

Driving digital switchover:

A summary of Ofcom's report to the Secretary of State for Culture, Media and Sport



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Foreword

We at Ofcom (the Office of Communications) have been asked by Tessa Jowell, the Secretary of State for Culture, Media and Sport, to report on progress towards digital switchover. Digital switchover is the Government's ambition to switch off the traditional television signal that households have received through their TV aerials for many years and to replace it with a digital signal. This signal is also sent through the airwaves to TV aerials, but builds a TV picture from millions of ones and zeros.

Ms Jowell asked us to:

- evaluate the prospects for switchover within the next ten years if the Government decides not to take any further action to encourage digital TV;
- set out our views on how the nation could use spare airwaves after the switchover;
- list the main challenges that could prevent full switchover by 2010; and
- analyse the possible options to achieve switchover.

This report will particularly interest UK consumers and citizens because many will need to buy digital converter boxes to make sure that their TVs and video recorders continue to work after switchover. The Government, broadcasters, manufacturers of converter equipment and retailers will be interested in our policy recommendations, designed to smooth the path towards switchover.

Our report does not cover every issue in full. We have summarised some of the discussion of potential regulatory changes because the details will depend on the outcome of confidential negotiations between us, the Government and private companies. We have also not tried to measure the benefits of switchover for the UK because the Government has already done similar work that shows switchover would give a considerable boost to the UK's economy. We accept the thrust of the Government's analysis as long as we can make sure that the UK can put the spare airwaves to good use after the switchover takes place.

Since 29 December 2003, we have been the new regulator for the TV, radio, telecommunications and other communications industries. Assessing and driving digital switchover is one of our main tasks in 2004.

We have developed this plain English summary to help you understand the issues. It is not a formal or detailed account of our views. You can find our full report on our website at www.ofcom.org.uk.

Introduction

What is digital TV?

Your TV at home works by receiving and decoding a signal that has been sent either through the air (terrestrial), or through a cable running in to your home (cable) or from a satellite in space (satellite).

Traditionally, the signal was sent as a series of waves, either through the air or along a cable, and was called 'analogue transmission'. However, in the past ten years, technology has moved on and it is now possible to send TV pictures as millions of ones and zeros which are decoded in your TV or a set-top box on your TV. This is digital TV.

Its benefits are that it normally provides a sharper picture, clearer sound and uses much less space to send the same TV programme. Many more TV channels and programmes can be broadcast using the same airwaves or along the same cable as digital TV than as analogue TV, offering more choice.

When did digital TV start?

In the UK, digital TV started in 1998 when BSkyB began to offer its satellite customers the choice of digital reception to replace their analogue satellite dishes and set-top boxes. Soon after, ONdigital began digital terrestrial broadcasting and in 1999, cable companies began to change their customers over from analogue services to digital services.

Have I got digital TV?

If you pay for a BSkyB satellite service, or have Freeview (you get your TV through your aerial but you also have a set-top box or a TV which can receive the digital signal directly), you will already have digital TV. Most subscribers to cable TV also have digital TV. However, the cable companies have not fully completed the changeover of all their services from analogue to digital.

If you receive your TV through your aerial and receive only four or five main channels – BBC1, BBC2, ITV, Channel 4 (S4C in Wales) and Five – you will still have analogue TV.

At the end of 2003, half of the UK's homes had installed digital TV and half still relied on analogue technology to receive TV.

What is digital switchover?

Digital switchover involves switching off the traditional analogue television signal that households have received for many years and replacing it with a digital signal.

What are the Government's plans?

In September 1999, the Government first announced its ambition to switch off the analogue TV signal and move to digital TV. It said the process could start as early as 2006 and so be finished by 2010.

In 1999, the Government said that switchover would not take place until the following conditions had been met.

- First, that everyone who could watch the main channels in analogue form could receive them on digital systems.
- Second, that switching to digital was an affordable option for almost everyone.

More recently, the Government has repeated its commitment to switchover. However, there is no set date when it expects or wants switchover to start.

What would switchover mean for me?

Switchover would mean different things to different people.

