2007 facilitates the identification of qualifying households by allowing government departments to share relevant information with those administering the help scheme, notably the BBC.

5.2 Finance

The issue of financing the assistance scheme was considered during the Culture Media and Sport Select Committee inquiry. It was the Committee’s opinion that the cost of assistance should not be covered by the BBC and thus, ultimately, the licence payer. Instead, and in common with the House of Lords Committee on BBC Charter Review, they suggested that central Government should cover the cost (with concomitant Ministerial responsibility):

The total cost of the targeted assistance scheme is uncertain, and it has not been factored into the BBC’s proposal for a licence fee settlement well in excess of inflation. Interestingly, targeted assistance is not included in the Government’s cost-benefit analysis: it is treated as a transfer cost because the cost to the licence payer will, it is argued, be offset by the benefit gained by those in receipt of assistance.

It is planned to fund the scheme through the TV licence fee, the appropriateness of which will depend in part on the extent to which this is considered a broadcasting or a social cost. In its Second Report of 2005-06, the House of Lords Select Committee on BBC Charter Review argued against the Secretary of State’s assertion that the targeted assistance scheme is a broadcasting cost: “We can see no reason why help for the over 75s, and other vulnerable viewers, with the costs of switchover should be borne by the BBC when the Government already accepts that it is responsible for bearing the costs of the licence fee for over 75s.”

Caroline Thomson told us that the BBC was “content” to go along with the Government’s request to fund targeted assistance from the licence. However, her contentment was on the basis of four criteria: “that the licence fee is not being used as a substitute for social security payments, which clearly would be totally inappropriate, that any scheme meets all the state aid requirements and is platform neutral, that it does not in the end, partly because of the flat rate nature of the licence fee, put an unreasonable burden on the licence fee payers that would put the long-term future of the licence fee at risk, and that it is not at the expense of our core services.”

Written evidence from the National Consumer Council stated: “There is also a question of how the targeted assistance programme is being funded. Using funds

15 Digital Switchover Help Scheme - A Scheme Agreement Between DCMS and the BBC, Cm 7118, 4 May 2007. The Scheme Agreement has subsequently been revised and reissued a number of times, most recently in December 2009 as Cm 7771
16 House of Commons Library Research Paper 06/64, The Digital Switchover (Disclosure of Information) Bill, 13 December 2006
raised from the television licence fee has the advantage of retaining a link between
the funds and how they are used. It is also relatively cost-effective to collect. But it is
not in line with the core purpose of the licence fee, which is to support programming,
and NCC believes it would be false economy to direct money away from that. Using
the licence fee is also likely to magnify the worst aspects of unfairness inherent in a
flat-rate fee, where the burden is heavier on low-income households. As Government
anticipates switching will deliver some financial benefit to the Treasury some of that
money should be diverted to offset the burden for consumers." We agree. **While
transmitter upgrading is clearly a broadcasting cost the provision of television
and other receiving equipment is a social cost in recognition of the need to
provide compensation to vulnerable groups. We believe that the use of
Exchequer funds to meet this cost is more progressive and justified given the
value of the spectrum released. It also places accountability properly on a
Minister's desk. We recommend that the Government should reconsider this
option.**

In their response to the Committee’s report the Government explained their disagreement:

The Government takes note of the Committee's recommendation but disagrees. A key
outcome of digital switchover will be to ensure that the BBC’s digital services are
available to all licence fee payers, and that all the licence fee payers benefit from
more choice, better picture quality, and new services. Therefore the Government
strongly believes that it is right for the BBC, as part of its role in building digital Britain,
to help establish and fund the costs of providing assistance as part of its wider
leadership role in the completion of digital switchover. We are working with the BBC to
ensure that any accountability issues are properly addressed. **19**

### 5.3 Take-up of the Help Scheme

According to the BBC's 2008-09 accounts, as of 31 March 2009 the cumulative spend from
the Help Scheme was £29.5 million out of the ring-fenced total of £603 million.**20**

In February 2008 the National Audit Office published a value for money study on the
preparations for digital switchover, which took into account the outcome of the switchover
completed in the Whitehaven area on 14 November 2008: **21**

The Departments designed and, after consultation with industry and consumer
groups, set the eligibility criteria for the Digital Switchover Help Scheme and have
ring-fenced £603 million in the licence fee between 2007-08 and 2012-13 to fund it.
The BBC is responsible for administering the scheme and in February 2008, through
its subsidiary DSHS Ltd., identified eaga plc. as the preferred bidder for a contract to
deliver the national help scheme. The BBC is accountable to the BBC Trust and not
the Departments for the value for money of this expenditure, and is developing
outcome targets for this scheme.

