



# BBC Management's assessment of the public value of its new on-demand proposals

Redacted for publication

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## Section 1

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### Introduction

#### 1.1.1

The BBC has traditionally fulfilled its public purposes by broadcasting high-quality, distinctive programmes on its television channels and radio stations. However, over the last ten years the environment in which the BBC operates has changed. First, the increase in distribution capacity has led to significant growth in the number of TV channels and radio stations. Second, the emergence of interactive TV means that broadcasting is no longer a one-way, linear activity. Third, the web has emerged as a new medium in its own right, capable of offering text, pictures and audio.

#### 1.1.2

The BBC successfully embraced this first wave in digital. It launched a portfolio of new linear TV and radio services with interactive enhancements. [bbc.co.uk](http://bbc.co.uk) has become one of the BBC's most popular services and is regarded by its users as being as important as BBC television and radio. BBC News is a proposition that is now available across platforms, being delivered on radio and TV, and over the web to fixed and mobile devices.

#### 1.1.3

We are now experiencing a distinct second wave in digital, characterised by revolutionary and accelerating changes both in technology and in audience expectation. The growth rate for broadband is one of the fastest of any new technology in UK history. There will be an explosion in the availability of audiovisual content on-demand as increases in computer power and bandwidth allow audiences to consume whatever they want whenever and wherever they want.

#### 1.1.4

But although technological change is enabling the second digital wave, the driving force is a revolution in audience behaviour. Audiences are becoming more discriminating and demanding; they expect greater choice and control over all media. For most people some of the time, and for some people most of the time, audiovisual media consumption is likely to follow the path that music has already taken – towards specialisation and fragmentation.

#### 1.1.5

BBC Management has responded to these challenges by proposing an expansion in the scope and functionality of the BBC's on-demand offerings. The set of new proposals, assessed in this document, will deliver greater value to licence fee payers by allowing them to time-shift and place-shift their consumption of BBC content. Extensive audience research and trials demonstrate strong support for an on-demand BBC. It is BBC Management's view that the public value generated by the new proposals will justify the planned investment.

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**1.1.6**

Over time, on-demand will enable the BBC to have a direct one-to-one relationship with every household in the country. By making the BBC more relevant and responsive to audiences, on-demand will enhance delivery of the BBC's public purposes. In short, on-demand represents a new means to achieving the same ends.

## Section 2

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### Executive Summary

#### 2.1.1

This document sets out BBC Management's application to the BBC Board of Governors for permission to launch a number of new public service offerings, which will provide the BBC's existing content on-demand to licence fee payers. The evidence and analysis presented in this document will enable the BBC Governors to assess the public value of the proposals as part of the Public Value Test (PVT).

#### 2.1.2

The approach to public value used in this document is in line with that set out in the Government's White Paper and by the BBC Governors. The document follows Terms of Reference agreed with the BBC Governance Unit. It draws on extensive analysis and input from media strategy consultancy, Human Capital.

#### 2.1.3

Separately, BBC Management has commissioned independent advice on the potential market impact of its new on-demand proposals. This work was carried out by Human Capital<sup>1</sup>, with background analysis by Oliver and Ohlbaum.

#### 2.1.4

In summary, the proposed new offerings are:

- Seven day TV catch-up over the internet
- Seven day TV catch-up over cable
- Simulcast TV over the internet
- Non-DRM audio downloads over the internet

#### 2.1.5

The three internet-based offerings will be combined into a direct-to-consumer offering, BBC iPlayer version 1.0<sup>2</sup>, which will incorporate all the existing BBC players<sup>3</sup>. In summary, BBC iPlayer version 1.0 is designed to unify the BBC's provision of audio and video content on-demand and to make it available to UK audiences over the internet.

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<sup>1</sup> Robin Foster, Chief Advisor to Human Capital, with assistance from Professor Martin Cave, and Mr Simon Terrington

<sup>2</sup> Note that Non-DRM downloads will also be accessible through podcasting portals such as iTunes.

<sup>3</sup> Radio Player, News Player, Weather Player, Sport Player and the Media Console Player

## 2.2

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### Fit with BBC strategy and public purposes

#### 2.2.1

The new proposals reflect and respond to the changing media environment. They are central to the BBC's strategy of remaining a relevant and valued public service broadcaster in the digital world. In summary, the rationale behind creating an on-demand BBC is to:

- Meet the expectations of licence fee payers for greater choice and control over how and when they consume BBC content. As such, on-demand provision will play an essential role in maintaining reach and usage of BBC output.
- Increase the impact and value of the BBC's investment in content. On-demand more efficiently matches supply and demand for programmes than a linear schedule.
- Make the BBC more relevant to licence fee payers and thereby enhance the delivery of the BBC's public purposes, including building digital Britain.

#### 2.2.2

The BBC already maintains a direct to consumer proposition on the internet at [bbc.co.uk](http://bbc.co.uk). This website has established itself as a rich resource of public service content, from the provision of the latest news to content that supports and enhances BBC broadcast programmes as well as distinctive online content and formats. The Graf review of BBC Online in 2004 stated that "the fixed Internet has the potential to become, for the BBC, one of the main means of distributing its content to TV and mobile devices, as well as to the PC" and that the "provision of an appropriate level of audio and video services will be an important element in...preserving the attractiveness and relevance of BBC Online in the future".

#### 2.2.3

While public value is intrinsic to BBC programming, additional public value will also be created by the BBC presenting its output on-demand in a direct to consumer proposition:

- As in linear broadcasting, audiences will expect access to BBC programmes on-demand over the internet free at the point of use and without advertising.
- The BBC currently adds public value in the way in which it schedules, packages, and presents its content. Online this effect can be enhanced through the provision of richer context and a public service focused user interface. This approach will be complemented by linking to and from the service to increase the overall audience benefit.
- The BBC has a key role to play in making users comfortable with the concept of downloading content. The new offerings will also help specifically to drive the

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uptake of broadband internet, making them consistent with the BBC's purpose of building digital Britain.