- Households that cannot currently receive extra free TV channels through their aerials would gain more free TV channels. This would apply to homes where Freeview is not available.
- All households wanting to use aerials to receive TV, either on their main TV set in their living room or on other sets, would have to buy a set-top box so they could continue to use their TVs if they have not done so already.
- Households wanting to use their video recorders to record one programme while watching another would have to buy an extra box or a new video recorder to continue to do so.

- Some households might need to buy a new aerial if their existing equipment is of poor quality.
- Households who have already fully converted to cable or satellite or Freeview would not notice any big changes.

Why does switchover matter for the UK?

Switchover would give the UK many potential benefits.

- It would free a large amount of the airwaves currently used to broadcast BBC1, BBC2, ITV, Channel 4 and Five. The airwaves used for TV broadcasting form part of what is known as the electromagnetic spectrum – or ‘spectrum’ for short. If switchover happens, it will release a large amount of spectrum for other uses, either more TV broadcasting or even, perhaps, mobile communications.
- Consumers would gain from the new uses of the freed-up spectrum.
- Without strict limits on the number of channels they can offer, broadcasters would be better able to tailor their channels and programmes for viewers.
- As consumers have switched to digital TV faster in the UK than in any other country, switchover would help to cement the UK’s leading position in using digital TV technology.

For these reasons, the benefits of switchover outweigh the costs of making the move that some consumers will have to pay.

Is the UK going it alone?

No. Berlin successfully switched off its analogue signal in 2003 with very little disruption. The rest of Germany and most other European countries are planning to follow its lead. In the US, plans are also in place to start switching off the analogue signal. And from 2007, all TVs sold in the US will have to include a digital converter.

The success of digital television

The growth of digital TV has been one of the UK's most significant commercial and technical achievements of recent times. Since its launch in 1998, digital TV has grown faster than almost any other electronic household product or service. People have paid for digital satellite, digital cable and bought Freeview boxes faster than they bought colour TVs in the 1970s, video recorders in the early 1980s and initial satellite TV in the early 1990s.

By the end of 2003, over half of UK households had digital TV in their homes.

Progress in 2003

The pace of digital TV growth speeded up in 2003 because consumers bought over 1.5 million Freeview boxes or TVs which included a digital converter. This was particularly true over the Christmas period. BSkyB also managed to add 600,000 homes to the 6.9 million which already pay monthly subscriptions for their pay TV services. The number of homes which had cable stayed constant.

Overall, the percentage of homes with digital TV rose from 41% to 50.2% in 2003. There are many reasons for this success.

- The BBC heavily promoted digital channels (BBC3 and BBC4).
- Falling prices of digital equipment (the cheapest Freeview box can be bought for around £50).
- Rising sales of TVs which include a digital converter ('integrated digital TVs').
- Freeview boxes were more widely available, especially in supermarkets.
- Continued demand for premium TV channels and programmes, especially football on satellite and cable.

The regional dimension

The take-up of digital TV varies across the UK. It is highest in Wales, where the analogue TV signal is often weak and lowest in the south west of England.

Once switchover has happened, the number of homes which can receive an adequate digital signal should be similar to the number that can currently receive good-quality BBC1 reception.

Second sets

During 2003, there was a growth in the number of people changing all the TV sets in their homes to digital. Many people bought Freeview boxes for TVs in their kitchens and bedrooms.

However, most homes have still not changed all their TVs to digital, which means that most households would have to buy a digital converter if switchover happened tomorrow.

Our expectations for digital TV

Will digital TV continue to grow?

Yes. We estimate that by the end of this year (2004), 58% of homes will have digital TV, and this figure will have risen to 63% by the end of 2005. By the end of 2010, we estimate that 78% of households will have changed over at least one of their TVs to digital.

Our expectations of the likely future take-up of digital TV until 2012 are based on the assumption that there are no changes to policy and that a switchover timetable is not announced.

We think the number of cable, satellite and Freeview viewers will grow. But most households changing to digital in the future will choose Freeview because there is no need to pay a monthly subscription.

The overall rate of growth is likely to slow. Three reasons account for the slowdown in digital take-up as the decade progresses.