Take-up of the help scheme in Copeland, the first area to switch, was significantly
lower than projected in the Departments' cost model for both those accepting free
assistance and those paying £40 for assistance under the scheme. If this level of
take-up were replicated in other areas, the number of scheme applicants would be
substantially lower than forecast.

It is too early to draw firm conclusions on the funding requirement for the help scheme
as the Copeland switchover had some distinctive features which mean it may not be

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representative. Our illustrative re-run of the Departments’ cost model for the help scheme suggests that in a scenario where national take-up of scheme assistance mirrored that in Copeland, the funding requirement in the licence fee settlement to 2012-13 would reduce by some £250 million.

The House of Lords Select Committee on Communications identified a similar sized potential underspend in its report *Digital switchover of television and radio in the United Kingdom* (HL 100, 29 March 2010):

**Underspend due to much lower take-up than anticipated**

73. The Government originally estimated that around 4.7m people would take up the assistance provided by the Help Scheme. The take-up of the Help Scheme has only been 18 per cent of those eligible as opposed to the 65 per cent forecast when the scheme was devised. DSHS told us that this is likely to result in an underspend of £250m–£300m (Q 1). The Government is consulting with the BBC Trust on how the emerging underspend can be redeployed.

74. Caroline Thomson, Chief Operating Officer of the BBC, offered two reasons for this underspend: people switched to digital of their own accord in much larger numbers than expected; and the price of set-top boxes came down a lot, so people bought them themselves thinking that the Scheme did not offer any additional benefits (Q 378).

75. The BBC said that it is not wise to assume that take up will remain at 18 per cent, or to be categorical about the final level of underspend when less than a fifth of the UK has been through switchover. Peter White agreed and told us that spend on the Help Scheme could increase: “... we have had a change including care homes, which brings additional cost. We have also just finished research that shows there are some people who are still struggling with switchover that we would like to help, and we think it would be a good thing to help. We think that that is probably an additional five to ten per cent of the eligible people that probably could benefit from our help” (Q 1).

76. Siôn Simon MP thought the underspend on the Help Scheme was the biggest lesson to be learned from television switchover: “I think on the macro level, the most obvious thing to go back to is the extent of the miscalculation of the Help Scheme fund. I think it is much better that it was miscalculated that way round and I think there are very good and understandable reasons, the principal one of which is that digital TV take-up in 2005, when the analysis was done, was 65 per cent and now it is at 90 per cent, and obviously that is a completely different context for the Help Scheme, and procurement came in at £100 million less, which one could never anticipate” (Q 552).

### 5.4 Use of the Digital Switchover Help Scheme underspend

In November 2009 the then Minister for Creative Industries, Siôn Simon, said in a Written Answer that the Government was discussing with the BBC Trust how the underspend on the Digital Switchover Help Scheme could be redeployed:

**Mr. Don Foster:** To ask the Secretary of State for Culture, Media and Sport when he plans to provide money from the Digital Switchover Help scheme Fund to pay for other services; and how much he expects to provide initially. [298930]

**Mr. Simon:** The Digital Switchover Help Scheme has mailed more than 2.1 million eligible persons and completed over 180,000 installations and deliveries. It does look highly likely that there will be an under spend in the help scheme, though the switchover process has only just begun in earnest and the final outturn will depend on take up rates which could differ around the country and over time.
The Government are discussing arrangements for the redeployment of under spend with the BBC Trust.22

The previous month the Secretary of State for Culture Media and Sport, Ben Bradshaw, had outlined some of the options being considered:

Mr. Jamie Reed: To ask the Secretary of State for Culture, Media and Sport what proportion of licence fee receipts has been used to facilitate digital switchover; what proportion of the digital switchover help scheme budget remains unspent; and if his Department will make an assessment of the merits of using money from that scheme to upgrade relay transmitters. [292938]

Mr. Bradshaw: £803 million was set aside in the 2007-13 TV licence fee settlement to facilitate digital switchover. We expect there to be an under-spend on the £603 million provided for the Digital Switchover Help Scheme but it is too early to estimate the level of under-spend with any precision. However, as set out in the Digital Britain White Paper, a number of ways the under-spend might be redeployed have been identified. These include contributing to the roll-out of universal broadband; the maintenance of plurality of news in the nations, locally and in the regions; and the roll out of Digital Audio Broadcasting. There are no plans to use the under-spend to increase the coverage of the three commercial digital terrestrial television multiplexes.

