



The BBC's investment in Freeview

NAO review presented to the BBC Governors' Audit Committee,
May 2004, by the Comptroller and Auditor General, and a response
to the review from the BBC's Board of Governors

Response from the BBC's Board of Governors

The National Audit Office (NAO) review of the BBC's investment in Freeview was the first external study to be undertaken following an agreement in 2003 between Government and the BBC to evolve the BBC Governors' overview of value for money into a programme of reviews.

The overall approach of the reviews has been determined by the BBC's Audit Committee, composed exclusively of Governors, on behalf of the Board of Governors. A key constituent of the programme is the appointment of external agencies, including the NAO, to undertake certain topics for review within the programme. A programme of six reviews until the end of the current Charter has been agreed between the BBC's Audit Committee and the NAO's Comptroller and Auditor General.

The NAO's review of the BBC's investment in Freeview was undertaken between January and May 2004. In summary the report concluded that "the BBC had clear and sound reasons for investing in Freeview and that the BBC contributed significantly to the quick and successful launch" in October 2002. The BBC welcomes this conclusion.

A successful launch within a tight timescale was a crucial objective for Freeview. It enabled the BBC to offer subscription-free access to all its digital television and radio services, while rescuing the ailing Digital Terrestrial Television (DTT) platform. The NAO report states that, since the launch of Freeview, take-up of digital terrestrial television has significantly exceeded the BBC's projections.

Freeview is now watched on first sets in over 3.5 million households compared to an estimated 300,000 households receiving BBC digital channels on a free-to-view basis in 2001. This growth demonstrates a previously unmet demand among consumers for non-subscription digital television. Indeed Freeview is now the key driver in increasing overall digital take-up,

which has increased from 38% in November 2002, when Freeview was launched, to 53% of households (13 million homes) in March 2004.

The BBC therefore welcomes:

- the NAO's recognition of the progress the BBC has made in driving digital take-up via DTT with the provision of a free-to-view service, which in turn supports the Government's targets for digital switchover
- the NAO's recognition of the steps taken by the BBC to increase Freeview coverage, and that full coverage now depends on the future actions taken by the Government and other industry parties, as outlined in the BBC's report to Government, *Progress Towards Achieving Digital Switchover*
- the NAO's recognition of the BBC's efforts to make its digital services more readily available to those who cannot receive Freeview, for example by broadcasting unencrypted on satellite since July 2003

Actions taken to address the NAO's recommendations

The NAO makes a number of observations and recommendations within its report. While the resolution of some of these areas is outside the BBC's control and includes dependencies with other external parties, the BBC is already taking active steps to address these recommendations to ensure wide access to the BBC's digital services.

Specifically the BBC would like to highlight the following actions being taken as reported against each of the BBC's stated objectives for its involvement in Freeview. The response focuses in particular on the objectives which the NAO have judged partial rather than complete successes.

Objective:**Secure digital terrestrial television****Succeeded**

The BBC welcomes the NAO's conclusion that the BBC has succeeded with this objective. The BBC's investment in Freeview sought to protect the DTT distribution platform; to restore the overall credibility of digital television amongst consumers; and most importantly to increase the availability of the BBC's digital services, for free, to as many licence payers as possible.

Objective:**Launch Freeview according to the planned timetable****Succeeded**

The BBC ensured that the bid for Freeview was submitted within the ITC's demanding timescale of less than six weeks by putting together its strategy, marketing and investment plans in a clear and concise manner to meet the deadline. The BBC therefore welcomes the NAO's conclusion that it acted pragmatically by fast-tracking decision-making within the organisation. The BBC approvals process was accelerated without diminishing its rigour. The BBC rose to the ITC's challenge by proving it could act in a nimble and professional manner where necessary, and the quality of the BBC's bid was recognised by the ITC in awarding the DTT licence to launch Freeview.

Objective:**Ensure that people can receive BBC digital services without paying a subscription fee****Partial success**

Prior to the launch of Freeview, there were very limited options for making the BBC's digital channels available to the consumer without charging a subscription. The BBC is committed to universality and to trying to make the BBC's services free at the point of use wherever possible.

Detailed market research has regularly identified that a significant proportion of analogue households are not prepared to pay a subscription in order to convert to digital. On that basis the concept of a wholly free-to-view platform, placing the BBC's digital services at the heart of the proposition, was developed in 2001/2.

When ITV Digital failed, an opportunity to deliver this strategy presented itself and the concept of Freeview evolved. Initial BBC take-up projections of 2.1 million households receiving free-to-view services via DTT by March 2004 were far exceeded – with the actual figure amounting to 3.4 million in the same time.

Since the launch of Freeview, the BBC has continued to look at a range of ways of making its services free-to-view through other distribution mechanisms and platforms. For example, the BBC now broadcasts unencrypted on satellite and supports the development of a free-to-view satellite service offering consumers across the UK, and specifically those out of Freeview coverage, the chance to receive the BBC's digital services.

Objective:**Increase awareness of subscription-free access to BBC digital channels****Partial success**

The BBC's campaigns to promote its digital channels across Freeview, satellite and cable have been a significant driver behind the consumer response to Freeview. Ongoing market research is being undertaken which ensures the BBC fully understands the motivations of those yet to enter the digital world.

The BBC will be continuing to promote the BBC digital channels and services through Freeview, cable and satellite throughout 2004, and has a new dedicated on-air campaign planned for autumn 2004. This campaign will direct viewers towards the BBC digital website and telephone number for further information on digital.

Steps are also being taken, through increasingly successful and targeted marketing campaigns, to address customer confusion among analogue audiences over Freeview. Specifically, digital on-air trails will continue to emphasise that up to 30 free digital channels can be received following a one-off payment for equipment. The introduction of dual trailing, whereby the BBC broadcasts different trails simultaneously in analogue and digital homes, means that the power of these 'how to get' campaigns will be maximised among analogue audiences, while not alienating digital viewers who already benefit. The BBC has been piloting dual trailing since May 2004. Subject to results, it is expected that the initiative will be rolled out all day and every day of next year.

In order to increase the number and distribution of those yet to convert to digital, the BBC is working hard to make its digital services more readily available to those who cannot currently receive Freeview.

Since July 2003, households have been able to receive the BBC's digital services unencrypted on digital satellite. This means that viewers can access all of the BBC's digital channels and radio stations via satellite receiving equipment, irrespective of whether a consumer subscribes to a pay satellite service or not. Furthermore, the BBC recognises the need to offer those viewers living outside Freeview coverage areas, and those within coverage but requiring an aerial upgrade, the option of a consumer-friendly free-to-view satellite package.

To that end the BBC is keen to draw on its expertise, as demonstrated by Freeview, in forming successful industry alliances to establish a proposition and offer consumers a free-to-view alternative as soon as practicable.

On behalf of the BBC, the Governors thank the NAO for this value for money study.

June 2004

The BBC's investment in Freeview

REVIEW BY THE COMPTROLLER AND AUDITOR GENERAL
Presented to the BBC Governors' Audit Committee 28 May 2004



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The National Audit Office scrutinises public spending on behalf of Parliament.

The Comptroller and Auditor General, Sir John Bourn, is an Officer of the House of Commons. He is the head of the National Audit Office, which employs some 800 staff. He, and the National Audit Office, are totally independent of Government. He certifies the accounts of all Government departments and a wide range of other public sector bodies; and he has statutory authority to report to Parliament on the economy, efficiency and effectiveness with which departments and other bodies have used their resources.

Our work saves the taxpayer millions of pounds every year. At least £8 for every £1 spent running the Office.

The National Audit Office team consisted of:

Keith Hawksell, Keith Davis, Richard Gauld and Mark Simpson.

PREFACE

This is the first National Audit Office review to be produced under an arrangement agreed between the Government and the BBC in 2003, in the context of Parliament's consideration of the Communications Bill. The arrangement provided for the BBC Governors' Audit Committee to decide on a programme of value for money reviews following discussion with the Comptroller and Auditor General, and to allocate some of those reviews to the National Audit Office. The programme of reviews covers the period up to the end of 2006 when the BBC's current Royal Charter expires.

This review examines the BBC's decision to invest in Freeview, looks at how Freeview is operating, and assesses what impact the BBC's investment has made so far.

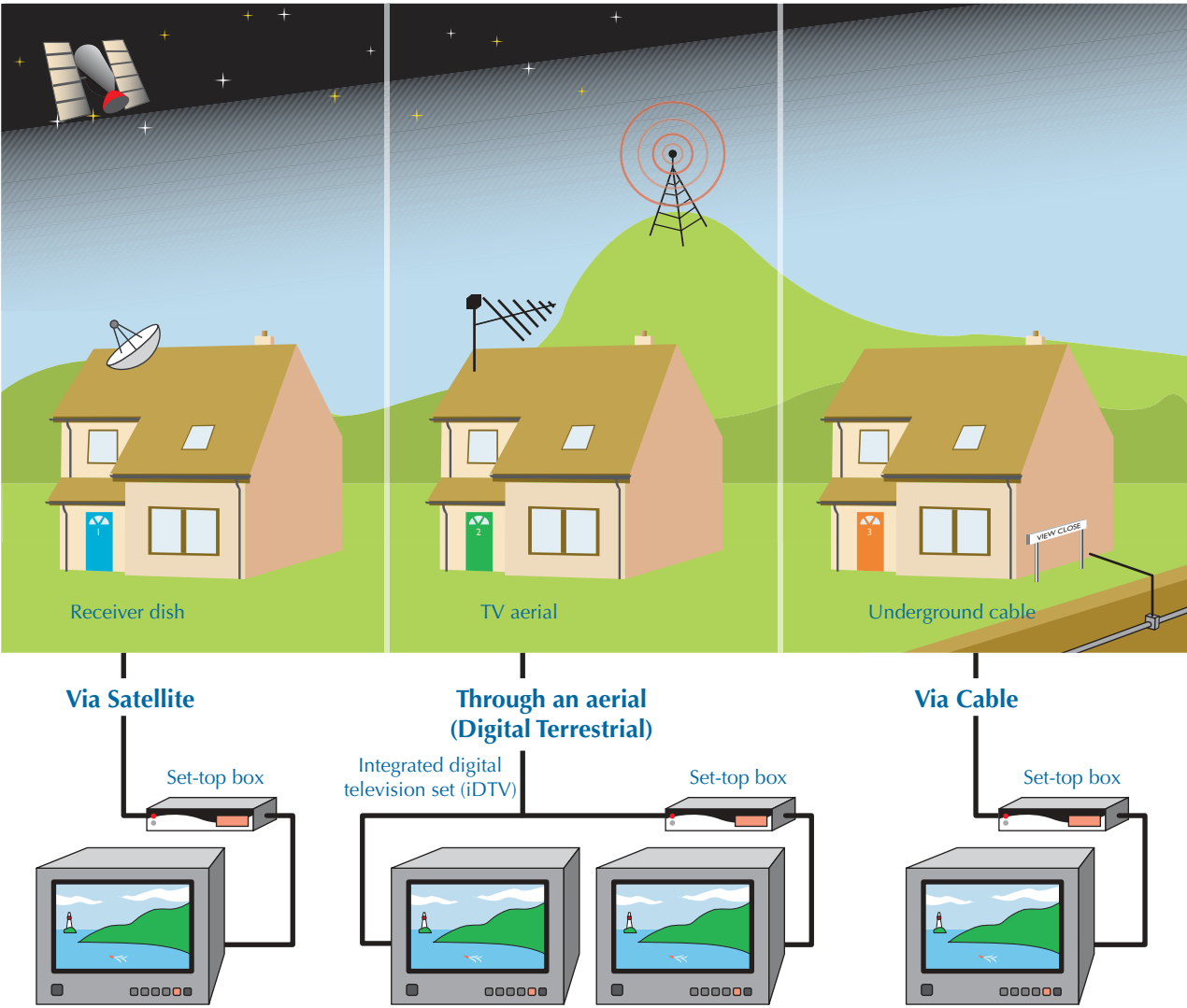
The report is structured as follows:

- Background to the BBC's investment in Freeview
- Analysis, findings and recommendations
- Main report
- Methodology
- Glossary

BACKGROUND TO THE BBC'S INVESTMENT IN FREEVIEW

- The government is seeking to switch off analogue terrestrial television signals and to ensure that everyone who currently receives the public service channels (BBC 1, BBC 2, ITV, Channel 4/S4C and Five) in analogue can receive them in digital. The government expects that this digital 'switchover' could start in 2006 and be completed in 2010.
- The BBC is obliged to promote digital television as part of an enhanced licence fee settlement. It broadcasts eight television services and ten radio stations on digital satellite, digital cable and digital terrestrial (Figure 1).

1 How the BBC's digital television services can be received in the UK



NOTE

Integrated digital televisions (iDTVs) are television sets with a built-in receiver able to decode and display a digital signal.