#### **2.2.4**

While PVR technologies currently provide a more generous consumption window, seven day catch-up will offer audiences the opportunity to view a programme after it has been broadcast without having to make the decision prior to transmission. BBC iPlayer will also place programming in a much richer context than basic PVR systems. Non-DRM downloads will complement the BBC's existing on-demand audio service by extending appropriate material across the widest possible range of portable devices.

## **2.3**

### **Quality and Distinctiveness**

#### **2.3.1**

There is considerable uncertainty about how the on-demand market will develop and about the nature and sustainability of commercial business models. There are many examples, particularly in the United States, of content providers and broadcasters experimenting with different options for charging for and delivering audiovisual content. The strategic dynamics of UK broadcasting suggest that all the major commercial operators will launch on-demand services as a matter of course, whatever the BBC decides to do.

#### **2.3.2**

In this context the BBC's offerings will be distinctive in a number of ways. First, the full range of the BBC's public service output, available on-demand, will extend beyond commercially attractive programming. Second, as in linear broadcasting the BBC's on-demand provision will be free at the point of use and advertising free. Finally, the BBC iPlayer will generate public value in the distinctive way in which it presents its content in a rich context and through a public service focused user interface. It will provide adequate access for audiences with sensory, cognitive and physical impairments.

#### **2.3.3**

Audience research undertaken as part of trials shows a high level of appreciation for the proposals:

- 83% gave Seven day TV catch-up over the internet a score of five or more out of ten for excellence,
- 96% gave Seven day catch-up over cable a score of five or more out of ten for excellence

- 97% gave Non-DRM downloads over the internet a score of five or more out of ten for excellence

## 2.4

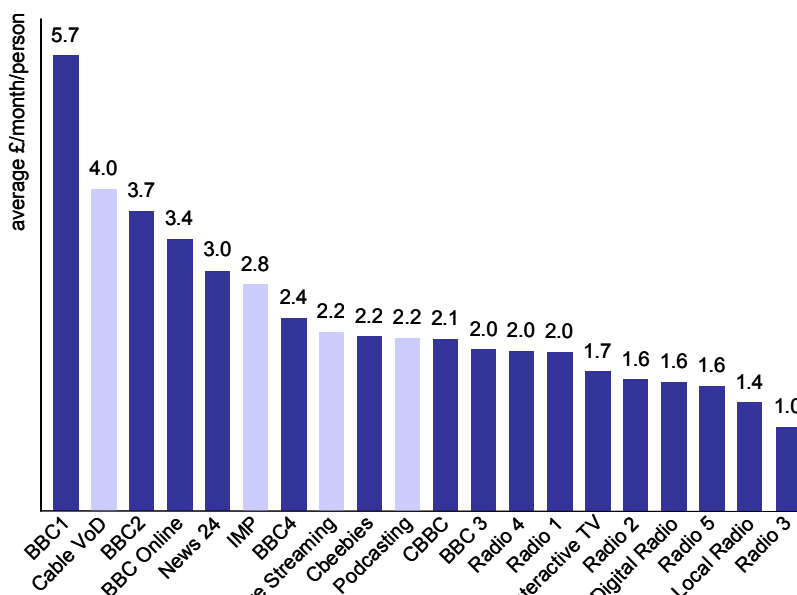
### Consumer and Citizen Benefits

#### 2.4.1

The proposals are valued highly from both a consumer and citizenship perspective. Extensive audience research suggests that individuals welcome the opportunity to access the BBC content they value in more convenient and flexible ways. Audiences also recognised that in many areas – knowledge-building, culture and building digital Britain – the new on-demand offerings will enable the BBC to deliver greater value to society. In this way, the consumer benefits of the proposals are intrinsically linked to the delivery of the BBC's public purposes. Taken together, the new proposals were seen to be worth £11.20 per person per month – more than the monthly cost of the current licence fee.

Figure 1: Value of new on-demand proposals

Imagine you no longer had to pay the BBC licence fee. We are curious to know what the different BBC services are worth to the average person. To help us understand this could you tell us what you think each of these is worth, to each person, please?<sup>4</sup>



Source: Human Capital, Deliberative Research, March 2006

<sup>4</sup> 'IMP' refers to the BBC's Integrated Media Player trial and 'Podcasting' refers to the BBC's download and podcasting trial. See annex 1 for more details

In deliberative research, 100% of the participants thought that, taking all of the issues together, the BBC should launch these types of services

## 2.5

### Reach

#### 2.5.1

In a world in which audiences will increasingly access content through on-demand functionality, these proposals will help the BBC meet its ambition of universal provision. Over time, the BBC expects that on-demand television viewing in the home will in aggregate be a substitution of linear viewing as audiences choose to take control of their scheduling. On-demand, however, offers the opportunity for the BBC to re-connect with audiences who have drifted away from traditional linear TV. For instance, the proposals will enable place-shifted consumption via mobile devices. Crucially, more of the BBC content that audiences do consume should be more directly relevant and attractive to them.

#### 2.5.2

The modelling work carried out for this report projects the following figures for 2011:

- Seven day TV catch-up over the internet: 10% of BBC viewing in broadband homes, with a reach of 20% of TV homes
- Seven day TV catch-up over cable: 19% of BBC viewing in cable homes, with a reach of 11% of TV homes
- Simulcast TV over the internet: 5% share of BBC viewing in broadband homes, with a reach of 11% of TV homes
- Non-DRM downloads over the internet: 1.5% of BBC Radio consumption in broadband homes, with a reach of 5.5% of all homes

#### 2.5.3

Given the uncertainties around any projections of usage and reach for new products, the report contains some alternative scenarios to illustrate the effects of changing the key assumptions used in the model. Although the above projections may seem modest compared with overall broadcast consumption, they mark the early years of a fundamental shift in the way audiovisual content will be distributed and consumed. From 2011 a number of important supporting technologies may be achieving mass market status including:

- In-home networks and multiple PCs in the home will enable more PCs in the home to make use of the same broadband connection for downloading content.
-

- 
- Media centers which will enable internet content to be viewed on the TV set, which may be preferred to watching it on a PC.
  - Widely available wifi outside the home, which will allow people with laptops or pocket PCs to consume broadband content while in public spaces.