There is a licence requirement that the three Public Service Broadcasting (PSB) digital multiplexes, which carry the public service broadcasting channels, should reach 98.5 per cent. of UK households after Digital Switchover. Since the national re-tune, ITV3 and ITV4, which are not PSB channels, have been carried on commercial multiplexes where the licence post-Switchover requirement is that 90 per cent. of household coverage is achieved. Any decision to build out beyond 90 per cent. coverage would be a commercial decision for the multiplex operators.23

As mentioned by Mr Bradshaw, one possible use of the Digital Switchover Help Scheme underspend that has been considered is to contribute to the Universal Service Commitment to roll-out 2 megabits per second broadband connections to all households by 2012 which was made in Digital Britain: Final Report (Cm 7650, 16 June 2009). The Executive Summary of the report says:

24. The Universal Service Commitment will be delivered by a mix of technologies: DSL, fibre to the street cabinet, wireless and possibly satellite infill. It will be funded from £200m from direct public funding (We expect this to be in the order of £200m, based on current estimates of the Digital Switchover Help Scheme underspend) enhanced by five other sources: commercial gain through tender contract and design, contributions in kind from private partners, contributions from other public sector organisations in the nations and regions who benefit from the increased connectivity, the consumer directly for in-home upgrading, and the value of wider coverage obligations on mobile operators arising from the wider mobile spectrum package...We will also discuss with the BBC Trust the structure which gives them appropriate visibility in the delivery process of the use being made of the Digital Switchover Help Scheme underspend, which will be realised in full by 2012.

The option of using some of the underspend to support the plurality of regional news provision was noted in the Culture, Media and Sport Select Committee report Future for local and regional media (Fourth Report of Session 2009-10, HC 43, 24 March 2010):

146. The television licence fee is collected in order to fund public service television, which is not confined to the output of the BBC. Plurality of regional news provision is

22 HC Written Answer 10 November 2009 Column 186W
23 HC Written Answer 19 October 2009, Column 914W
vital in a democracy, therefore we restate our support for the principle of public funding, and note the Government’s existing suggestion that this could be met from that part of the income of the licence fee that is currently allocated to the digital switchover help scheme.

As is suggested by the Select Committee’s comment above, any redeployment of the underspend might set a precedent for the future top-slicing of the TV Licence for purposes other than funding of the BBC.

6 Digital dividend

Switching off the analogue broadcasts and switching over to more powerful digital signals will leave a surplus of radio frequencies available for other applications – such as mobile TV or high definition TV. This is the so-called digital dividend. The possible uses to which this spectrum may be put, and the allocation of frequencies, have been the subject of Ofcom’s digital dividend review, begun on 17 November 2005.

A consultation on the digital dividend review was subsequently launched by Ofcom on 19 December 2006, ending on 20 March 2007. Ofcom received over 600 written responses to its consultation and, among the wide range of issues raised, it singled out four – including the reservation of spectrum for high definition TV services on Freeview. Ofcom further points to its objective as being to maximise the digital dividend’s benefits to society as a whole. The Government’s position is illustrated by the following written answer:

Peter Luff: To ask the Secretary of State for Culture, Media and Sport what powers are available to the Government to ensure high definition television broadcasting is available free to air on digital terrestrial television. [124819]

Mr. Woodward: The broadcasting of high definition services and the acquisition of any additional spectrum necessary for their introduction, are matters for the broadcasters. Spectrum allocation is the responsibility of Ofcom, subject to a power of direction by the Secretary of State.24

On 13 December 2007, Ofcom made an announcement on delivering the benefits of the digital dividend review:

Ofcom today announced how the radio spectrum that will be freed-up through digital television switchover will be awarded for new uses for the benefit of citizens and consumers in the UK.

Spectrum is a finite resource that is the essential ingredient for all wireless communications. Demand for spectrum is growing continually with changes in technology and consumer trends. Spectrum is used throughout the economy and society, from the emergency services and defence, to radio and television broadcasting, and mobile phones and wireless internet, and underpins 3 per cent of the UK’s GDP.

The digital dividend spectrum is in the sought-after UHF band currently used by the terrestrial television broadcasters. Transmissions in this band cover large geographical areas with relatively few transmitters, and penetrate buildings well. This makes the digital dividend the highest quality spectrum likely to be released in the UK in the next 10 or 20 years

The digital dividend is suitable for a wide range of uses including:

• ultra-fast wireless broadband services;

24 HC Deb 5 March 2007 c1673W
• mobile television;
• more digital terrestrial television channels in either standard or high-definition;
• local television;
• wireless microphones; and
• low-power applications developed from wi-fi.

Maximising the benefits for citizens and consumers

Ofcom’s objective is to ensure that the digital dividend is used to deliver the maximum benefit for citizens and consumers in the UK.