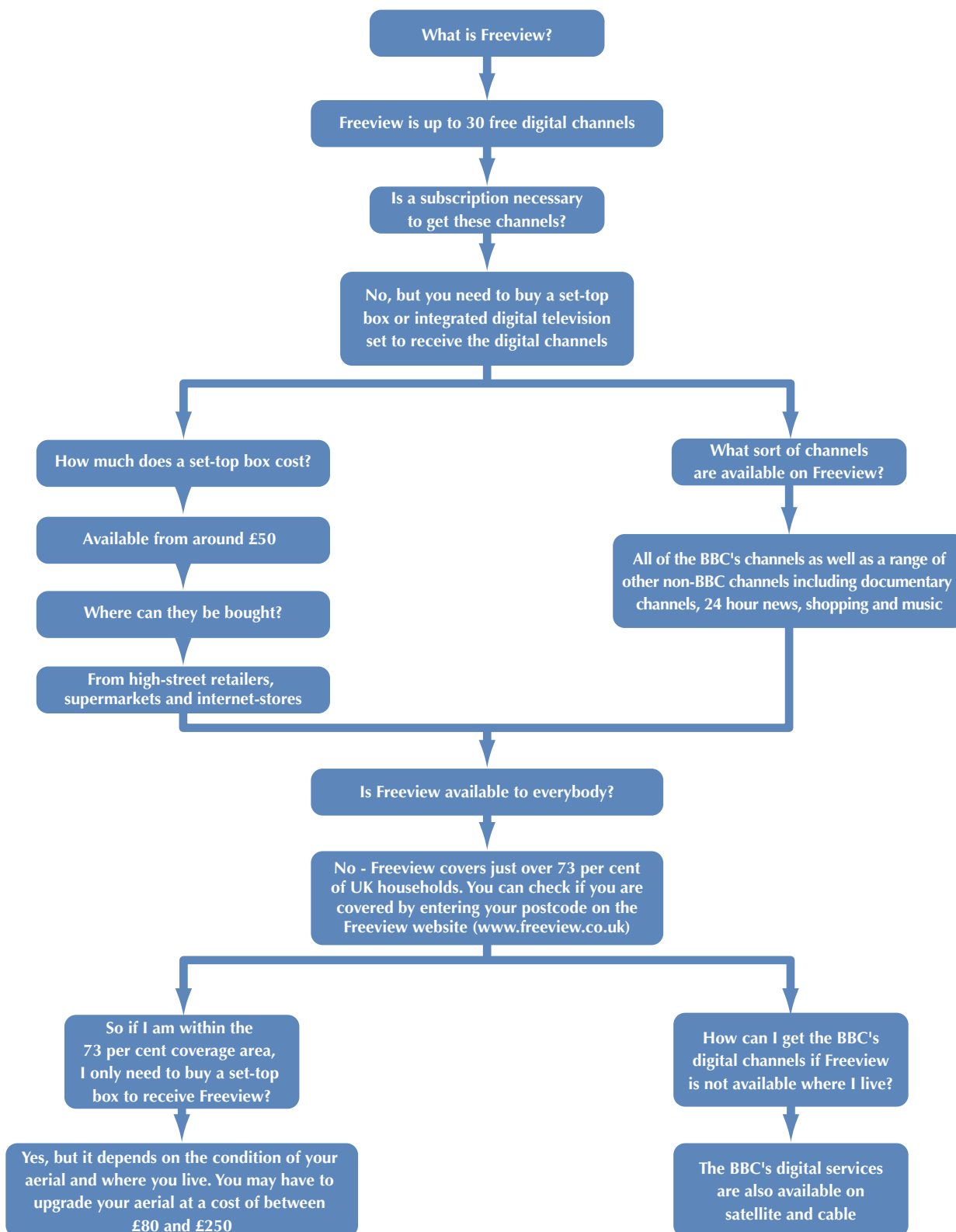
Source: National Audit Office

- BBC research has indicated that a significant proportion of licence fee payers who do not have digital television might convert to digital if they could receive it subscription-free through their television aerial.
- Digital terrestrial television (digital through a television aerial) is spread across six digital 'multiplexes' (named 1, 2, A, B, C and D). Each multiplex consists of a frequency band in the radio spectrum which can be used to transmit several digital terrestrial television services. Multiplexes can also be used to transmit radio and data services such as Teletext.
- When digital terrestrial television was launched in the UK in 1998, the multiplex licences were held by four different organisations:

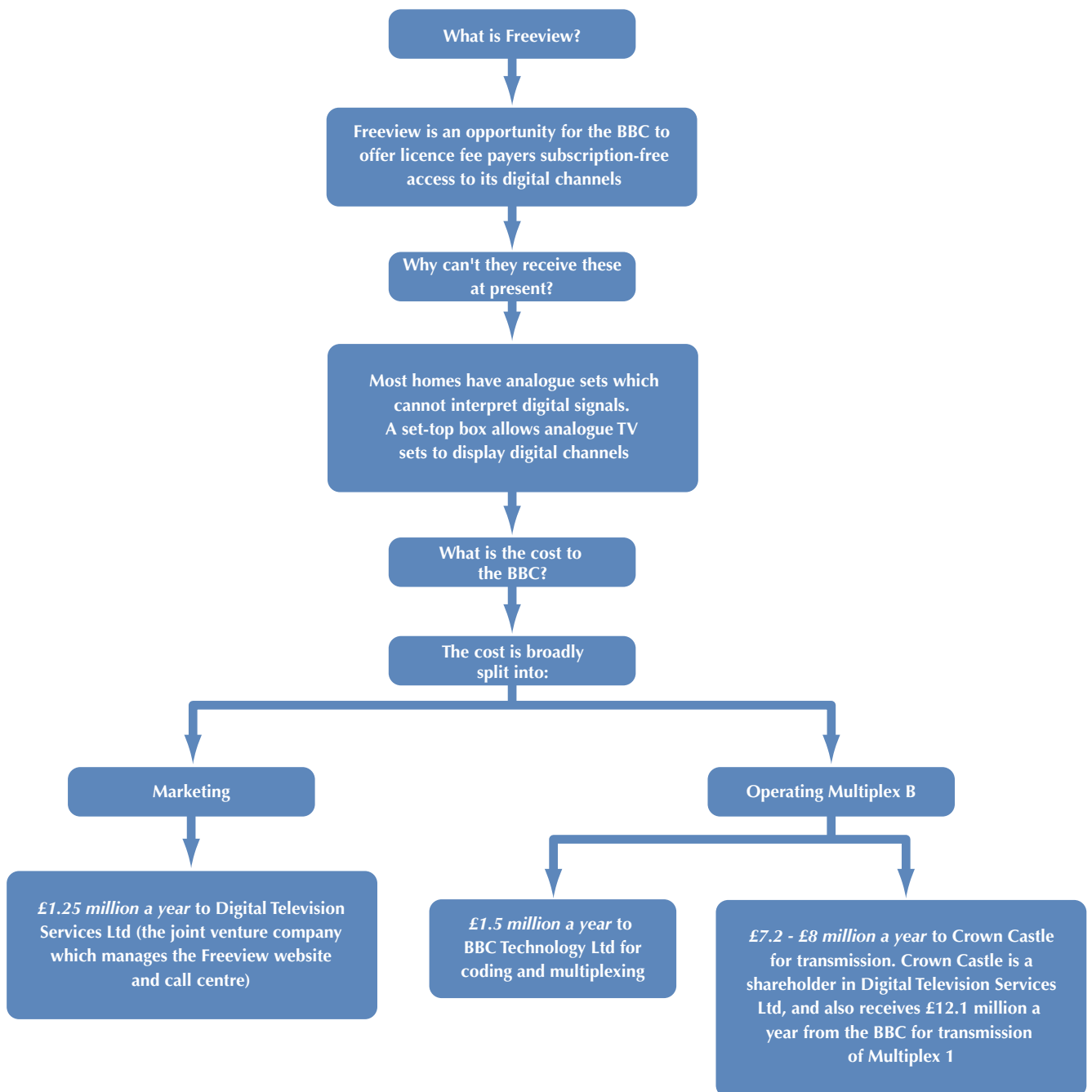
| Multiplex | Held by |
|------------------------|---|
| Multiplex 1 | Given to the BBC by the government. |
| Multiplex 2 | Reserved by the government for ITV licensees, Channel 4 and the public teletext service (they had to bid for the multiplex, but were the sole bidders). ITV and Channel 4 formed a separate company (Digital 3 and 4 Ltd) to hold the licence. |
| Multiplex A | Auctioned, but had reserved capacity for Channel 5 and S4C (the Welsh language broadcaster). S4C Digital Networks Ltd was formed to hold the licence. |
| Multiplexes B, C and D | Auctioned separately - British Digital Broadcasting Plc (later renamed ITV Digital) successfully bid for all three. |

- Multiplexes B, C and D were readvertised in May 2002 after ITV digital, who held these three licences, went into administration.
- The BBC decided to make a linked bid with Crown Castle (a company involved in digital terrestrial transmission) for the three readvertised licences. The BBC was awarded Multiplex B and Crown Castle was awarded Multiplexes C and D.
- The BBC and Crown Castle worked with BSkyB to develop 'Freeview', the brand name for a package of subscription-free television and radio (including all the BBC's digital services) broadcast on digital terrestrial television. This collaboration led to the setting up of a joint venture company (Digital Television Services Limited), in which the three parties are equal shareholders, to provide marketing support for Freeview.
- Freeview was launched in October 2002.
- (The diagrams on pages 7 and 8 show what Freeview means to the licence fee payer and to the BBC.)

What Freeview means to the licence fee payer



What Freeview means to the BBC



Source: National Audit Office

ANALYSIS, FINDINGS AND RECOMMENDATIONS

- 1 The BBC estimates that investing in Freeview will cost between £10.7 million and £11.5¹ million a year over the next 12 years. The BBC is funding this through licence fee income.
- 2 Our overall conclusion, against the background of the Government's intention to switch from analogue to digital transmission, is that the BBC had clear and sound reasons for investing in Freeview and that the BBC contributed significantly to the quick and successful launch. Since the launch of Freeview, take-up of digital terrestrial television has significantly exceeded the BBC's projections and this has helped make progress towards digital switchover. However, a quarter of licence fee payers are not able to receive Freeview and it is therefore less easy for them to benefit from the BBC's investment in providing and promoting subscription-free digital services.
- 3 As a shareholder in the Freeview company, the BBC is taking a range of actions to drive Freeview further forward, particularly in relation to reducing consumer confusion and increasing take-up. In addition to the efforts made to let licence fee payers know whether they can get Freeview, the BBC needs to explain clearly why Freeview is unavailable in some areas, and the steps that are being taken to address this. It should also work with the Freeview company (Digital Television Services Limited) to look at whether the facility which allows consumers to check whether they can receive Freeview based on their postcode can be improved by giving details of the individual digital channels that can be received at a given postcode.

¹ This includes £7.2 - £8.0 million of transmission costs which the BBC might have incurred independently of the Freeview project, as part of efforts to obtain more capacity.

- 4 Drawing on BBC documentation and discussions with BBC staff, we identified four broad objectives that the BBC aimed to achieve through its investment in a new digital terrestrial service, Freeview. In the table below we set out our findings and an assessment of how successful the BBC has been so far in achieving each objective.

- **Increasing its stake in digital terrestrial television fitted well with the BBC's objectives for digital services.**
- **If, when ITV Digital went into administration, the digital terrestrial television market had been weakened or ceased to exist, this would have been damaging to the BBC given the investment it had already made in digital terrestrial.**
- **The BBC adopted an accelerated approvals process in response to a demanding timetable.** To ensure that a bid for additional digital terrestrial capacity was submitted to the Independent Television Commission by the required date, the BBC's Executive Committee did not request a single detailed written investment document for Freeview, as it would normally have done, but it did receive documents which identified the main costs and benefits of Freeview, the key risks and how they could be managed.
- **The BBC judged that it would be a more attractive proposition for it to collaborate with other bidders, rather than bid alone and in potential competition with other consortia.**

Objective:
Secure digital terrestrial television

Succeeded

- **The BBC and its partners met a demanding timetable for launch.**
- **The joint venture was set up with safeguards for the BBC.** While there are risks that the goals of the shareholders are less well-aligned than is desirable in a joint venture, the shareholders managed this risk by ensuring that any significant changes to the joint venture cannot be made without support from all three shareholders.
- **The Freeview company quickly became operational** and it is now dealing with several hundred thousand consumer enquiries a month.

Objective:
Launch Freeview according to the planned timetable

Succeeded

- **Freeview offers viewers subscription-free access to BBC and other digital channels in return for a one-off payment for a set-top box.** The BBC's digital terrestrial costs are financed from the licence fee.
- **The BBC considered that its main priority was to ensure that Freeview was launched according to the planned timetable.** It also provided confidential take-up projections to the Independent Television Commission, but it did not consider take-up to be a primary objective.

Objective:
Ensure that people can receive BBC digital services without paying a subscription fee

Partial Success

- **Seventy-three per cent of households can now receive Freeview** and almost one in two households can receive it through their existing aerial. Within this there are wide regional variations: in the BBC's North West region 93 per cent of households can receive Freeview but in the South East only 45 per cent can. The BBC has taken the action agreed in its bid to increase coverage and is working to provide subscription-free access to its digital services in areas where Freeview is available.
- **Freeview has been a clear success so far in terms of take-up by consumers.** Freeview is now watched in more than 3 million households. The BBC's campaigns to promote its digital channels, which have been designed to also promote the existence of Freeview, alongside satellite and cable, have been a big factor behind the consumer response to Freeview.
- **Achievement of this objective depends on factors outside the BBC's control.** Significant further increases in digital terrestrial coverage will only be achievable when switchover occurs.