#### **2.5.4**

Moreover, the size of the technology-sophisticated younger generation that has grown up in an online world will continue to grow. The BBC believes these trends will support continuing substantial growth of the new offerings over the longer-term.

#### **2.5.5**

These proposals, therefore, are important both to deliver public value to licence fee payers over the next five years, but also to ensure the BBC has established its strategic position in readiness of these wider and potentially more fundamental changes..

## **2.6**

### **Cost**

#### **2.6.1**

The BBC has considered only incremental costs for the new proposals. For instance, the cost of content creation has not been allocated to these proposals. This is because the linear TV channels will continue to supply the relevant BBC content regardless of whether the on-demand proposals are launched. Also not included are already planned infrastructure improvements (such as distribution and search) that will be an important enabler of the new proposals, but which will be deployed for [bbc.co.uk](http://bbc.co.uk) regardless of whether these proposals are launched. In aggregate the four proposals have expected start-up and build costs of [ x ], and operating costs of [ x ] through 2010/11, with a total incremental cost of £131m (or approximately £26m per year).

#### **2.6.2**

A significant proportion of the incremental costs are shared across two or more of the proposals. For instance, the cost of rights and playout, which represent [ x ] of the total costs for all four proposals, are shared across Seven day TV catch-up over the internet and Seven day TV catch-up over cable. This means there are significant economies of scope from doing all the TV proposals in conjunction – the cost of doing all three of them together is much less than the sum of doing each of them individually. Conversely Non-DRM downloads over the internet, which does not share incremental costs with the TV proposals, can be more reasonably considered in isolation.

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**2.6.3**

Our estimate is that the average cost per user hour over the years up to 2010/11 will be 1.52p. This looks low compared to the cost of the BBC as a whole (5p per viewer/listener hour) because they are primarily methods of distribution and do not incur increased content creation costs beyond additional rights payments and limited re-purposing.

**2.7****Value for Money****2.7.1**

The BBC has used established survey techniques to estimate the audience's perception of the value, in monetary terms, of these proposals. By comparing the perceived value with the cost of provision, one can calculate a 'value yield'. The 'value yield' is defined as the total perceived value divided by the total cost, with an average across the current BBC of approximately 2<sup>5</sup>. By 2010/11 we estimate that these proposals, taken together, will be generating an average value yield of 14. The value yields for the proposals improve over time as usage and reach increase.

**2.7.2**

Again, these figures are high partly because the cost figures contain only the incremental costs of running these offerings. These proposals should, however, increase the overall value yield for the BBC thereby increasing the effectiveness of Licence Fee investment.

**2.7.3**

These proposals are an integral part of the BBC's digital strategy and will enhance the delivery of the Corporation's public purposes. The evidence outlined in this document suggests that the proposals would increase the value and impact of the BBC's content, as well as add public value through new methods of distribution. In summary, BBC Management believes that the gross public value created by the proposals, taken together, justifies the planned investment.

**2.7.4**

Other options for addressing the challenges posed by the move to on-demand have been examined. These include directing the investment into linear content, 'wait and see', and a fully commercial model for on-demand. For the reasons set out in the main body of the report, none of these is likely to deliver an equivalent level of public value for the investment as BBC Management's current on-demand proposals.

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<sup>5</sup> 'Measuring the Value of the BBC', A report by the BBC and Human Capital, 2004.

## Section 3

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### Description of proposals

#### 3.1.1

Under the new Charter and Agreement, all BBC proposals for significant change to existing services or for new services should be subject to a Public Value Test (PVT)<sup>6</sup>. The PVT, which will be applied by the new BBC Trust, will involve weighing up the public value of the proposed change against its potential impact on the market.

#### 3.1.2

The BBC Board of Governors intends to undertake initial application of the PVT during the current Charter period, if it receives any service-related investment proposals which fall within its scope.

#### 3.1.3

This document sets out BBC Management's application to the BBC Governors for permission to launch a number of new public service offerings, which will provide the BBC's existing content on-demand to licence fee payers. The evidence and analysis presented in this document will enable the BBC Governors to assess the public value of the proposals as part of the PVT.

#### 3.1.4

The approach adopted is in line with that set out in the White Paper and by the BBC Board of Governors<sup>7</sup>. The document follows Terms of Reference agreed with the BBC Governance Unit. It draws on extensive analysis and input from media strategy consultancy, Human Capital.

#### 3.1.5

Separately, BBC Management has commissioned a preliminary assessment of the potential market impact of the new on-demand proposals. This work was carried out by Human Capital, with background analysis by Oliver and Ohlbaum.

#### 3.1.6

Over the last eighteen months the BBC has conducted a number of trials to assess audience demand for new on-demand offerings. Trial initiatives included the Integrated Media Player, TV+<sup>8</sup>, radio downloads, video on demand on cable and Homechoice and mobile coverage of major events. Having analysed the consumer research from these trials, BBC Management wishes to launch a number of new, complementary on-demand propositions. These proposals involve a substantial

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<sup>6</sup> DCMS White Paper, A public service for all: the BBC in the digital age (March 2006)

<sup>7</sup> BBC Governors, Service Licences and the PVT public consultation document

<sup>8</sup> TV+ was a body of work that evaluated the opportunities that on-demand offers television

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broadening of the current scope of existing offerings and an enhancement of their functionality. BBC Management believes this package represents an appropriate response to current and projected audience demand and fits with the BBC's strategy to deliver public value in the transition to digital.