- Some households do not value the extra choice they can get from digital TV.
- Though many people want to pay a monthly subscription for premium channels, particularly for sport and films, we do not expect a large growth in pay TV. Its growth has already slowed in the past few years.
- Many households who want to get digital TV without a monthly subscription do not live in areas covered by Freeview, so they cannot get digital TV until switchover happens and the strength of the digital signal can be boosted.

And, as well as every home having a main TV set, most homes have at least one other set in the kitchen, in bedrooms or elsewhere. We estimate that there are over 35 million TVs which would need to be converted if switchover happened this year. We estimate that this number will stay at a similar level in 2010 because households are continuing to buy many more analogue TVs than digital TVs or digital converter boxes.

Does it matter that the growth of digital TV is likely to slow?

One problem is that, at first, the Government set a target of affordability for digital TV which was that 95% of homes had digital TV. That is unlikely to be achieved, mainly because Freeview is only available in about three-quarters of homes.

For the UK to gain the benefits of switchover, the Government needs to make a decision to start switchover before take-up reaches almost every household. This fact is a real challenge for switchover, but the conclusion should not be that switchover is impossible. Everyone should recognise that just allowing the market to carry on as it is, is unlikely to deliver switchover. We need a new strategy to overcome the obstacles in switchover's path.

The obstacles facing switchover if no action is taken

The popularity and take-up of digital television has been so rapid that it is easy to understand why the Government is committed to switchover but is not actively putting the change into practice.

However, our expectation about digital TV is that such a market-led approach is likely to hit natural limits. As we explained in the previous section, some households do not want to change to digital TV, other households do not want to get pay TV on cable or satellite, and even more households want to get Freeview but cannot receive it where they live. This means that high levels for digital take-up are unlikely to be met, including the Government's 1999 indicator of affordability which was set at 95% of households.

Specific obstacles in the way are shown below.

Consumer take-up

At present, some consumers do not value digital TV. Attitudes are likely to change (mobile phones, for example, were considered to have limited appeal in the early 1990s), but surveys of consumer attitude show that in 2003 some households (5%) said that they would be willing to live without TV

rather than change their sets to digital. Some more (15%) see little value in the greater choice digital TV offers.

Only a few currently support the policy of full switchover.

And, consumers are considerably less interested in changing secondary TVs than their main TV set.

Broadcasters' incentives

Broadcasters are crucial for achieving switchover, but they will need to have a clear incentive to help the UK achieve the switchover.

Though some of ITV's and Channel 4's costs would fall if they could stop broadcasting both a digital and an analogue signal, their income from advertising might also fall as switchover would increase the number of TV channels available.

The BBC has an equally difficult balancing act. Switchover would reduce its transmission costs, but any loss of viewers could reduce the public's support for the licence fee.

Free-to-view digital TV

Free-to-view digital TV (where viewers do not pay a monthly subscription) will still be an important feature of the TV market for the near future. However, around a quarter of households cannot receive it until switchover starts.

BSkyB offers to install a satellite dish and a set-top box for £169 and free-to-view satellite does not have the same coverage problems of Freeview. However, viewers cannot currently receive all the main TV channels – BBC1, BBC2, ITV, Channel 4 and Five – by satellite without paying a monthly subscription.

Timing issues

The Government has not announced a switchover timetable yet, so the timing of switchover lacks certainty. Without a more definite timetable, broadcasters, transmission companies, manufacturers and consumers will be less willing to invest in the equipment needed for the switchover.

Putting switchover into practice

For the past few years, many of the people and groups interested in switchover have met regularly to produce a Digital TV Action Plan. It has been very successful in setting out the steps needed for digital switchover. But as the UK moves from planning to putting switchover into practice we will need co-ordination and active management to complete the process effectively.

If the process is not managed efficiently, the risks are that switchover would not happen, or that a great deal of unnecessary disruption would surround the process.

International agreements

Many of the wider benefits of switchover would come only if spectrum can be reused after the analogue signal is switched off. We will represent the UK at important international conferences which will decide how the spectrum which has been released may be used. These international issues do not represent a specific obstacle to digital take-up, but the idea behind switchover depends on flexible use of the spectrum for the UK after these forthcoming conferences.