Objective:

Increase awareness of subscription-free access to BBC digital channels

Partial Success

- **Almost three out of four people in the BBC's survey are now aware of the Freeview brand.**
- **The BBC's campaigns have not yet succeeded in significantly reducing consumer confusion about Freeview in non-digital households.** While consumer take-up has been high, indicating that many have understood the concept, more than half of the remaining households that have not converted to digital believe that they have to pay a subscription in order to receive the BBC's digital services. The BBC is working to address this in its digital campaigns, and its evaluations show that more recent campaigns have been much more effective than earlier campaigns in getting the subscription-free message across to viewers.
- **The BBC could provide clearer information to licence fee payers about why they may be unable to receive BBC digital services through Freeview.** The BBC has helped develop a service which allows licence fee payers to use their postcode to check whether they can get Freeview. However, there is still confusion among licence fee payers about why Freeview, which is funded partly by the licence fee, is not available to a quarter of UK households.

- 5 The main risks facing the BBC as its investment in Freeview moves forward are summarised in **Figure 2** along with the action taken by the BBC to reduce them. It is important that the BBC manages these risks carefully to ensure the future of its investment is secure and that it delivers value for money.

2 Ongoing risks to the BBC's investment in Freeview

| Risk | Impact if risk transpires | Probability of risk transpiring | Action taken by the BBC to reduce the risk |
|--|---|---|---|
| Licence fee payers do not understand that they can get the BBC's digital services without paying a subscription. | Take-up will not be maximised. Criticism of the BBC because licence fee payers perceive that they should be able to get BBC digital services without paying a subscription. | Medium. There is continuing confusion among licence fee payers about whether Freeview is a subscription service (see Figure 22). | The BBC's digital trails emphasise a one-off payment for a 'Freeview box' in order to receive up to 30 free digital channels. The BBC's digital trails are supported by leaflets, a postcode checker and website. All mention satellite and cable as well as Freeview. The BBC conducts ongoing market research which keeps it abreast of how consumers are viewing the service. |
| Coverage limitations undermine the Freeview product. | Criticism of the BBC for failing to ensure that all licence fee payers can receive its digital channels which, in turn, impacts on the reputation of both Freeview and the BBC. Impact also on level of take-up. | Medium. Significant further increases in coverage are unlikely before digital switchover, however the Government currently envisages that switch over could start in 2006 and be completed by 2010. | The BBC has taken steps to increase coverage. It is also working to make its digital services more readily available to those who cannot receive Freeview. For example, since July 2003, households have been able to receive the BBC's digital services subscription-free on satellite if they make a one-off purchase of a satellite dish and a set-top box. Further significant increases in digital terrestrial coverage can only be achieved if analogue signals are switched off. |
| The other shareholders withdraw or try to change Freeview's direction. | If one or both shareholders withdraw the BBC would incur increased costs though these would not be significant in terms of the BBC as a whole. If the BBC had serious concerns about the direction of the company it might have to withdraw and establish an alternative. | Low. Although the objectives of the BBC and BSkyB may not be fully aligned, they have a shared interest in driving the take-up of digital television. | Freeview offers benefits to both Crown Castle and BSkyB. Crown Castle receives income from leasing out the channels on the multiplexes and BSkyB is able to increase the awareness of the Sky brand in a wider range of households and increase its advertising revenue. The interests of the individual shareholders are protected by the Shareholders' Agreement which sets out a series of matters requiring unanimous agreement. |

Source: National Audit Office

Chronology of key events

| | |
|------------------------|--|
| 1995 | BBC sets up digital pilot project to demonstrate the feasibility of digital television. |
| 1996 | BBC sets up digital project team with brief to launch BBC digital services on satellite, terrestrial and cable. |
| 1996 | Government announces plans for the introduction of digital terrestrial television based on the use of six digital multiplexes (a multiplex is a frequency band in the radio spectrum which can be used to transmit several digital television channels). The Government allocates the first multiplex to the BBC. The Broadcasting Act 1996 enabled the Independent Television Commission to license the remaining five multiplexes. |
| December 1997 | Multiplex 2 awarded to Digital 3 & 4 Ltd and Multiplexes B, C and D awarded to British Digital Broadcasting plc. Jointly owned by Carlton Communications and the Granada Group, British Digital Broadcasting was renamed ONdigital in 1998 and then ITV Digital in 2001. |
| May 1998 | Multiplex A awarded to S4C Digital Networks Ltd. |
| October 1998 | Digital satellite launches in the UK. |
| November 1998 | Digital terrestrial television launches in the UK. |
| September 1999 | Secretary of State for Culture, Media and Sport announces that switching off analogue terrestrial television signals could start in early 2006 and be completed by 2010. |
| October 1999 | Digital cable launched in UK. |
| 27 March 2002 | ITV Digital goes into administration after Carlton and Granada decide to pull out of a £315m contract for the TV rights to Nationwide League football games. |
| 30 April 2002 | ITV Digital surrenders multiplex licences B, C and D to the Independent Television Commission. The Independent Television Commission re-advertises the licences and receives six bids. |
| 13 June 2002 | The BBC and Crown Castle submit linked applications to the Independent Television Commission for Multiplex Licences B, C and D. The applications included a plan to form a cost recovery venture to provide technical and marketing services in support of the three multiplexes. BSkyB was not a party to the licence application but did become a shareholder in the cost recovery venture - Digital Television Services Limited. |
| 4 July 2002 | The Independent Television Commission announces that the BBC and Crown Castle have been successful in their bids for multiplex licences. Multiplex B is granted to BBC Free to View Ltd (a wholly-owned subsidiary of the BBC) and Multiplexes C and D to Crown Castle. BSkyB agrees to broadcast three of its channels on Multiplex C and contribute to the consortium's marketing efforts through Digital Television Services Limited. |
| 30 October 2002 | A subscription-free service, with twenty-four full-screen simultaneous TV channels as well as digital radio and some improved support for interactive services, is launched under the brand "Freeview". The service is broadcast from 80 digital terrestrial transmitters. Marketing support for Freeview is provided by Digital Television Services Limited which is run by its three shareholders: the BBC, Crown Castle International and BSkyB. Responsibility for the programmes shown on digital terrestrial television rests with those providing the programmes. |
| 31 March 2004 | A subscription-based service is launched on digital terrestrial by Top Up TV Ltd (a private company in which the BBC does not have a stake) using capacity on multiplexes 2 and A. The channels offered by Top Up TV are not part of the Freeview service and are not included under the Freeview brand. |

1.1 This part of the review examines what Freeview is and why the BBC invested in it. It covers:

- how well the investment fitted with the BBC's objectives for digital services; and
- whether the decision was properly considered by the BBC.

3 The status of the BBC

The BBC is a public corporation, established by Royal Charter. Many of its public obligations are set out in an Agreement between the Secretary of State for Culture, Media and Sport and the BBC. It is funded mainly by the television licence fee. The Government sets the licence fee which supports the BBC, and granted the BBC £2.6 billion in 2002/03.

- The Secretary of State for Culture, Media and Sport has some responsibilities which can be used to ensure that the BBC keeps to the terms of the Royal Charter and the Agreement.
- The BBC Governors are responsible for ensuring that the BBC meets all its statutory and other obligations (including those in the Charter and Agreement).
- Ofcom is responsible for regulating some aspects of BBC content and programme-making and has some regulatory responsibilities in respect of licences to operate digital television services. Such licences are needed only for services provided on a commercial basis by the BBC's subsidiaries. No licences are necessary for the services provided by the BBC itself.

Source: National Audit Office

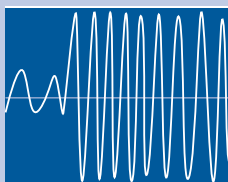
Freeview is a digital terrestrial service

1.2 Digital television was launched in the UK in 1998 (Figure 4). The BBC broadcasts a number of digital services which can be received via a satellite dish, a roof-top television aerial (this is known as digital terrestrial television) or digital cable (see Figure 1 on page 2). The BBC provides all of its digital services to all distribution platforms without charge.

4 What is digital television?

Television and radio transmission in the UK has, until relatively recently, relied on analogue technology. Analogue transmission is based on sending pictures and sounds as a continuous electronic wave. Digital transmission uses binary code to send pictures and sounds as streams of zeros and ones. Digital code uses less space (or bandwidth) than analogue signals so several digital channels can fit into the bandwidth needed to transmit one analogue channel