The proposals are:

- Seven day TV catch-up over the internet
- Seven day TV catch-up over cable
- Simulcast TV over the internet
- Non-DRM audio downloads over the internet

## 3.2

### Seven day TV catch-up over the internet

#### 3.2.1

The proposed on-demand catch-up facility will give audiences access to the BBC's linear television schedule where rights costs allow. It will be principally organised around a seven day window from the point of original broadcast. The seven day window is defined as:

- Audiences will have seven days from the point at which it is broadcast within which to receive the programme from the BBC<sup>9</sup>. They will then have another seven days from the point at which the programme is first viewed to watch that programme as many times as they like. After seven days from the point at which the programme was first viewed, the file is deleted or permanently disabled.
- In addition the service will include 'series stacking'<sup>10</sup> whereby all of the episodes in a series are available from the BBC from the point at which they are broadcast until seven days after the transmission of the last episode in the series. The viewer is then able to watch any episode as many times as they like for seven days after the point at which each episode is first viewed. After seven days from the point at which it was opened the episode is deleted or permanently disabled.
- The definition of the seven day window and the series stacking enhancement is designed to provide a basis for the PVT but could be changed in the future in response to evolving consumer behaviour. Any change would be subject to any appropriate regulatory approval.

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<sup>9</sup> Also includes packages of existing BBC radio content focused on particular genres, e.g. BBC Jazz or BBC Science

<sup>10</sup> Series stacking will also apply to radio programming

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### 3.2.2

A more limited definition of Seven Day catch-up over the internet was evaluated through the Integrated Media Player (iMP) trial which ran from September 2005 until February 2006 (see Section 6). Audiences felt that this approach did not provide enough flexibility when compared with catch-up enabled through personal video recorders (PVRs) and more traditional technologies such as video recorders. The BBC considered a range of options in order to balance the creation of public value with the interests of rights holders and the BBC's obligation to maximise secondary commercial revenues for reinvestment in programming. BBC Management believes that the approach outlined above represents the most effective solution.

### 3.2.3

While PVR technologies currently provide a more generous consumption window Seven day catch-up over the internet offers audiences two critical advantages:

- Retrospective scheduling allows users to view a programme after it was broadcast without having to make the decision prior to transmission. This facility provides significantly more convenience i.e. read the review and then watch the programme. This feature also supports the public service broadcasting objective of creating shared experiences among audiences.
- Seven day catch-up over the internet is able to place programming in a much richer context than basic PVR systems. TV or radio programmes can be linked to supporting web functionality such as additional material and search to create an overall experience that is greater than the sum of its parts.

## 3.3

### Seven day TV catch up over cable

#### 3.3.1

This offering (Seven day TV catch-up over cable) will make BBC television content available on-demand within a seven day window via digital cable (ntl and Telewest) and Homechoice, building on the ongoing technical and consumer trials on these platforms. For these platforms the seven day window is defined as:

- Audiences will have seven days from the point at which it is broadcast within which to view a programme. After seven days the programme will no longer be available on a public service basis.
- In addition the service will include 'series stacking' whereby all of the episodes in a series are available for viewing from the point at which they are broadcast until seven days after the transmission of the last episode in the series. After this point all episodes will no longer be available on a public service basis.

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## 3.4 Simulcast TV over the internet

### 3.4.1

This will provide UK audiences with the ability to watch the BBC's existing television channels wherever they have a broadband internet connection.

## 3.5 Non-DRM downloads over the internet

### 3.5.1

The provision of audio programmes and material related to audio programming (with the exception of full track commercial music) without Digital Rights Management (DRM) protection alongside the existing seven day on-demand audio service, where the rights holders agree that this form of distribution is appropriate. Removing DRM restrictions allows a broader range of devices to access the material, extending audience choice around where and when they consume BBC programming (see section 4 below).

## 3.6 Further information

### 3.6.1

The three internet-based offerings will be combined into a direct-to-consumer offering, BBC iPlayer version 1.0<sup>11</sup>, which will incorporate all the existing BBC players<sup>12</sup>. In summary, BBC iPlayer version 1.0 is designed to unify the BBC's provision of audio and video content on-demand and to make it available to UK audiences over the internet.

### 3.6.2

Delivery over the internet means that BBC iPlayer will deliver content to any device that is connected to the internet, subject to the connection speed being sufficiently fast to allow transfer of rich media assets in a reasonable time. In practice, this means that the service will be available primarily to users with a broadband connection. Where distribution is via downloading, programme files will be available in a range of formats which will affect the size of each file. The range of formats will be determined by a number of considerations: editorial, audience demand and technical.

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<sup>11</sup> Note that Non-DRM downloads will also be accessible through podcasting portals such as iTunes

<sup>12</sup> Radio Player, News Player, Weather Player, Sport Player and Media Console Player

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### 3.6.3

Currently most broadband connections run to a PC (located at home or in the office), and so viewing is likely initially to occur in front of a computer screen. Wireless devices with the equivalent of a broadband connection to the internet e.g. 3G, may also access BBC iPlayer. Where programmes are downloaded to view (e.g. catch-up), it may be possible to transfer them to portable devices through synchronisation with a computer subject to supporting appropriate DRM.

### 3.6.4

Over time, convergence of technologies is likely to mean more devices become internet enabled, e.g. set top boxes for linear digital television reception. It is anticipated that BBC iPlayer would become available through such converged devices.

### 3.6.5

In release 1.0, existing types of audio and video content that are currently restricted to the UK will continue to be restricted to the UK, and content types that are available internationally will continue to be available internationally. But 7 day TV catch up over the internet and Simulcast TV over the internet will be restricted to the UK only, with the exception of non-DRM protected material<sup>13</sup>.

### 3.6.6

The seven day catch up television offerings we are assessing as part of the current PVT relate to the BBC's direct to audience proposition, BBC iPlayer, and those digital cable services that have undergone technical and consumer trials of BBC television catch-up. To date, this includes ntl, Telewest and Homechoice. In principle, BBC Management is prepared to make BBC television content available to other mediated on-demand distribution methods, subject to an assessment of public value and cost, ensuring that such general criteria as may be required are met and following any regulatory clearance as appropriate.