Following consultation and an extensive programme of research, Ofcom has concluded that the most effective way to maximise the value to society is to take a market-led approach, giving users the freedom to decide how spectrum is used and clear incentives to use it efficiently.

This approach will create the maximum flexibility for different services. It will also allow the use of the spectrum to change over time, as demand develops, technology evolves and new services become available.

This approach of awarding spectrum to those who will make the most of it and value it most will deliver significant benefits to society, including:

• innovative technologies and services that will be launched using the digital dividend;
• more competition in wireless services which could lead to greater choice and lower prices; and
• a significant contribution to the UK, as the overall benefit from the use of the digital dividend is estimated to be £5bn to £10bn of added benefit to the economy over 20 years.

To maximise these benefits, Ofcom plans to auction most of the digital dividend in 2009, offering licences that allow users to decide the technology and service, and that can be traded after award.

Specific spectrum uses

Ofcom has considered whether a market-led approach could prevent important spectrum uses from getting access to this spectrum. We have identified just one compelling case where we should reserve spectrum for a particular use, to avoid the risk of market failure in an auction. We will therefore award spectrum by ‘beauty contest’ for the programme-making and special events sector (usually referred to as PMSE), who principally use the spectrum for wireless microphones.

The consultation also identified a number of potential uses of the digital dividend in which citizens, consumers and industry expressed a keen interest. Ofcom will therefore package the spectrum to make it suitable for these uses. This relates to the cleared spectrum (the frequencies that will be cleared of broadcasting as a result of digital switchover) and the interleaved spectrum (the ‘white spaces’ that exist geographically between television transmitters to prevent interference between them).

These decisions create new opportunities for a wide range of uses:

1. National digital terrestrial television in standard or high definition. Ofcom has already demonstrated that new High Definition and Standard Definition channels can be delivered on Freeview without the need for any digital dividend spectrum. This was the subject of proposals published by Ofcom on 21 November 2007. In addition, Ofcom will package the cleared spectrum in a way that makes it suitable for more digital terrestrial television, but it will not be reserved for this use.
2. **Cognitive radio.** This is a new wireless technology that shares with other services by detecting when spectrum is not being used. It is hoped that cognitive radio devices will be able to work together to create so-called ‘mesh networks’ that can support a range of wireless applications such as high-speed broadband access across urban and rural locations. Ofcom is proposing to allow cognitive radio to use the interleaved spectrum provided it can be shown this does not cause interference to other spectrum users.

3. **High speed mobile broadband and mobile television.** Our market research has found keen interest in high speed mobile broadband. We will package the cleared spectrum in a way that makes it suitable but not reserved for these uses.

4. **Local television.** Ofcom will auction packages of interleaved spectrum suitable but not reserved for local television in some 25 locations across the UK where there is evidence of demand to provide this type of service.

5. **PMSE spectrum users.** Ofcom will award most of the available interleaved spectrum by ‘beauty contest’ to a band manager who will be required to manage spectrum for PMSE users. This process will be designed to ensure that the licensee’s interests are aligned with those of PMSE users. The licensee will earn revenue by charging for access to the spectrum but will be required to meet reasonable demand from PMSE users on fair, reasonable and non-discriminatory terms. These measures will ensure that PMSE users can continue to access spectrum while moving towards a more market-based approach over time.

Recent proposals about Ofcom’s use of the Digital Dividend is provided in *Government Response to the Consultation on a Direction to Ofcom to Implement the Wireless Radio Spectrum Modernisation Programme* (Department for Business, Innovation & Skills, March 2010). The Ofcom website provides details of the latest consultations undertaken as part of the digital dividend review, and also recent Spectrum Awards.

7 Further reading

*Culture, Media and Sport Committee, Analogue Switch-off, HC 650 2005-06, March 2006*

*Government Response to the Culture, Media and Sport Select Committee, Session 2005-2006: Report on Analogue Switch-Off, Cm 6850, June 2006*

*NAO, Preparations for Digital Switchover, HC 306 2007-08, February 2008*

*NAO / BBC Trust, The BBC’s preparedness for digital switchover, 13 November 2007 http://www.nao.org.uk/publications/bbc-reports.htm*

*House of Lords Select Committee on Communications, Digital switchover of television and radio in the United Kingdom, HL Paper 100 2009-10, 29 March 2010*

*www.digitaluk.co.uk* (includes a facility for establishing, by postcode, current and post-switchover access to digital television and a comprehensive set of frequently asked questions)

*www.ofcom.org.uk*

*http://www.culture.gov.uk* (The website of the Department for Culture, Media and Sport includes a link on digital switchover)