Analogue data



Digital data

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01000101000
10100100011
00101100101
101100
```

Source: National Audit Office

- 1.3 Freeview is the brand name for a package of subscription-free digital television and radio services (including the BBC's digital channels) which is available on digital terrestrial television. Digital terrestrial television has fewer channels and more limited interactive services than satellite or cable (**Figure 5**). Prior to Freeview, licence fee payers had only very limited opportunities to access the BBC's digital services without paying a subscription.

5 Key differences between digital terrestrial and the other main digital television platforms

- Digital terrestrial television can be easier to install than satellite or cable as it does not require a satellite dish or connection to a cable network.
- Digital terrestrial is available to more households than digital cable, but it does not offer the near universal coverage which satellite offers.
- Digital terrestrial currently offers at least 28 channels. Over 100 channels are available on cable and over 200 on satellite.
- Digital terrestrial offers interactive services, but these are more limited than those available on cable and satellite.
- Satellite, digital terrestrial and cable television all offer subscription-based services. However, BBC channels can be watched subscription-free on digital terrestrial and satellite.

Source: National Audit Office

- 1.4 Digital terrestrial television in the UK is licensed under the 1996 Broadcasting Act. This Act defined six digital 'multiplexes', each one consisting of a frequency band in the radio spectrum which can be used to transmit several digital terrestrial television channels as well as radio and data services such as Teletext. Under the 1996 Act, the BBC was given one digital multiplex (Multiplex 1).
- 1.5 In 2002, ITV Digital, which owned three multiplex licences, went into administration and returned its multiplex licences to the Independent Television Commission (now replaced by Ofcom). The Independent Television Commission invited interested parties to bid for the licences. The BBC decided to make a linked bid with Crown Castle (a digital terrestrial television transmission provider). The BBC was awarded Multiplex B and Crown Castle was awarded Multiplexes C and D (**Figure 6**). Together with BSkyB, the BBC and Crown Castle also developed a proposal to establish a joint venture company to market subscription-free digital terrestrial television, which subsequently became known as 'Freeview'.

Investing in Freeview fitted well with the BBC's digital objectives and its commitment to the digital terrestrial platform

- 1.6 'Strengthening the BBC's digital services with the aim of providing something of value for all digital audiences' is one of the BBC's key objectives. By 2002-03 the BBC was spending £350 million² of its licence fee revenue on digital services (**Figure 7**).

² Excludes some digital-related spend such as on newsgathering for digital channels and marketing digital services.

6 Changes in the ownership of multiplex licences since 1998

| Multiplex | 1998 ¹ | 2004 |
|-----------|---|--------------------------|
| 1 | BBC | BBC |
| 2 | Digital 3 & 4 Ltd | Digital 3 & 4 Ltd |
| A | S4C Digital Networks Ltd | S4C Digital Networks Ltd |
| B | British Digital Broadcasting Plc ² | BBC |
| C | British Digital Broadcasting Plc | Crown Castle |
| D | British Digital Broadcasting Plc | Crown Castle |

NOTES

1 Digital terrestrial television was launched in the UK in 1998.

2 Renamed ONdigital in 1998 and ITV Digital in 2001.

Source: National Audit Office

7 BBC services available on digital platforms

| Television | Radio | Interactive |
|----------------|-------------------|-------------|
| BBC 1 | Radio 1 | BBCi |
| BBC 2 | Radio 1 Xtra | |
| BBC 3 | Radio 2 | |
| BBC 4 | Radio 3 | |
| CBBC | Radio 4 | |
| CBeebies | Radio Five Live | |
| BBC News 24 | BBC 6 Music | |
| BBC Parliament | BBC 7 | |
| | BBC Asian Network | |
| | BBC World Service | |

Source: BBC

The BBC's plans for Freeview supported its aims to offer BBC digital television subscription-free

- 1.7 The BBC's digital television channels were approved by the Secretary of State for Culture, Media and Sport on the basis that they would be made available throughout the UK to licence fee payers with appropriate receivers and would be 'free at the point of use'. Prior to the launch of Freeview, digital television in the UK was largely synonymous with subscription services. At the end of 2001, the BBC estimated that only around 300,000 households were receiving its digital channels on a subscription-free basis.³

³ Subscription-free services were (and still are) available on satellite.

- 1.8 The BBC wanted its digital services to be available to licence fee payers who did not want to pay monthly subscriptions but were willing to make a one-off payment for a digital receiver. The BBC considered that digital terrestrial television could be used to provide the BBC's digital services at relatively low cost to licence fee payers who did not want to subscribe to pay-TV services and that without this option, funding digital channels from the licence fee would be difficult to justify.
- 1.9 The BBC commissioned research into the market potential for a non-subscription digital set-top box and this indicated potential consumer interest in a set-top box priced at around £99.⁴ This research showed that digital terrestrial had the potential to attract licence fee payers who would not consider getting satellite or cable.
- 1.10 The BBC subsequently developed a proposal in November 2001 to create an alliance with other broadcasters willing to provide channels on a subscription-free basis to market digital terrestrial television and work with manufacturers and retailers to encourage them to sell set-top boxes for under £100. Under this proposal, the BBC envisaged that ITV would provide a pay upgrade option which would allow viewers to subscribe to additional channels.
- 1.11 The BBC recognises that investing in digital terrestrial television cannot by itself provide all licence fee payers with access to the BBC's digital services, and that its aim to provide universal access depends partly on the actions of Government and others in the industry (**Figure 23 on page 33**).

The investment fitted with the BBC's existing plans to increase its digital terrestrial capacity

- 1.12 The BBC could not put all of its television, radio and interactive services on its existing multiplex (Multiplex 1) as it did not have sufficient capacity. So prior to developing the Freeview proposal, the BBC had already considered acquiring additional capacity. However, a successful bid for a multiplex licence would also offer the extra capacity the BBC sought.

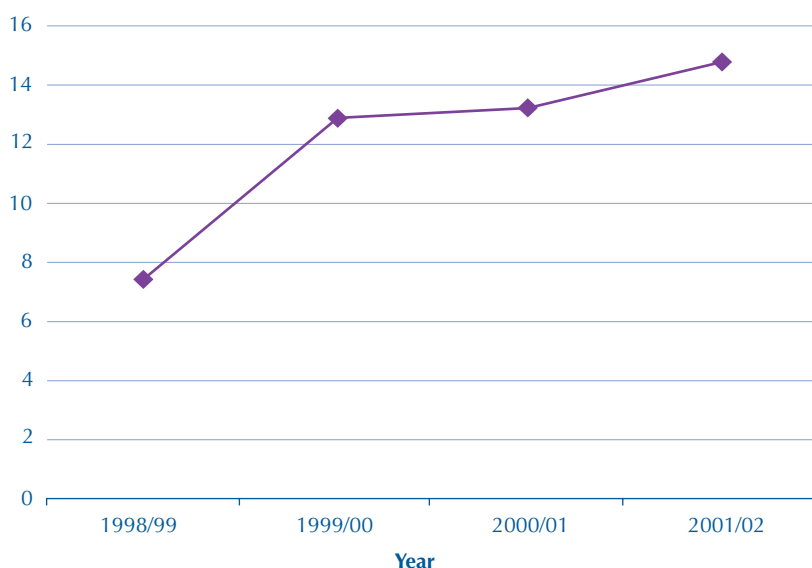
If digital terrestrial television services stopped operating, this would have been damaging to the BBC given the investment it had made

- 1.13 The BBC made a significant strategic and financial commitment to digital terrestrial television. Between 1998, when digital television was launched in the UK, and the end of March 2002, when ITV Digital went into administration, the BBC had spent nearly £50 million on transmitting television services on digital terrestrial (**Figure 8**).

⁴ Set-top boxes are now available for around £50.

8 The BBC's annual expenditure on digital terrestrial transmission grew to £14.9 million in 2001/02

Transmission costs (£ Millions)



Source: BBC

1.14 When ITV Digital went into administration, there was widespread uncertainty about the future of digital terrestrial television and the potentially negative effect on digital switchover (Figure 9). If digital terrestrial television was no longer available, the BBC would not have been able to build upon the investment it had already made in establishing its services on digital terrestrial television. A successful bid for a multiplex licence and actively promoting Freeview would provide the BBC with greater certainty that digital terrestrial television would continue in the UK.

9 The Government's plans for digital switchover

In September 1999 the Government announced its intentions to switch off analogue terrestrial television signals, subject to the following criteria being met:

- everyone who can currently get the main public service broadcasting channels in analogue form (BBC 1, BBC 2, ITV, Channel 4/S4C and Five) can receive them on digital systems; and
- switching to digital is an affordable option for the vast majority of people. As a target indicator of affordability, 95 per cent of consumers have access to digital equipment.

The Government currently envisages that switchover could start in early 2006 and be completed by 2010.

Faced with significant time constraints, the BBC acted pragmatically in putting together its investment plans

The BBC acted swiftly in developing a proposal to bid for one of ITV Digital's multiplexes

1.15 At the beginning of May 2002 the Independent Television Commission invited expressions of interest in acquiring the three multiplex licences surrendered by ITV Digital (**Figure 10**). Prospective bidders had only six weeks to submit bids for one or more of the licences. The timetable was accelerated so that a full digital terrestrial television service could be re-launched as soon as possible while a skeleton service continued to operate on air.

1.16 The BBC consulted with a range of third parties about the potential for a joint bid. Some of the third parties proposed a partly or wholly subscription-based package, but the BBC was concerned that subscription services would lead to consumer confusion. Following these consultations, the BBC opted to bid for one of the licences.

The BBC adopted an accelerated approvals process for Freeview to ensure its bid for an additional multiplex licence was submitted on time

1.17 The BBC's internal guidelines require the preparation of an investment case for all investments over £500,000. Investment cases are needed to support investment decisions and provide a framework for planning and managing project delivery by:

- demonstrating the strategic fit with organisational objectives and priorities;
- showing the options available;
- assessing the commercial aspects of projects where external procurement is required;
- demonstrating the costs and benefits of the investment and the availability of funding; and
- setting out clear objectives, outcomes, outputs and targets and how they will be achieved.

10 Key milestones in the BBC's investment planning

| May 2002 | |
|-----------|--|
| 1st | The Independent Television Commission issues an invitation to apply for the multiplex service licences formerly held by ITV Digital, with a deadline for submission of full applications by 30 May |
| 16th | BBC submits expression of interest to the Independent Television Commission |
| 21st | The Independent Television Commission extends closing date for applications to 13 June 2002 |
| June | |
| 9th | Shareholder Agreement with Crown Castle and BSkyB agreed in principle |
| 10th | BBC sends letter to Department for Culture, Media and Sport pre-warning of need for permission to establish a subsidiary company to hold an additional multiplex |
| 11th | Bid proposal, rationale and request for financial commitment presented at BBC Executive Committee meeting |
| 12th | BBC sends letter to Department for Culture, Media and Sport regarding regulation of BBC services if multiplex Bid is successful Bid proposal, rationale and request for financial commitment for marketing and distribution presented at meeting of BBC Governors |