### 3.6.7

In light of the rapidly changing media environment, the BBC intends to incorporate additional features into future releases of BBC iPlayer, subject to regulatory approval where necessary. Technical and regulatory considerations have led to the restriction of BBC iPlayer release 1.0 to BBC commissioned content. The BBC does, however, recognise the potential to deliver greater value to audiences through collaboration with other organisations. The BBC will explore a range of options for expanding the content available in subsequent releases of BBC iPlayer.

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<sup>13</sup> While the availability from [bbc.co.uk](http://bbc.co.uk) of non-DRM downloads may or may not be restricted or qualified in some way, by definition audiences will be able to subsequently share this material outside of any geographic, device or time limited conditions

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**3.6.8**

As an extension of free to air linear broadcasting, these proposals relate to the primary consumption window. It should be noted that the BBC is intending to offer on-demand content within the secondary window on a commercial basis.

## Section 4

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### Fit with BBC Purposes and Strategy

#### 4.1.1

This section considers the extent to which the four proposed offerings are aligned with the BBC's strategy and will improve its ability to deliver its public purposes. Additional information on audience perception of how the new proposals will support the BBC's purposes is included in Section 6: Consumer and Citizen benefits.

## 4.2

### Current role of the BBC

#### 4.2.1

The BBC has a unique role as a broadcaster and programme-maker. It aims not only to enrich the lives of those who pay the licence fee by entertaining, informing and educating, but also to deliver value to society as a whole. The continuing importance of the BBC in a rapidly changing world has been endorsed by both the government and audiences in the Charter Review process. The recent White Paper<sup>14</sup> makes explicit the particular public purposes that the BBC should pursue. Six public purposes will be enshrined in the next BBC Charter and Agreement which will come into force in January 2007. The purposes are:

- Sustaining citizenship and civil society
- Promoting education and learning
- Stimulating creativity and cultural excellence
- Reflecting the UK's Nations, regions and communities
- Bringing the world to the UK and the UK to the world
- Building digital Britain

#### 4.2.2

The BBC currently delivers these purposes through a range of services, including national and local radio, its television channels, BBCi and bbc.co.uk. The next Charter period will see unprecedented technological change. In order to continue delivering value to licence fee payers the BBC must evolve to ensure that audiences will still be reached in ways that best meet their needs and expectations.

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<sup>14</sup> Secretary of State, White Paper – "A Public Service for All: The BBC in the Digital Age", March 2006

## 4.3

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### The changing world

#### 4.3.1

A changing society is leading to different expectations of broadcasters

In *Building Public Value*<sup>15</sup>, a number of key trends were identified that will shape audience expectations of the BBC during the next Charter period:

- An increasingly plural and diverse society; where differences between the generations are becoming more pronounced, deference is diminishing and family structures are changing.
- A maturing multicultural society; with ethnic minorities now representing just under 8% of the overall population and projected to grow rapidly over the next decade, particularly in urban areas.
- A society with a growing interest in individual self-fulfilment and achievement; but where access to learning opportunities and the motivation to take them up remain unequal.
- A society more open to global influences; where people are more likely to travel, conscious of both the opportunities and threats that globalisation can bring.
- A society where people increasingly value localness; which supports the new democratic institutions in Scotland, Wales and Northern Ireland.

As a result, one-size-fits-all mass broadcasting, in which audience members are prepared to go on watching and listening to a TV channel or radio station which may work for others but which does not feel relevant to them, is unlikely to satisfy the needs of audiences.

#### 4.3.2

The public has changing expectations of public institutions

Expectations of public service broadcasting are in part being shaped by developments in other areas of the public sector. The Government has published its intention to use technology to give citizens greater flexibility and control when accessing public services<sup>16</sup>. These will increasingly be designed around the needs of the consumer and the citizen rather than around the needs of the provider.

Everyday, people are choosing to access the NHS by phone, file their tax returns online or look at school performance tables on the internet. As more consumers use the internet, mobile phones and digital television to interact with commercial service providers, they will increasingly expect public services to be delivered in similar ways.

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<sup>15</sup> BBC, *Building Public Value: Renewing the BBC for a Digital World*, June 2004

<sup>16</sup> *ibid*

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### 4.3.3

New technologies are transforming the delivery and consumption of media

The on-demand world is defined by audience's desire to consume media however, whenever, wherever they want, enabled by time shifting and place shifting technologies. 70% of UK households now have digital television and radio<sup>17</sup> and 60% have access to the internet. Of these, over half now have a broadband connection<sup>18</sup>. Broadband network development in the UK has now reached the point where video can be distributed over the public internet. Audiences are already listening to live and time-shifted radio via the internet whilst working at their computers, as well as downloading extracts from television and radio programmes to their mp3 players and mobile phones for consumption on the move. Personal Video Recorders (PVRs) allow individuals to reschedule broadcast radio and television programmes to enjoy at a time that suits them.

### 4.3.4

Audiences increasingly expect media products to be tailored to their individual requirements. Mobile phones, electronic programme guides, buying on the basis of peer group recommendations on amazon.co.uk and breaking news text alerts are just a few examples of devices and products that are offering greater convenience, flexibility and control to individuals.

### 4.3.5

The BBC expects that on-demand television viewing in the home will in aggregate and over time be a substitution of linear viewing. The continued explosion of choice in television in the UK has not led to an increase in the number of hours viewed and in fact viewing to multi-channel networks has almost entirely been substitutional<sup>19</sup>. On-demand, however, offers the opportunity for the BBC to re-connect with audiences who have already drifted away from traditional linear TV. For instance, the proposals will create new opportunities for place-shifted consumption. It is expected that portability of radio related Non-DRM downloads may contribute to some increase in overall radio consumption.