Our recommendations for a successful switchover

We believe the Government's ambition to switch off the analogue TV signal and to replace it with a digital signal is desirable, practical and achievable. But the challenges are considerable. Everyone involved in achieving a successful switchover – Government, us, broadcasters, manufacturers, retailers and consumers – needs to move up a gear and get ready to put switchover into practice. It will not happen, and the UK will not gain the benefits of greater TV choice and freed-up spectrum, if important decisions are avoided and action is not taken.

The most important hurdle to jump is one of co-ordination. The people who will benefit from switchover are spread more widely than those most likely to pay the costs of making the change.

In this report, our 30 main findings and recommendations are as follows.

Timing

- 1 We recommend a gradual switchover process so that TV screens do not go blank overnight. One or two analogue TV channels should be switched off first to allow the digital signal to be boosted before the other analogue TV channels are switched off. This would reduce, as far as possible, the disruption in UK homes.
- 2 Without a firm timetable for switchover, broadcasters and transmission companies will not be able to decide if and when the existing analogue equipment should be replaced. We recommend that switchover is not delayed too long. It should not come after the existing analogue transmission equipment's useful life has ended.
- 3 The most serious risk of an early announcement of the timescale is the possibility of making consumer attitudes worse towards switchover before the public see digital TV as a technological certainty.
- 4 However, the benefits of an early announcement of a precise timetable are:

- that consumers will know they have to buy equipment for the changeover;
 - broadcasters, transmission companies, manufacturers and retailers will be able to make investment decisions; and
 - we will be able to manage the regulatory framework.
- 5** An announcement of a timetable would encourage many households to buy digital TV equipment and would help digital switchover to be achieved between 2007 and the end of 2010. Consumer research shows that many current analogue households are prepared to buy digital TV receivers as long as they know that digital switchover is near. With most households already having bought digital television, the foundations for announcing a timetable have already been laid.
- 6** We have a big role to play in creating incentives to encourage people to buy digital TV and in removing some of the obstacles in the path of switchover.
- 7** Although broadcasters should not have to manage the process of switching over, it is reasonable to expect them to make a significant contribution, particularly by extending digital terrestrial coverage and by making sure viewers are properly informed about switchover. We will consider including the extra appropriate obligations in new broadcasting licences, due to be issued by the end of 2004.
- 8** We are already considering whether competition is effective in the broadcasting transmission market. We will try to make sure that if broadcasters agree to invest in new digital-transmission equipment, an agreement to roll out DTT does not result in broadcasters being charged too much.
- 9** We will consider charging companies who use the spectrum from 2006. This would give broadcasters an incentive to use as little as possible. If we decide to go ahead, charges could apply for the first time to the BBC, Channel 4 and S4C in 2006. ITV and Five already pay for their licences to broadcast, which automatically include a charge for using the

Our regulations

spectrum. We will ensure they do not pay twice for the use of the same spectrum.

10 Some of the extra obligations could raise costs for commercial broadcasters. Where appropriate, we will try to take account of the investments that they have made to achieve switchover.

11 We recommend that as part of the BBC's Royal Charter review, the Government adds new and specific obligations to the BBC's current general obligations to promote digital TV. These obligations should include building a full digital transmission network, providing public information, continuing to provide its channels on free-to-view satellite and providing on-air marketing of digital TV without any bias in favour of Freeview.

Free-to-view digital TV

12 Even if all consumers wanted to change over to digital, some would face a serious hurdle because around a quarter of households cannot receive Freeview.

13 Until switchover, free-to-view digital satellite could play an important role in increasing digital take-up among those who do not want to pay monthly subscriptions for TV. In areas not covered by Freeview, it is the only option. But free-to-view access to ITV, Channel 4 and Five is currently not possible on digital satellite. We will consider whether we need to impose regulations to make free-to-view satellite a more realistic option before switchover.