| 13th | BBC and Crown Castle bids submitted to the Independent Television Commission |
| 16th | BBC, Crown Castle and BSkyB enter into Shareholders Agreement |
| July | |
| 4th | BBC awarded licence for Multiplex B |
| 19th | BBC sends letter to Department for Culture, Media and Sport seeking formal permission to establish BBC Free to View Ltd to hold the multiplex licence and outlining financial and other exposures |
| August | |
| 1st | Department for Culture, Media and Sport sends letter granting approval to BBC involvement in Freeview and establishment of BBC Free to View Ltd |
| September | |
| 3rd | Update on launch progress, financial commitment and risks put to BBC Executive Committee |
| 19th | Update on launch progress, financial commitment and risks put to BBC Governors |
| October | |
| 31st | Freeview launches |

Source: National Audit Office

1.18 Under the BBC's internal guidelines, the Freeview proposal required approval from the Executive Committee and Board of Governors because it was a large (greater than £10 million) and strategic investment. To ensure that the bid for an additional multiplex licence was submitted to the Independent Television Commission by the required date, the BBC's Executive Committee did not request a single detailed written investment document for Freeview, as it would normally have done, but, based on various written submissions, it did focus on quickly identifying the main costs and benefits of Freeview, the key risks and how they could be managed. (Figure 2 on page 9 provides an analysis of the ongoing risks to the BBC's investment in Freeview).

1.19 The BBC estimated that Freeview would cost between £10.7 million and £11.5 million⁵ a year over the 12 year term of the multiplex licence (Figure 11), giving a total cost of between £128.4 million and £138 million. This was additional to the cost of operating Multiplex 1, which it was awarded under the 1996 Broadcasting Act. The total cost to the BBC of making its digital channels available on digital terrestrial in 2003/04 is shown in Figure 12.

11 Most of the estimated cost to the BBC of investing in Freeview was for transmission

| | Projected annual cost (£ millions) |
|--|---------------------------------------|
| Transmission costs (Multiplex B) | 7.2-8.0 ¹ |
| Coding and multiplexing (Multiplex B) | 1.5 |
| Overheads (including Freeview marketing) | 2.0 |
| Total | 10.7 to 11.5 |

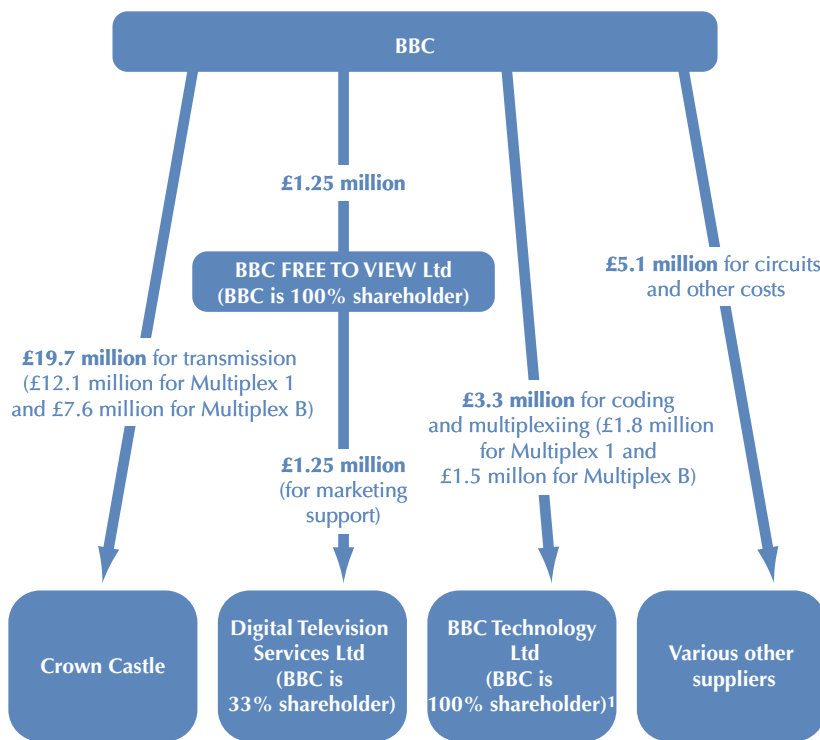
NOTE

- 1 The BBC agreed to pay Crown Castle up to £800,000 a year for unfilled capacity on one of the multiplexes operated by Crown Castle. The BBC has paid Crown Castle nearly £300,000 to date and all the capacity is now taken.

Source: BBC

⁵ This includes £7.2 - £8.0 million of transmission costs which the BBC might have incurred independently of the Freeview project, as part of efforts to obtain more capacity.

12 Total BBC expenditure on digital terrestrial in 2003/04



NOTE

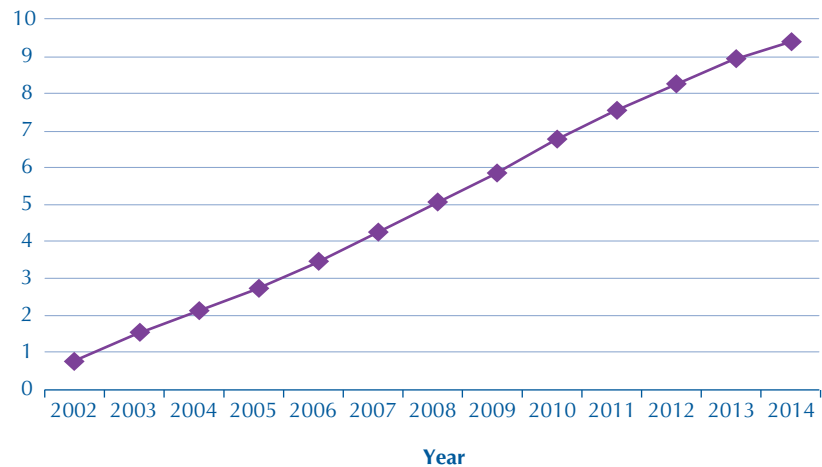
1 The BBC plans to sell its share holding in BBC Technology.

Source: BBC

- 1.20 The BBC estimated that the impact of investing in Freeview would be a steady growth in the number of households with digital terrestrial, reaching 9.4 million households at the end of the 12 year term of the multiplex licence (Figure 13). These projections did not show what effect changes in government switchover plans would have or how marketing spend may have to be increased in future years to achieve the projected levels of take-up. The BBC did, however, recognise that the budget allocated to marketing may need to be increased in the future. The BBC considered that the projections were achievable and included them in the bid submitted to the Independent Television Commission for Multiplex B.

13 The BBC forecast that investing in Freeview would contribute to a steady increase in the number of households with digital terrestrial television

Millions of households



Source: BBC

1.21 The BBC's Board of Governors considered the estimates of costs and take-up and approved the investment in Freeview on 12 June 2002 on the basis that it was "content to spend approximately 1.5 per cent of the BBC's annual income on distributing BBC channels to a proportion of the population".⁶

1.22 The BBC's bid for Multiplex B was submitted on 13 June 2002 to the Independent Television Commission, which received five other applications.

The BBC identified specific value for money criteria for its investment in Freeview

1.23 The BBC told us that the primary objective for Freeview was to launch the service to ensure that as many licence fee payers as possible could receive the BBC's digital services on a subscription-free basis. The associated value for money criteria which the BBC set were:

- take-up (the percentage of households with digital terrestrial television); and
- the cost per digital terrestrial household (the cost to the BBC using households as the unit cost).

⁶ The cost as a percentage of income consisted of the costs associated with Multiplex 1, Multiplex B and overheads (including marketing).

- 1.24 Although the BBC identified take-up and the cost per household as important value for money criteria, they were not the BBC's main objectives for investing in Freeview.
- 1.25 Targets and projections help to provide transparency and accountability by demonstrating the outcomes expected from investments. The BBC decided not to publish the take-up projections it submitted to the Independent Television Commission on the basis that it was uncertain about how Freeview would develop. The sale of set-top boxes and integrated digital television sets depended primarily on the response of retailers and manufacturers and not just the actions of the BBC or the Freeview company.
- 1.26 At the time when the BBC bid for an additional multiplex, the BBC estimated that the cost of transmitting its channels on digital terrestrial television was around £12 a year for each household that had digital terrestrial. Although the BBC considered that this did not offer value for money for licence fee payers, it did not specify the cost per household that would represent value for money. The BBC would not have been able to significantly reduce its expenditure on digital terrestrial services if take-up had been poor following the launch of Freeview.

2.1 This part of the review examines the launch of Freeview and the performance of the joint venture marketing company established between the BBC, BSkyB and Crown Castle. It covers:

- the setting up of the joint venture company;
- changes made to improve signal reception prior to the launch of Freeview; and
- the performance of the joint venture company.

The BBC had good reasons for forming a joint venture to market Freeview

2.2 Although the BBC did not prepare a detailed analysis of the criteria for the selection of partners or shareholders based on required competencies, resources and assets, the BBC saw the following advantages to creating a joint venture to manage a call centre and website and relations with retailers and manufacturers:

- bring together the members of the Freeview consortium in a legal entity, protected by limited liability, which could market Freeview;
- allow the BBC to share the costs of marketing Freeview;
- utilise BSkyB's experience of call centre management and marketing digital television;
- incorporate Crown Castle's experience of digital terrestrial television; and
- provide a forum within which the three shareholders could meet and discuss the progress of Freeview.

2.3 The BBC could have adopted a different approach, such as using outsourced contracts, but it would not have been able to share the cost of running services such as the call centre with other shareholders. Alternatively, the BBC could have relied on an informal partnership arrangement to run the joint venture but this would not have ensured contractual protection if things went wrong.

The creation of a joint venture company (Digital Television Services Ltd) formalised the relationship between the BBC and the other parties in the Freeview consortium

2.4 The setting up of the joint venture company was supported by a Shareholders Agreement which ensured that there was a binding commitment between the BBC, Crown Castle and BSkyB to provide marketing support for Freeview. This Agreement was developed with input from all three prospective shareholders and set out the constitution of the company, the names of the executive officers, protocols for board meetings, voting issues, entry conditions and exit provisions.

- 2.5 BSkyB's involvement in Freeview allowed them the opportunity to increase awareness of the Sky brand in a wider range of households, and to increase viewing and advertising revenue from its subscription-free channels. However, some of the third parties we consulted questioned whether the objectives of the BBC and BSkyB could be fully aligned since Freeview could potentially compete with satellite for digital customers. The shareholders managed this risk through the Shareholders Agreement which prevents the BBC or any of the other shareholders from being forced to accept changes to specific aspects of the joint venture, such as the nature and scope of its activities, if there is not unanimous agreement among all shareholders.
- 2.6 The joint venture company was named Digital Television Services Limited. A target annual budget of £3.75 million was set by the company's board, and it was envisaged that the BBC would contribute £1.25 million a year.
- 2.7 The main objective of Digital Television Services Ltd is to promote the Freeview brand within its budget. The Company has no direct control over the manufacture or sale of set-top boxes or integrated digital televisions, except through licensing the Freeview brand, and has no sales targets.

The BBC made improvements to the reliability of reception on its multiplexes

- 2.8 When it was launched in 1998 the reception of digital terrestrial television was affected by the use of low transmitter powers and the way the signals were sent. This resulted in some viewers experiencing intermittent break up of the vision and sound due to interference from electrical appliances. To try and overcome these problems as far as possible, the transmitted powers of the Freeview multiplexes were increased at a significant number of transmitters and changes were made to the characteristics of the digital signals. Although the changes to the signals reduced the capacity of each of the Freeview multiplexes, the BBC had enough capacity available to broadcast all of its digital television and radio services as well as interactive content on digital terrestrial.
- 2.9 Further improvements could be obtained by increasing the power of digital signals but this would have a detrimental affect on existing analogue services both inside and outside the UK, and might therefore not be compatible with international commitments. However, if analogue signals are switched off, the BBC will be able to increase the power of its digital signal.

Freeview was launched in quick time

2.10 Freeview was launched in October 2002 and Digital Television Services Ltd ensured that the most important services were in place in time for the launch (**Figure 14**). **Figure 15** shows the number of phone enquiries, website hits and text messages that Digital Television Services Ltd receives per month. The company also liaises with manufacturers and retailers, in particular to monitor how retailers are merchandising Freeview.

The postcode check facility could provide more detailed information on coverage