### 4.3.6

The emerging on-demand market

Although on-demand markets are in their infancy around the world, there are already many examples of content providers and broadcasters experimenting with different commercially-funded models. In the USA, network broadcasters such as ABC offer downloads of key video programming shortly after first transmission. These are

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<sup>17</sup> Ofcom, Quarterly Digital Progress Report Quarter 4 2005

<sup>18</sup> Ofcom, The Communications Market, Interim Report, February 2006

<sup>19</sup> BARB

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financed through different combinations of pay-to-view charges and advertising. In the UK, BSkyB has launched 'Sky by broadband', offering on-demand access to certain types of content free as part of the premium Sky subscription package. Home Choice and NTL/Telewest similarly offer a range of on-demand content. Both ITV and Channel 4 have announced services which will be a mix of advertisement-funded and pay-per-view. In addition similar video services will be provided by non-traditional broadcasting organisations such as AOL, Google, MSN, Yahoo, Amazon and BT. On-demand audio services enjoy a relatively lower barrier to entry leading media companies, publishers, public institutions, private companies and individuals to experiment in this area. This breadth of content is available through a range of distributors from individual websites through to large aggregators such as iTunes or mySpace.

#### 4.3.7

Around 70% of households are projected to have broadband access by 2011<sup>20</sup>. By this time downloading and sharing of video, audio and even user-created content from the internet will be commonplace for many. Around two-thirds of homes will have media storage devices<sup>21</sup> and a significant number of on-demand services will be launched within this period. Accordingly, the user base will move from early adopters to a more mainstream audience, reflecting the profile of the UK as a whole.

#### 4.3.8

Commercial providers are likely to use a mix of advertising, subscription and pay-per-view models to fund on-demand services. For video these services are likely to be initially limited to high-value programming such as sport, films, peak time drama and entertainment, although the range of programming may broaden over time. For audio on-demand, any paid services are likely to be highly distinctive exclusive content, such as the Ricky Gervais podcasts, or music programming. Media companies are already experimenting with sponsorship for and advertising within podcasts. The market will bring benefits in terms of greater choice for those consumers who are willing and able to pay, but is likely to be limited in the range of public service content available.

## 4.4

### The BBC's on-demand strategy

#### 4.4.1

Against this background, the BBC's strategy is to offer licence fee payers more choice and convenience in accessing the public service content they have already

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<sup>20</sup> Human Capital, Reach Model, April 2006

<sup>21</sup> Ibid

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funded. It will do this through a range of new offerings that build on the on-demand offerings already available.

In summary the rationale behind creating an on-demand BBC is to:

- Meet the expectations of licence fee payers so they can easily access BBC content in an environment where they will be able to watch and listen to whatever they want whenever and wherever they want. This will play an essential role in maintaining reach and usage of BBC output.
- Help licence fee payers find and consume the content they most value thereby increasing the impact and value of the BBC's investment in content. On-demand more efficiently matches supply and demand for programmes than a linear schedule.
- Make the BBC more relevant to licence fee payers thereby enhancing the delivery of the BBC's public purposes, including building digital Britain.

#### **4.4.2**

Extensive research commissioned by the BBC showed that audiences see two fundamental reasons why the BBC should be involved in on-demand<sup>22</sup>; first to keep up with changing audience expectations and second to ensure that it is not "left behind" in this new world. In the deliberative research licence fee payers felt that the BBC's provision of on-demand offerings would enrich their TV viewing experience considerably. They also felt that on-demand would play a fundamental role in helping the BBC fulfil its purposes by making content more easily and widely available (see section 6).

#### **4.4.3**

Early BBC on-demand offerings have been well received

The BBC has already made significant progress with a range of on-demand offerings. The BBC Radio Player was launched on [bbc.co.uk](http://bbc.co.uk) in June 2002. This made the majority of BBC radio channels available to listeners over the internet for the first time and gave audiences a chance to catch-up with BBC radio programmes within seven days of broadcast. In January 2006, the BBC's radio websites were visited by a record 9.3 million unique users who consumed an unprecedented 18 million hours of live and on-demand radio. BBC television news broadcasts have been available online since 2004, and they are attracting significant audiences - in the week ending 16th April 2006, there were 2.4 million requests for downloads of BBC news audiovisual material<sup>23</sup>. They also widen the appeal of BBC news offerings by attracting younger audiences. The BBC's current download and podcasting trial has given audiences access to a range of BBC radio material for consumption on the

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<sup>22</sup> Human Capital, Deliberative Research, March 2006

<sup>23</sup> BBC New Media, Stats Package, April 2006

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move. This generated a record 1.9 million mp3 downloads in January 2006, ranging from the Today programme on Radio 4 to Film Café from the Asian Network and the Rumour Mill on Radio Five Live<sup>24</sup>. Interactive offerings allied to BBC programming are strengthening audience relationships with the BBC as well as enhancing the enjoyment they receive from BBC programmes<sup>25</sup>.

The BBC Two website has been trialling downloaded clips and full episodes of selected BBC Two programmes since February 2006. Live and on-demand web streaming and the premiering<sup>26</sup> of individual programmes has been built into the BBC Three proposition – and formed part of the consent from the Secretary of State.

## 4.5

### The proposed on-demand offerings

#### 4.5.1

The next stage of the BBC's on-demand strategy will add the following elements:

- Seven day TV catch-up over the internet
- Seven day TV catch-up over cable
- Simulcast TV over the internet
- Non-DRM audio downloads over the internet

The three internet-based offerings will be combined into a direct-to-consumer offering, BBC iPlayer version 1.0<sup>27</sup>, which will incorporate all the existing BBC players<sup>28</sup>.