14 Depending on the actual coverage of the digital signal after switchover, we may need to consider further measures to make sure that all households can receive BBC1, BBC2, ITV, Channel 4 and Five on a free-to-view satellite system. We have the power to make certain broadcasters provide a way of receiving these services when households cannot otherwise receive them to an acceptable standard.

15 The Government should continue to try and remove the barriers which prevent progress towards switchover, for example, planning restrictions which prevent placing satellite dishes on certain buildings.

Consumer information and advice

- 16** Although half of households have digital TV, the other half are unlikely to go digital as quickly. Switchover will simply not be possible unless consumers believe in its benefits.
- 17** Well before switchover, a national advertising campaign should explain to all households that switchover is coming and should try to build up public support. We should also introduce a new consumer-labelling scheme to warn consumers that unconverted analogue equipment will not function past a set date. This needs to be put in place with the support of manufacturers and retailers.
- 18** Around the switchover date consumers will need further information and support. The promotion drive should not just include on-air advertising, but also direct marketing, helplines and clear product labelling. We will need to see a regional communications campaign in the immediate run-up to analogue switch-off. Advice must be tailored to households who cannot receive the digital signal until switchover starts.

- 19** After switchover is completed, we will also need to offer continuing support to consumers who are still not sure or confused about changing to digital.

A move from planning to putting into practice

- 20** The Digital TV Action Plan has been effective in helping the Government make a decision on switchover. However, it is not aimed at dealing with the process of making switchover happen. We need to see active management to complete switchover effectively.
- 21** Once agreement has been reached between broadcasters, the Government, us and others, we recommend that an organisation is set up (SwitchCo), to be responsible for the switchover. They should have a set date to complete the task.
- 22** SwitchCo should:
- highlight the benefits of switchover;
 - provide public information;
 - provide support when switchover starts;

- make sure products are clearly labelled;
- work with all the interested parties;
- report on their progress; and
- make sure that information to consumers is not biased in favour of one form of receiving digital TV.

23 Many interested parties – the Government, the broadcasters, us manufacturers and retailers – will continue to have important roles to play in delivering switchover and must agree to the process. However, none of those mentioned should run SwitchCo because their interests are too wide-ranging. Instead, SwitchCo should be independent enough so it can represent the consumer effectively and avoid conflicts of interest.

24 The Government should make sure SwitchCo has enough resources to achieve its tasks. It will need funding for running costs, spending on marketing and consumer support around switchover. Funding could come from a number of possible sources including direct public spending, part of the BBC licence fee, or private finance which comes

from the money made from charging for using the spectrum. Since the economy as a whole will receive the biggest benefit from switchover, the funding mechanism should not put too heavy a burden on any one group, organisation or company.

Affordability

25 Even if digital take-up is very high, the cost of digital conversion may still be a significant barrier for some households. It risks leaving a few households without TV after switchover. Households with high incomes are currently more likely to have digital TV than poorer households, so the costs of switchover would currently fall mostly on the poor.

26 These costs do not need to be a great barrier to switchover. The price of a basic converter box in 2004 is already less than half the cost of the annual TV licence fee. Prices are likely to fall over time, and many consumers will buy converters of their own accord in coming years.

- 27** By the time switchover takes place there is still likely to be a small affordability problem. Any financial support would reduce some of the resistance to switchover. However, decisions on financial support do not need to be taken immediately.
- 28** At a later date, the Government should consider the costs and benefits of offering limited financial help to particular groups, similar to the free BBC licence fee scheme for over-75s. To avoid the danger that some households might wait until the last minute in the hope of receiving financial support, any scheme should be available to all households in a certain group rather than just the households that have not changed their TV sets to digital.

International issues

- 29** The benefits of switchover depend on using the spectrum flexibly. The UK's strategy should be to try and make sure the UK's current plan for digital TV is fully protected. It should also aim to protect future UK use of the released spectrum.
- 30** In the 2004 and 2006 international conferences, the UK will aim to protect its digital broadcasting plans and keep options open for any cleared spectrum made available after switchover. In the 2007 and 2010 international conferences, the UK will try to gain the maximum flexibility for the freed-up spectrum for broadcasting and other uses.

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