2.11 The Freeview website provides information about the services available on Freeview, how to get it and a facility to check whether Freeview can be received at a given postcode. Entering a postcode onto the website generates a response of:

'Yes' - if the recipient is able to receive all the Freeview channels,

'No' - if the recipient can receive none or only some of the channels, or

'Yes, but' - if the recipient would need an aerial upgrade to receive the channels.

2.12 Although the coverage of different multiplexes varies so that some but not all channels might be available at a given postcode, the Freeview website does not give details of the individual channels that can be received. As well as investing in the postcode check facilities provided by Digital Television Services Ltd, the BBC also operates its own postcode check service which advises licence fee payers if they can receive Freeview. The BBC's postcode check includes information about whether BBC channels can be received through Freeview at a given postcode. A more detailed alternative to these is the Digital Television Group's website, which lists the individual channels on digital terrestrial that

14 Marketing support services available when Freeview was launched

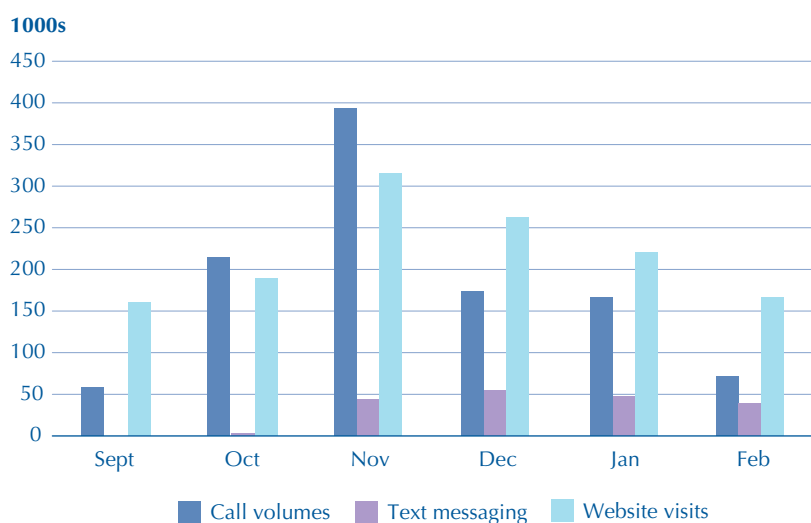
| Service | Available at launch? |
|--|--|
| Call centre | Yes |
| Freeview website | Yes |
| Trademark licence available to retailers allowing them to use the Freeview logo for instore promotions | No, though these were available two weeks later in time for the Christmas shopping period. |
| Trademark licence available to manufacturers enabling them to use the Freeview logo in packaging and marketing set-top boxes | The BBC did not intend this to be available at launch and the final licence was issued in spring 2003. The licence required manufacturers to conform to a basic specification for set-top boxes set by an industry group. ¹ |

NOTE

- ¹ This specification did not require licencees to include audio description capabilities (the BBC has broadcast audio description services on digital terrestrial television since May 2000, as required under the 1996 Broadcasting Act, but until a set-top box with audio description capability was launched in January 2004, the equipment needed to receive these services was not generally available).

Source: BBC

15 Enquiries received by Digital Television Services Ltd between September 2003 and February 2004



Source: Digital Television Services Limited

can potentially be received at a given postcode.⁷ Its website is designed for the digital industry rather than licence fee payers, but is a good example of the information that could be provided.

2.13 Residents of the Isle of Man, Jersey and Guernsey, who have to pay the television licence fee, are not able to check the availability of Freeview using the Freeview postcode check facility as it does not recognise postcodes in the Isle of Man or Channel Isles.

The BBC needs to be clear about the costs it incurs in providing services to the Freeview company

2.14 In the early operational weeks of the joint venture, the shareholders responded quickly to problems by contributing specialist expertise at no extra cost to Digital Television Services Ltd. The shareholders still make some uncharged contributions for specialist help which they provide.

2.15 In the BBC's digital campaigns, the BBC draws attention to the way in which its digital services can be received. The BBC currently gives emphasis to Freeview alongside references to satellite and cable. The BBC considers this to be part of a legitimate effort to raise awareness about a 'new, subscription-free way' to receive the BBC's digital channels. It sees this as entirely driven by the BBC's corporate objective to promote its digital services and does not make a recharge to the Freeview company (or to satellite and cable companies). It is important that the BBC ensures that all platforms are treated in a neutral way. The BBC says that this will be achieved because the emphasis on Freeview is a short term measure to draw attention to a 'new service' and that other new subscription-free services would be treated in a similar way.

⁷ The Digital Television Group is an industry association for digital television in the UK. Its postcode checker uses the same database as the Freeview postcode checker.

3 THE IMPACT OF FREEVIEW

3.1 This part of the review examines the impact that the BBC's investment in Freeview has made so far. It covers:

- the take-up of digital terrestrial since the launch of Freeview;
- consumer awareness of Freeview; and
- digital terrestrial coverage.

In terms of take-up, Freeview has been a success

3.2 The BBC's investment in Freeview has contributed to an increase in the number of households with access to its digital services:

- 1 In March 2004 the number of households with digital terrestrial television was 3.4 million,⁸ which was 77 percent more than in October 2002, when Freeview was launched.
- 2 Digital terrestrial take-up has exceeded the BBC's projections (**Figure 16**).
- 3 According to research carried out by the BBC and Dixons, 81 per cent of Freeview consumers would recommend the service to a friend.

16 By March 2004, the number of households with digital terrestrial television had significantly exceeded the BBC's initial projections

| | BBC projection ¹ | Actual |
|---|-----------------------------|-------------|
| Number of households with digital terrestrial receivers | 2.1 million | 3.4 million |
| Percentage all UK households with digital terrestrial | 9% | 14% |
| BBC expenditure on digital terrestrial per household with digital terrestrial | £12 | £8 |

NOTE

- 1 The projections included in the BBC's bid for Multiplex B submitted to the Independent Television Commission in June 2002. The BBC identified the percentage of households with digital terrestrial television and the cost per household as the key value for money measures for its investment in Freeview (paragraph 1.23).

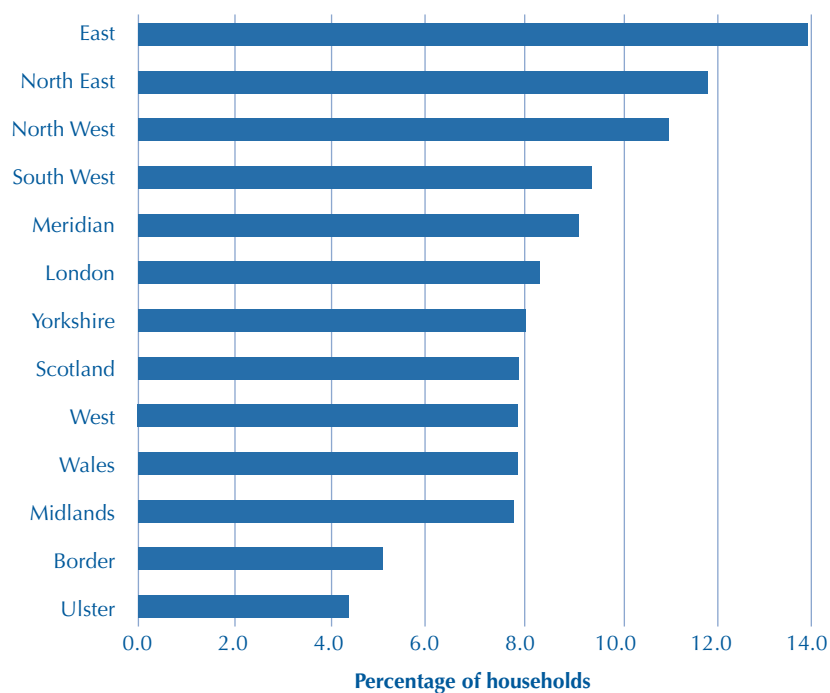
Source: BBC

⁸ This is an aggregate figure made up of 2.8 million digital terrestrial set-top box sales up to the end of February 2004 (source: GfK), 0.5 million legacy boxes still in the market (source: BBC), and a BBC estimate of 0.1 million additional Freeview sales in the period up to the end of March 2004.

3.3 Overall, the percentage of households with digital terrestrial is greater than the BBC predicted, although research undertaken by the Broadcasters' Audience Research Board indicates regional variations in the proportion of households with Freeview (**Figure 17**).

17 Research carried out by the Broadcasters' Audience Research Board indicates that the number of households with digital terrestrial television was higher in the East and North East ITV regions at the end of December 2003

Regions shown are ITV regions. In some regions, the absolute number of households in the research which had digital terrestrial was very small and some caution is needed in generalising from the results.

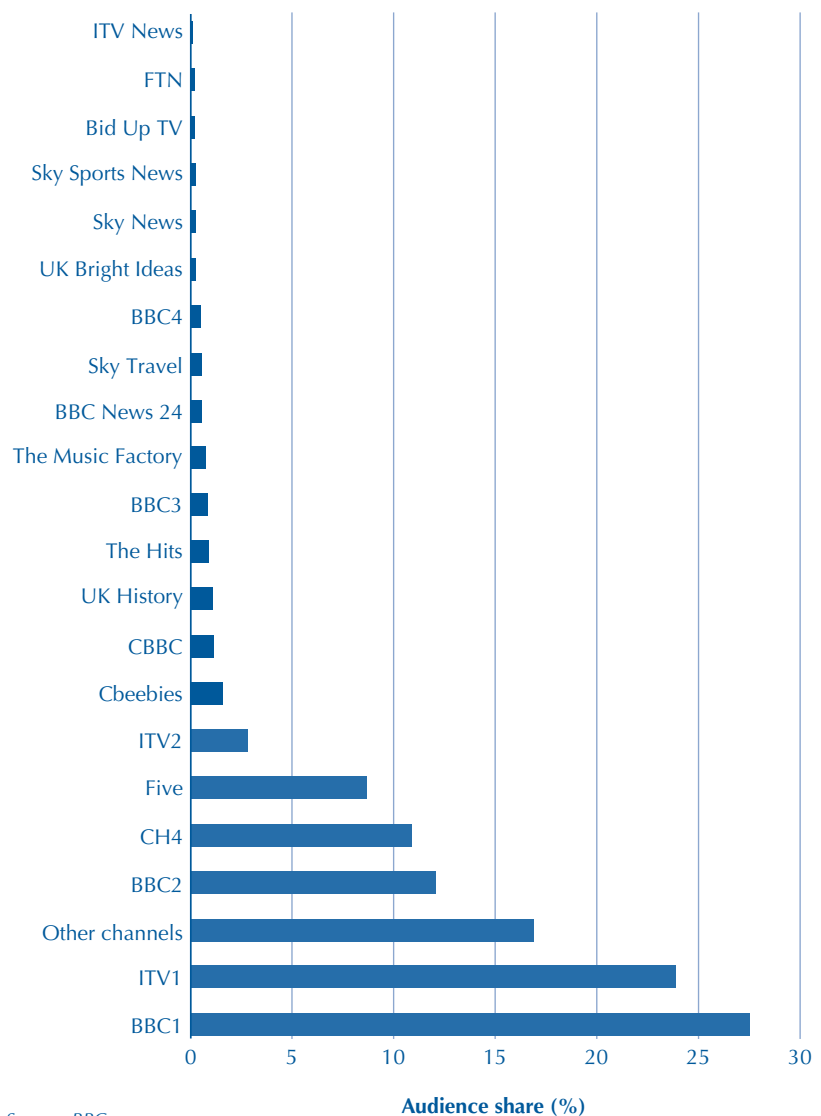


Source: Broadcasters' Audience Research Board

Take-up of digital terrestrial television following the launch of Freeview has contributed to increased viewing of the BBC's digital channels

3.4 One of the BBC's main rationales for investing in Freeview was to increase the time that licence fee payers spend watching the BBC's digital services to improve the value for money of these services.⁹ The BBC's digital channels achieve a lower audience share on digital terrestrial than the channels that are also available on analogue terrestrial (Figure 18), but have a higher share than on cable or satellite (Figure 19).

18 Channels that are also available on analogue terrestrial (BBC 1, BBC 2, ITV, Channel 4 and Five) accounted for more than 80 per cent of audience share on digital terrestrial television in the four week period ending 29th February 2004



Source: BBC

⁹ The Secretary of State for Culture, Media and Sport has appointed Patrick Barwise and Tim Gardam to conduct individual reviews of the BBC's new digital television and radio services.

19 The BBC's digital channels perform better on digital terrestrial than on cable or satellite, in terms of audience share

| Percentage audience share in 4 week period ending 29th February 2004 | Digital Terrestrial | Cable | Satellite |
|--|---------------------|-------|-----------|
| Cbeebies | 1.6 | 1.1 | 1.2 |
| CBBC | 1.2 | 0.5 | 0.3 |
| BBC3 | 0.8 | 0.6 | 0.5 |
| News 24 | 0.6 | 0.5 | 0.5 |
| BBC4 | 0.5 | 0.3 | 0.2 |
| BBC Parliament ¹ | - | - | - |

NOTE

¹ Viewing figures for BBC Parliament are too low to measure accurately.

Source: BBC

Awareness of Freeview is increasing but there is still some consumer confusion

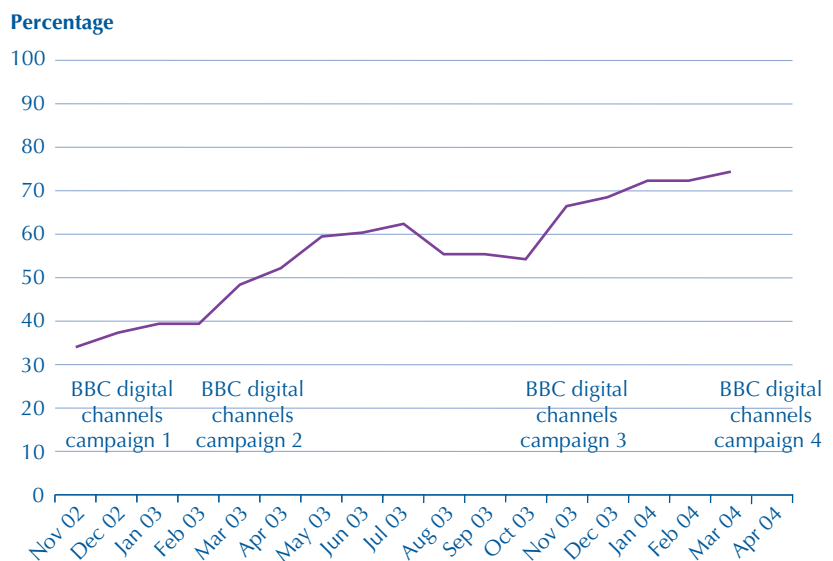
Freeview is promoted as a subscription-free digital service on the payment of a one-off fee

- 3.5 The BBC's market research indicated that many consumers were put off digital television by the association with subscription services, but would be interested in it if they only had to pay for a set-top box. The BBC therefore sought to emphasise this in its digital campaigns by describing Freeview as a way to get up to 30 extra channels by making a one-off payment for a set-top box and by using the brand name "Freeview" to convince licence fee payers that they would not be tied to a subscription service.
- 3.6 A clear emphasis is placed on a one-off payment for a set-top box. Integrated digital televisions (which have built in receivers able to decode and display digital signals) do not feature in the BBC's on-air digital campaigns. Although integrated digital televisions are mentioned in information sent to consumers who enquire about the BBC's digital services, some manufacturers of integrated digital televisions feel that they have been disadvantaged by the emphasis on set-top boxes.

The BBC's digital campaigns have contributed to increased awareness of Freeview

- 3.7 The BBC ran a major television and radio campaign promoting the BBC's digital services to coincide with the launch of Freeview. Amongst other messages, the campaign 'trails' included the message about the payment of a one-off fee. In the three weeks following the launch of Freeview the BBC broadcast 70 information trails about its digital services on BBC One and BBC Two and around 170 on its five national radio networks. These trails highlighted that the BBC's digital services could be accessed on Freeview. The BBC has confirmed that availability on satellite and cable was also mentioned in all these campaigns and that follow up information on all digital platforms was offered.
- 3.8 Brand awareness of Freeview has grown with three out of four adults in the BBC's March 2004 tracking survey¹⁰ being aware of the Freeview brand name (Figure 20).

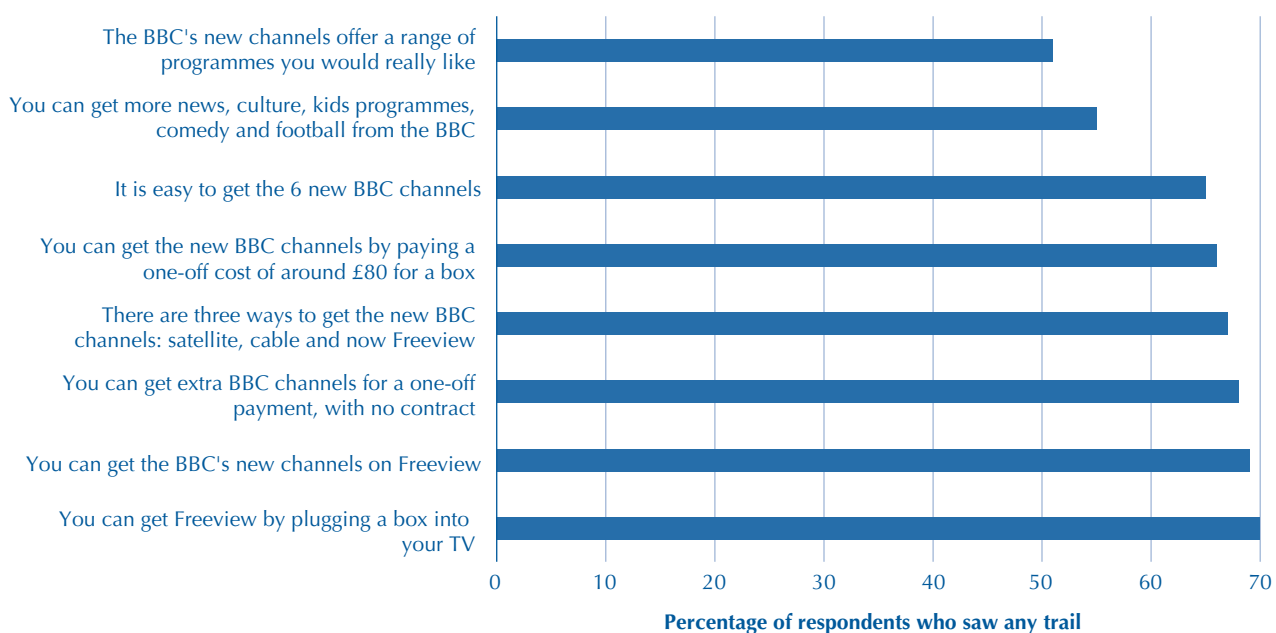
20 Public awareness of Freeview has significantly increased since it was launched



Source: BBC

¹⁰ The Pan BBC tracking survey uses a panel of 800 people. Approximately 400 in the panel do not have digital television.

21 Four of the eight key messages in the BBC's digital campaign relate to Freeview



Source: BBC

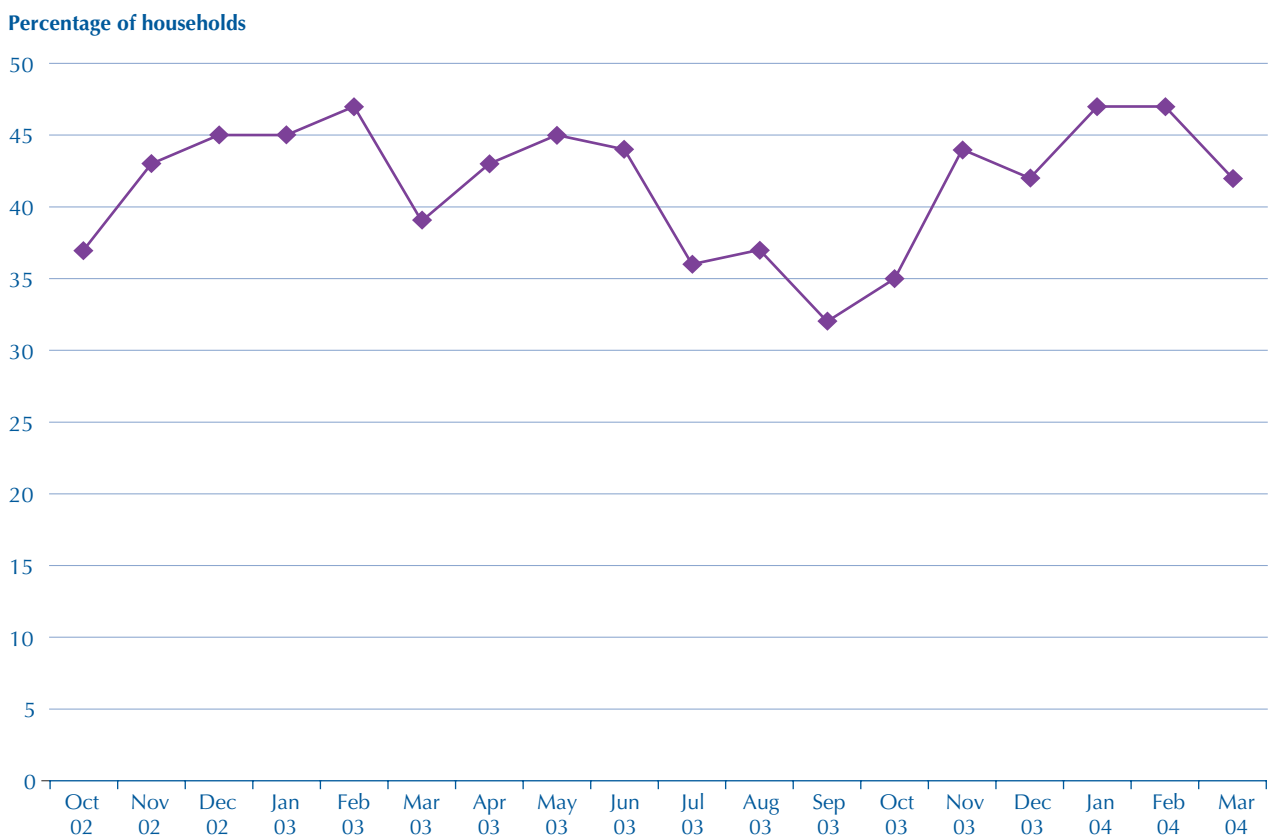
- 3.9 The BBC evaluates its digital campaigns using criteria which include all digital platform take-up data, digital penetration, phone and web responses to campaigns and the conversion of enquiries into sales. The BBC also measures what percentage of viewers who were exposed to a campaign understand certain key messages promoted in its campaigns. For the BBC's autumn/winter 2003-04 digital campaign, there were eight key messages, half of which specifically related to Freeview (Figure 21). Almost seven out of ten people who saw the campaign understood the message 'you can get Freeview for a one-off payment, no contract'. This represents a significant improvement from the Easter 2003 campaign when less than one in five understood that message.