#### 4.5.2

The BBC already maintains a direct to consumer proposition on the internet at [bbc.co.uk](http://bbc.co.uk). This website has established itself as a rich resource of public service content, from the provision of latest news to content that supports and enhances BBC broadcast programmes and distinctive online content and formats. This has led to [bbc.co.uk](http://bbc.co.uk) achieving a reach of 54% (Q4 2005/06) in internet households and an approval of 80% (Q4 2005/06). The Graf review of BBC Online in 2004 set out that “the fixed Internet has the potential to become, for the BBC, one of the main means of distributing its content to TV and mobile devices, as well as to the PC” and that the “provision of an appropriate level of audio and video services will be an important

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<sup>24</sup> BBC New Media, Stats package, January 2006

<sup>25</sup> BBC, Pulse data, 2005-2006 shows that, on average, 93% of respondents found BBC interactive services enjoyable, and 88% agreed that the service added to their enjoyment of programmes

<sup>26</sup> The first showing of a programme through broadband, before it moves to linear TV

<sup>27</sup> Note that Non-DRM downloads will also be accessible through podcasting portals such as iTunes

<sup>28</sup> Radio Player, News Player, Weather Player, Sport Player and the Media Console Player

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element in...preserving the attractiveness and relevance of BBC Online in the future<sup>29</sup>.

#### **4.5.3**

Public value is intrinsic to the programming the BBC creates but additional public value is created by the BBC presenting its on-demand offer in a direct to consumer proposition

- As with linear broadcasting, audiences will expect access to BBC programmes on-demand over the internet free at the point of use and without advertising.
- The BBC currently adds public value in the way in which it schedules, packages, and presents its content. Online this effect can be enhanced through the provision of richer context and public service focused user interface. This approach will be complemented by linking to and from the service to increase the overall audience benefit.
- The BBC has a key role to play in making users comfortable with the concept of downloading content. The BBC will be able to use the existing reputation of bbc.co.uk to encourage users to access video on-demand.

In addition, the majority of costs would be incurred whether the BBC distributes its content through a direct to consumer proposition or through third parties. From a value for money perspective, there is little incremental cost in the BBC providing this service itself rather than using third parties.

The individual components of the on-demand offerings will each meet different audience needs.

#### **4.5.4**

Seven day TV catch-up over the internet or over cable will offer licence fee payers the ability to consume the content they enjoy at their own convenience. Using a seven day period to organise the on-demand offers is based on the recognition that audiences are familiar with the concept of a weekly schedule and that the majority of BBC series have a weekly interval between episodes. Simulcast TV over the internet enables audiences to watch television in new situations or while using the computer for other tasks.

#### **4.5.5**

The BBC currently provides on-demand audio through the Radio Player, delivering audiences seven day catch-up listening across the BBC networks. This service will continue as a central part of the BBC's on-demand strategy, evolving in line with audiences and technology developments. The proposal to offer Non-DRM downloads is designed to complement this existing service.

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<sup>29</sup> Graf Review of BBC Online 2004, p61

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#### **4.5.6**

Since the launch of Radio Player an increasing amount of on-demand audio consumption is taking place on portable devices. From an audience point of view one limitation of Radio Player is that it was originally designed to be used on a fixed line PC. The extensive range of portable media players, from iPods to mobile phones, creates a fragmented technology environment. There is no DRM format that would work across all devices although the BBC continues to assess potential solutions in this area. Providing programming without DRM creates the most accessible and universal proposition for portable devices.

#### **4.5.7**

Where rights holders agree that this form of distribution is appropriate and being mindful of the potential for negative market impact, Non-DRM downloads are a logical extension to the BBC's existing seven day on-demand audio services. For other material the BBC will continue to offer and develop DRM protected solutions despite the universality limitations this creates.

Although the removal of DRM restrictions is principally driven by technical imperatives, the proposal creates the potential for audiences to keep material indefinitely.

#### **4.5.8**

The new proposals are based on a programme of trials and market research. This involved three specially designed pieces of quantitative and deliberative research covering both individuals who had trialled versions of the offerings as well as the wider population:

- BBC trials quantitative research<sup>30</sup>
- Human Capital deliberative research
- MORI research on new service ideas

#### **4.5.9**

The research methods are outlined in Annex 1. Overall, the research was weighted towards individuals who had direct experience of the new offerings. As 'early adopters', this group may not be representative of the UK population as a whole. However, when researching innovative new services, such as on-demand TV, it is important for respondents/participants to understand them as fully as possible. Over time, the mainstream typically adopts proposals that are identified as popular by early adopters.

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<sup>30</sup> The quantitative research was carried out on trialists of the iMP, Cable VoD and podcasting. Simulcast TV over the internet was not trialled.

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#### 4.5.10

The findings from the research, outlining the perceived quality and distinctiveness of the proposals and their consumer and citizen benefits, are discussed in detail in Sections 5 and 6 of this document. Overall, the research showed that licence fee payers recognise the rationale behind the BBC's on-demand proposals. In particular audiences believed the new offerings would help to:

- Give them greater choice over how and when they consume BBC programmes.
- Maintain overall reach and help the BBC to address harder to reach groups such as younger audiences.
- Enhance the impact and value of the BBC's investment in UK PSB content.
- Thereby, enhance the BBC's delivery of its public purposes and specifically help to drive digital Britain by attracting new audiences to the internet.

#### 4.5.11

Respondents generally felt that the on-demand proposition would allow them to fit their TV viewing more conveniently around other commitments, or watch programmes in response to a recommendation following the original broadcast. They saw it as a complement to linear broadcasting, picking the best of previously missed shows to wrap around the live schedule. There was also perceived to be a benefit in being able to consume programmes in different locations, particularly when the television was already being used by another household member.

#### 4.5.12

Audiences were likely to derive even greater satisfaction from the programmes viewed, since they were chosen to suit individual tastes at the particular time of viewing. There was strong agreement with the statement that this proposal could "change usage of TV for the better" (an average of 7.2 out of a possible 10)<sup>31</sup>.

## 4.6

### Maintaining BBC consumption

#### 4.6.1

The proposed offerings are designed to extend access to the full range of BBC output, and will therefore not be focused on specific audience groups. However, the new ways of distributing content are likely to help the BBC become more relevant to hard-to-reach segments of the audience, such as the young.

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<sup>31</sup> BBC, PVA research, iMP, February 2006,

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#### 4.6.2

There is clear evidence that younger audiences are drifting away from traditional linear TV. Research showed that in 2004 children aged 10-14 were consuming 20% less TV per week than children of the same age a decade earlier<sup>32</sup>. Younger people are increasingly demanding greater choice and control over how and when they consume media content. Many children now have a wider range of media devices in their bedrooms than their parents have in the living room<sup>33</sup>.