But there is still some consumer confusion

3.10 The rate of take-up of Freeview has been high, which indicates that a proportion of consumers have understood the concept of Freeview. However, there is still significant consumer confusion amongst the remaining analogue audience about the fact that the BBC's digital channels are available subscription-free, which the BBC considers to be linked to confusion about digital television in general. The BBC's tracking survey shows that in March 2004, just over four out of ten analogue terrestrial households in the survey understood that they could receive the BBC's digital channels without paying a monthly subscription (Figure 22). It also shows that the level of understanding has not changed significantly since the launch of Freeview although as the proportion of households that do not have digital decreases it is likely to be more difficult to achieve understanding among the remainder.

3.11 In another survey (Guerillascope, 2003) 60 per cent of respondents thought (incorrectly) that Freeview was made up entirely of BBC channels. This may reflect the use of the Freeview brand name in the BBC's digital campaigns to refer to subscription-free services on the digital terrestrial platform.

22 Changes in the proportion of analogue terrestrial only households in the BBC tracking survey who understand that they would not have to pay a monthly subscription to receive the BBC's digital channels



Source: Pan BBC Tracking Survey

- 3.12 The BBC's digital campaigns, which include references to Freeview, also run in areas where Freeview is not available. (It would not be possible to target specifically just the areas that are covered by digital terrestrial). Research published by the Department for Trade and Industry in March 2004 found that four in five respondents in a survey who thought Freeview was available to them were correct but almost half who thought that Freeview was not available to them should be able to receive it.¹¹
- 3.13 In March 2004, Top Up TV Limited launched a subscription-based package of television channels on digital terrestrial using capacity on Multiplexes 2 and A. Although the channels offered by Top Up TV are not part of Freeview, the BBC is concerned that licence fee payers might mistakenly associate the subscription-based channels offered by Top Up TV with Freeview but recognises that this is surmountable as long as consumer communication about the different products is clear.

Freeview is available to nearly three in four licence fee payers

The BBC recognised that a proportion of UK households would not be able to receive Freeview or would need to get a new TV aerial

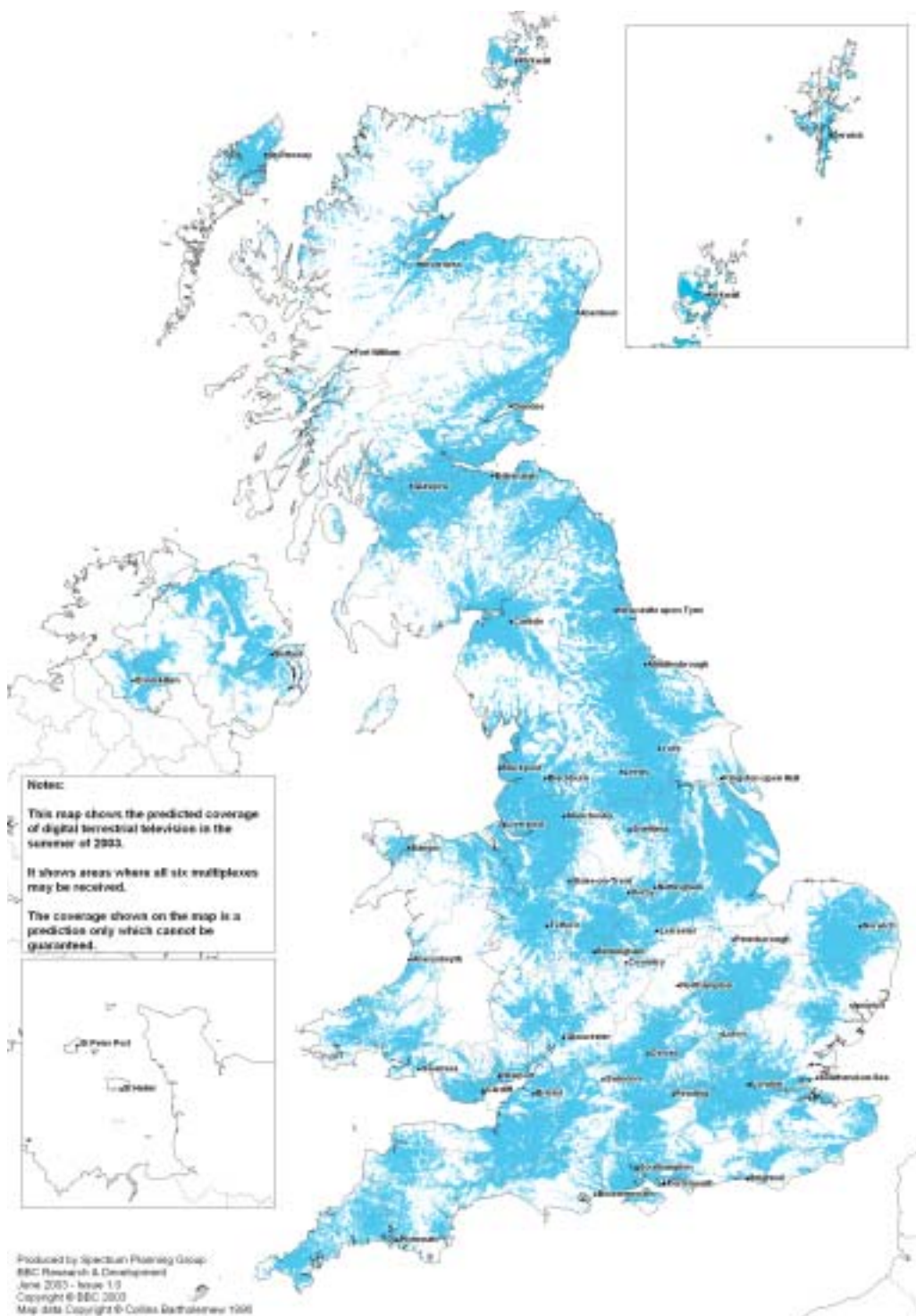
- 3.14 The BBC's Agreement with the Department for Culture Media and Sport (see Figure 3) requires it to transmit programmes for general reception unless prevented from doing so by circumstances beyond its control. The BBC's analogue terrestrial television channels (BBC1 and BBC2) are transmitted from a network of 1,154 sites. Between 1997 and 1999, 80 of these sites were upgraded with new transmitters to support digital terrestrial television. The number of sites was set by the Independent Television Commission and the Government and a key criterion in planning the digital terrestrial network was that digital signals must not interfere with existing UK or foreign analogue transmissions (**Figure 23**). The sites selected for upgrade focused on major conurbations to try and maximise the number of households covered.

23 The relationship between digital terrestrial and analogue terrestrial

Digital terrestrial television uses the same UHF spectrum and the same main transmitter network as analogue terrestrial television. Digital terrestrial signals can cause interference to analogue television. This happens when a digital channel uses an adjacent frequency to that of an analogue channel from the same transmitter, or the same frequency as an analogue channel located on a nearby transmitter. Transmission providers therefore need to contain the power of the digital terrestrial network, otherwise, some analogue viewers will suffer from co-channel interference. Transmission providers will only be able to turn up the power of the existing digital transmitters once analogue television is de-commissioned.

¹¹ *Attitudes to digital switchover: the impact of digital switchover on consumer adoption of digital television. Prepared for the Digital Television Project by the Generics Group in association with Ipsos UK (March 2004).*

- 24 Gaps in digital terrestrial coverage exist in places as diverse as South Wales, Londonderry, the centre of Basingstoke and parts of the South Coast



NOTE

The summer 2003 coverage pattern shown in the map is still current as coverage levels have not changed in any significant way.

Source: Ofcom/BBC

- 3.15 Multiplex licence holders were not required to achieve a particular level of coverage or guarantee that by building the specified number of digital transmitters they would achieve any minimum level of coverage. By December 1999, the network of digital terrestrial transmitters had been completed, covering 56 per cent of UK households. No additional sites have been upgraded since 1999 and there are currently no agreed plans to increase the number of sites with digital terrestrial. However, between December 1999 and early 2002, when ITV Digital went into administration, increases were made to the power of digital signals at a number of sites which, according to BBC estimates, increased household coverage to 65.9 per cent.
- 3.16 Freeview cannot be received in the areas served by the 1,074 transmitter sites that have not been upgraded to support digital terrestrial. The result is a "Swiss cheese" pattern across the country with gaps in coverage in places ranging from South Wales, Londonderry, the centre of Basingstoke to parts of the South Coast (Figure 24). In most cases these gaps can only be closed if analogue signals are switched off or the constraint on interfering with analogue signals in the UK or in neighbouring countries is relaxed. Licence fee payers who want to obtain BBC digital services but are not covered by Freeview can, in most cases, receive the BBC's digital services on cable or satellite.
- 3.17 Accurate coverage information is important due to the digital cliff effect (Figure 25). Digital terrestrial reception is influenced by the condition and type of aerial as well as by location. Coverage estimates are based on aerials which are of the right type and in good condition. In practice, around a third of households in areas covered by digital terrestrial will not be able to receive Freeview unless they upgrade their existing aerials at a cost of between £80 and £250, depending on the type and grade of aerial supplied.¹² Thomson, a manufacturer of digital terrestrial set-top boxes, has found that the number of boxes that are returned has been relatively high due to coverage and reception issues. However, return rates have fallen to around 10 per cent and Thomson believes that most consumers in areas covered by Freeview now understand that if they cannot receive pictures through their set-top box then it is probably due to their aerial.

25 Coverage predictions need to be accurate because of the 'digital cliff'

Digital terrestrial television suffers from the same electronic interference that affects analogue terrestrial television. However, analogue terrestrial television suffering from interference is characterised by a more 'graceful' deterioration in the quality of television pictures - programmes can still be seen, even though the picture suffers from 'snow' or 'ghosting' effects. Digital terrestrial television, on the other hand, is characterised by a very rapid transition from near perfect reception to no reception at all - the 'digital cliff'. It is therefore important that licence fee payers have access to accurate coverage predictions which allow them to determine whether or not they can receive digital terrestrial television.

- 3.18 The current network of digital terrestrial transmitters has not been designed to allow reception using portable set-top aerials, so digital terrestrial cannot be watched on the estimated 37 percent¹³ of television sets that rely on set-top aerials. This is a potentially significant issue for the conversion to digital of households' second and third television sets.

¹² Aerial installation cost figures supplied by the Confederation of Aerial Industries.

¹³ Mintel Report (Televisions, Market Intelligence, November 2003).

The BBC took steps to increase the number of households that would be able to receive Freeview

3.19 The power increases and changes to the signals which the the BBC and Crown Castle made on their multiplexes (see paragraph 2.8) increased household coverage to the current level of 73.1 per cent (**Figure 26**). The BBC had also estimated, in its bid to the Independent Television Commission in June 2002, that if all the multiplex operators made the proposed changes to the transmission mode the proportion of households covered by digital terrestrial television would increase to 81.6 per cent. The BBC further predicted that upgrading an additional 10-20 transmitter sites could increase coverage to around 87 per cent. However, upgrading additional sites did not form part of the BBC's proposal for Freeview because the capital costs involved are significant and are an issue for all multiplex licence holders.

26 Power increases and changes to transmitted signals have increased the percentage of households covered by digital terrestrial to just over 73 per cent

| | UK households covered by digital terrestrial (%) | UK households that can receive digital terrestrial without modifying aerial (%) |
|--|--|---|
| Digital terrestrial launch (November 1998) | 54 | Data not available |
| When ITV Digital went into administration (March 2002) | 65.9 | 38.6 |
| Current | 73.1 | 48 |

NOTE

1 Figures based on computer predictions.

Source: BBC

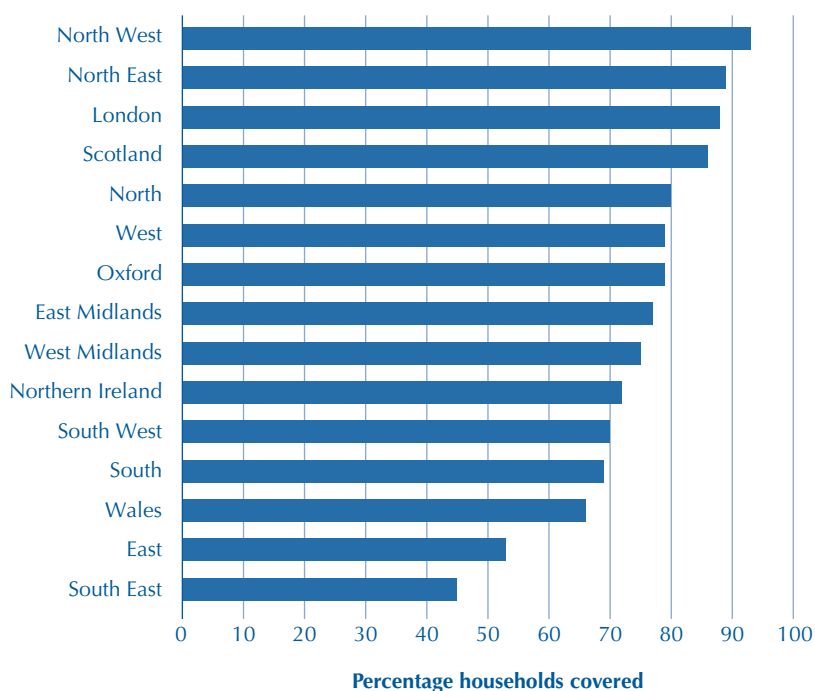
Freeview coverage varies significantly between BBC television regions, with the North West being best served

3.20 In general the digital terrestrial network tends to cover the more densely populated areas. There is very little coverage in predominantly rural areas such as the Scottish Highlands and parts of Wales. In terms of the proportion of households that are covered in each of the BBC's regions, the highest levels of coverage are in the North West, and the lowest are in the South East (where restrictions are in place to prevent UK digital terrestrial channels from reaching other European countries), **Figure 27**.

There are alternatives for people who cannot access the BBC's digital services through Freeview, although the cost varies

3.21 Ofcom's estimates of digital take-up suggest that more than 50 per cent of UK households have access to the BBC's digital services through satellite, digital terrestrial or digital cable (**Figure 28**). Ofcom's estimates indicate that around 13 per cent of households have access to BBC channels on a subscription-free basis.

27 The proportion of households covered by Freeview is highest in the BBC's North West Television Region and lowest in the South East

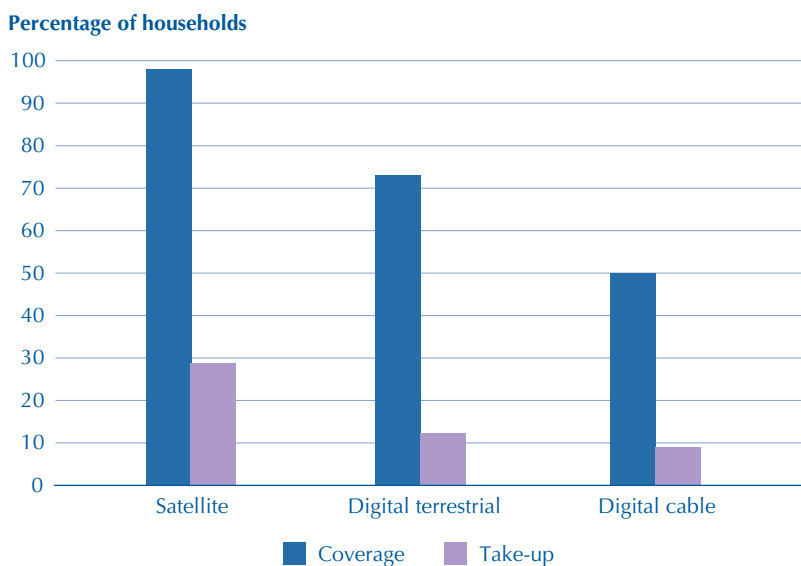


NOTE

These figures show estimated regional coverage as at 7th December 2002 and do not reflect an increase in coverage from 72.4 per cent in October 2002 to 73.1 per cent by June 2003. The BBC does not have more recent figures on regional coverage.

Source: BBC

28 Satellite covers the largest number of households and had the highest level of take-up at the end of December 2003



Source: BBC

3.22 The cost to licence fee payers of accessing the BBC's digital channels depends on where they live. For licence fee payers who do not live in areas covered by Freeview, they can in most cases receive the BBC's digital channels on satellite for a one-off payment of £120 (**Figure 29**)¹⁴. Another option, depending on location, is cable television, which includes the BBC's channels in basic subscription packages starting at £162 a year plus £40 for installation. Around 1.5 per cent of households do not have access to any digital platform at the present time.

29 For households not served by Freeview, the minimum cost of accessing BBC digital services is a one-off payment of £120 for a subscription-free service or £202 a year for a subscription service

| | Satellite | | Cable |
|---------------------------------|--|-------------------------------|-------------------|
| | Subscription (depending on the package chosen) | Non-Subscription ¹ | Subscription |
| Set-top box | Free | Free | Free ⁴ |
| Installation | £1 to £100 ² | £120 | £40 ⁵ |
| Cheapest annual subscription | £162 | none | £162 ⁶ |
| Minimum cost | £262 | £120 | £202 |

NOTES

- 1 Although viewers can receive BBC digital services, it is not possible to see ITV, C4 and Five on satellite without a viewing card. Viewing cards are currently available only from pay TV retailers.
- 2 Installation is £1 or £40 to £100 depending on the package.
- 3 Prices correct at May 2004.
- 4 Included in monthly subscription charge.
- 5 Although various campaigns run from time to time when installations can be free.
- 6 Includes £10 phone line rental.

Source: National Audit Office

¹⁴ Since July 2003 households have been able to receive the BBC's digital services subscription-free on satellite if they make a one-off purchase of a satellite dish and a set-top box. Satellite covers nearly all UK households, although planning restrictions prevent some households from installing satellite dishes.

3.23 For licence fee payers that are covered by Freeview but need to upgrade their aerial to receive it, the cost of accessing the BBC's digital channels on Freeview is affected by where they live. Those living in weaker signal reception areas will need larger aerial installations costing up to £250 (Figure 30). For licence fee payers living in fringe reception areas who need to upgrade their aerial, other digital platforms can offer a cheaper way of receiving the BBC's digital services.

30 Minimum additional cost of switching from BBC analogue services to BBC digital services on Freeview (April 2004)

| £ pounds | | | | |
|--------------|-----------------|--|--|--|
| | Suitable aerial | Unsuitable aerial Small Installation Standard antenna, masts and bracketry for primary service areas | Medium Installation Larger antenna, 2 metre mast and larger bracketry for more difficult signal areas | Large Installation Larger antenna, 9 metre mast and heavy duty bracketry for fringe reception |
| Set-top box | 50 ¹ | 50 | 50 | 50 |
| New aerial | n/a | 80-110 | 110-175 | 175-250 |
| Total | 50 | 130-160 | 160-225 | 225-300 |

NOTE

1 More expensive boxes are available which offer more features.

Sources: Aerial installation costs supplied by the Confederation of Aerial Industries and are for one TV receiving set-up in homes and do not include any form of distribution to other sets as this is only quantifiable by estimate or quotation directly to consumers. The average service call by an installer to diagnose faults or test for signals is currently around £40-£50.

A Study planning

The objective of this study was to assess whether the BBC's investment in Freeview is achieving value for money for licence fee payers based on an assessment of the BBC's objectives for Freeview, the approach it adopted, the costs and benefits to date and the action being taken to manage ongoing risks.

B Fieldwork

We used two main methods to collect evidence to enable us to meet the study objectives.

1 Documentary review and analysis

We reviewed and analysed documents held by the BBC and Digital Television Services Ltd, the joint venture company which provides marketing support for Freeview. The purpose of this review and analysis was to confirm the BBC's objectives and approach and the outcomes achieved. Documentary sources of evidence we examined included:

- Minutes of meetings of the BBC's Board of Governors
- Minutes of meetings of the BBC's Executive Committee
- The BBC's bid proposal (internal documents and the bid document including confidential annex submitted to the Independent Television Commission)
- Minutes of meetings of the Board of Directors of Digital Television Services Ltd.
- Shareholders Agreement for the joint venture company and performance reports

2 Semi-structured interviews

We carried out semi-structured interviews to obtain specific, in-depth, quantitative and qualitative information on specific aspects of the BBC's investment in Freeview. We interviewed three main groups.

i **The BBC**

We interviewed key members of staff in the BBC to identify the rationale, expectations, outcomes and future plans for the BBC's investment in Freeview.

ii **The joint venture company (Digital Television Services Ltd) and its shareholders**

We interviewed Digital Television Services Ltd, and Crown Castle and BSkyB who, along with the BBC, are equal shareholders in Digital Television Services Ltd. The purpose of these interviews was to assess the BBC's contribution to and management of the joint venture and the benefits obtained.

iii Third parties

Based on a literature review, web searches and discussions with the BBC, we identified a list of third parties with a potential stake or interest in Freeview. We interviewed and/or received written information from the organisations set out below. The purpose of this was to help us assess the wider costs and benefits of the BBC's investment in Freeview.

- Channel 4
- Confederation of Aerial Industries
- Consumers' Association
- Department for Culture, Media and Sport
- Department of Trade and Industry
- Digital Television Group
- Digital Television Stakeholders Group
- GFK
- Intellect
- ITV Plc
- Ofcom
- NTL
- Thomson Broadband UK Ltd.
- Top Up TV
- Voice of the Listener and Viewer

We followed up some of these interviews to compile data on how the cost of accessing the BBC's digital channels depends on whether an aerial upgrade is needed and how the cost varies between digital platforms.

Analogue transmission

Conventional broadcasting in which the picture, sound and other information is transmitted as a continuous wave form which is an analogue (as opposed to digital) representation of the source material. Analogue systems allow for a certain degree of signal degradation before users are unable to watch pictures or listen to sound.

Audience share

Of all the people viewing television or listening to radio at a particular time, the share is the percentage of those watching or listening to a particular channel or programme.

Audio description

An enhanced system for the visually impaired which provides, via an additional soundtrack, extra narration during breaks in dialogue, in order to explain to viewers what is happening on-screen.

BBC Free-to-View Ltd

A wholly owned subsidiary of the BBC.

British Digital Broadcasting Plc

Jointly owned by Carlton Communications and the Granada Group, renamed ONdigital in 1998 and then ITV Digital in 2001.

Cable television

Television, radio and data services distributed through a cable distribution network direct to the consumer's home via a set-top box.

Crown Castle International

Crown Castle is an owner and operator of the digital terrestrial transmissions network.

Digital 3 and 4 Ltd

A company formed by ITV and Channel 4 to hold the licence to Multiplex 2.

Digital Television Services Ltd

A joint venture between the BBC, BSkyB and Crown Castle to provide marketing and consumer support for Freeview.

Digital terrestrial television

Television transmitted from a network of terrestrial transmitter sites which can be received through an aerial, normally mounted on the roof-top.

Digital transmission

Broadcasting in which picture and other information are transmitted as a series of discrete 'bits' or binary numbers which represent the picture or information being broadcast. The digital data which are stored or transmitted are expressed as a series, or string, of zeros and ones. Unlike analogue systems, users must receive the whole digital signal in order to be able to see the picture or listen to the sound being broadcast. Digital transmission also makes use of compression, whereby elements of the picture or sound source which do not change over time are effectively omitted from the broadcast signal and are repeated from earlier samples inside the digital receiver. Hence digital broadcasting systems are more efficient than normal analogue ones.

Freeview

The brand name for a subscription-free package of digital television and radio services (including all the BBC's channels) which is available on the digital terrestrial television platform.

Independent Television Commission

Licensed and regulated commercial television services in the United Kingdom. It ceased to exist from 18 December 2003. Its duties have been assumed by Ofcom.

Integrated digital television (iDTV)

A television incorporating a built-in receiver able to decode a digital signal and display it conventionally. Currently integrated digital televisions are confined to digital terrestrial reception.

ITV Digital Ltd

Held Multiplex licences B, C and D before it went into administration in 2002 and returned them to the Independent Television Commission.

Multiplex

A frequency band in the broadcast spectrum which can be used to transmit several digital terrestrial, or digital satellite, television or radio services, in the same space in which only one analogue TV channel could be broadcast.

Ofcom

Ofcom is the regulator for the UK communications industries, with responsibilities across television, radio, telecommunications and wireless communications services.

S4C Digital Networks Ltd (SDN)

A company in which NTL, S4C and United News and Media hold equal shares and which also broadcasts the Welsh language channel, S4C.

Satellite television

Television services transmitted to a stationary satellite that receives the signal, amplifies it and then transmits it back to earth where it can be received via satellite dishes pointing at that satellite, the received signal then being decoded by compatible set-top boxes.

Set-top box

A device which can decode a digital signal and display it conventionally on a television screen.

Spectrum

The entire range of frequencies of waves in electro-magnetic radiation. Digital and analogue terrestrial television use part of the radio spectrum, namely UHF.

Switchover

The plan to convert all television reception from analogue to digital. The Government currently envisages that switchover could start in early 2006 and be completed by 2010.

Transmitter

A device that converts audio, video or digitally-coded signals into modulated radio frequency signals which can be propagated by electromagnetic waves by an antenna, normally mounted at the top of a tall building or tower.

Top Up TV Ltd

A company offering a subscription-only package of channels on digital terrestrial television.

UHF

Ultra High Frequency radio waves (in the range 300-3000 megahertz).