#### 4.6.3

In the iMP trial, panellists were skewed towards men (80% vs. 48% in the general population), and were younger in age (28% 25-34 vs. 13% in the population)<sup>34</sup>. These are not traditional BBC supporters<sup>35</sup>. Consequently their enthusiasm for the BBC's on-demand proposals can be seen as an indication of how new forms of distribution could help the BBC maintain, and hopefully, increase reach across certain audiences. These groups may have moved on from traditional forms of linear broadcasting or they may not have acquired the habit in the first place.

#### 4.6.4

The share of viewing via the iMP was highest in the youngest age group of 16-24 year olds. They were comfortable with viewing in non-traditional ways – typically alone, late at night and via the computer, wherever in the house that might be. In the trial, they alone showed evidence of swapping their traditional viewing for this new way of consuming television. All other age groups used the iMP to top-up their regular television viewing, typically after the evening peak period.

#### 4.6.5

BBC share in iMP triallist households increased by an average of 6% across the period of the trial. This was consistent in both multi-channel and analogue-only television households. This reflects the fact that only BBC programmes were offered on-demand, and may not be the case when commercial service providers also enter the market. It does suggest, however, that on-demand proposals will help maintain, and could possibly increase, current levels of BBC usage and reach in digital households.

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<sup>32</sup> BARB, TNS/Infosys, 2004

<sup>33</sup> Daily Life survey, 2002

<sup>34</sup> ONS, Census, 2001

<sup>35</sup> Human Capital, Measuring the value of the BBC, August 2004

## 4.7

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## Enhancing the impact and value of the BBC's investment in UK PSB content

### 4.7.1

The BBC currently invests approximately £900m per annum in originated programmes, only for these to be broadcast just once or a handful of times each (43% of programmes are never repeated). By extending the availability of the programmes, on-demand extracts greater value from the BBC's investment in content. In the deliberative research, respondents were very strongly in favour of the BBC's investment in on-demand as a way of enabling the BBC to meet their expectations. Audiences felt they would have more access to the things that interested them and therefore have an improved TV experience.

### 4.7.2

The most successful programmes in linear broadcasting were also the most popular in the iMP and cable VoD trials. Consequently, the most popular programmes were drama and entertainment – EastEnders, Life on Mars, Hotel Babylon, Top Gear, Casualty, Holby City, Little Britain – but there was significant consumption of almost all the programmes made available. Traditional schedules run the risk of marginalising niche programmes by placing them in unpopular slots. In an on-demand environment, programmes compete on a more level playing field. In the deliberative research, respondents thought audiences would have a better chance of finding niche programmes and felt there would be a stronger case for them being made in the first place.

### 4.7.3

These special interest programmes were seen as core to the BBC's purposes of representing communities, nations and regions as well as stimulating creativity and cultural excellence. Letter to Gaelic Learners was offered as part of the podcasting trial in February, and in the cable VoD trial audience downloads were not limited to EastEnders and Casualty but also included Marie Antoinette and The Natural World. In the context of the BBC's existing services, Radio 1's Essential Mix, a dance show broadcast at 3am on Sunday, attracted a substantial 48,439 listener requests, compared to its regular audience of 62,000. Additional listener requests for the Andy Kershaw Show on Radio 3 represented 9% of the linear audience<sup>36</sup>.

### 4.7.4

Making BBC television and radio news available online and on-demand has already demonstrated how on-demand proposals can contribute to specific BBC purposes, such as sustaining citizenship. [bbc.co.uk/news](http://bbc.co.uk/news) appeals more to the under-35 age group than news on the television, enhancing the BBC's appeal to this hard-to-reach

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<sup>36</sup> BBC, Radio Player stream requests, Quarter 4 2006

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group. In the podcasting trial, the Today programme was one of the most popular downloads, with the 8.10 interview being the second most popular programme in February, receiving over 300,000 separate downloads.

#### **4.7.5**

The majority of those who participated in the deliberative research agreed that on-demand offerings would enable people to learn more effectively. Their experiences were that greater access to more information meant more learning “by osmosis”. They also saw opportunities for on-demand offerings to support more formal learning. Teachers, for example, would be able to use extracts of programmes in the classroom without having to record material overnight. 87% thought that on-demand offerings would make it easier to find out about the world and other cultures (see section 6).

## **4.8**

### **Driving digital Britain**

In the recent White Paper, the Government has asked the BBC to use its brand, its content and its know-how to help licence fee payers migrate to and get value from new digital technologies. Throughout its history, the BBC has been instrumental in introducing people to new ways of receiving media services and encouraging their take-up.

#### **4.8.1**

This role was strongly supported in the Charter Review consultation process, with more than two-thirds of those responding to an online questionnaire raising the issue of the BBC's leadership role. Respondents under the age of 21 embraced the concept of digital Britain with enthusiasm. 9 out of 10 agreed that the BBC should be a responsible leader in helping the public to adopt and use new technologies. Interestingly, a similar proportion of the over-75s – whom many other respondents assumed would not want to or be able to adapt to the proposed changes – agreed<sup>37</sup>.

#### **4.8.2**

The BBC's sixth purpose to build digital Britain reflects a strategy that has already seen the launch of Freeview, new digital television and radio channels, and the BBC's internet site [bbc.co.uk](http://bbc.co.uk). The proposed new on-demand offerings will help to drive digital Britain by:

- Encouraging existing broadband subscribers to sample audiovisual material
- Stimulate broadband take-up

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<sup>37</sup> Ubiquis Reporting, BBC Royal Charter Review Green Paper Public Consultation – An Analysis of Responses, September 2005

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- Act as a 'trusted guide' to often complex new products and technologies

#### **4.8.3**

The deliberative research was supportive of the BBC's role in driving digital Britain. Audiences viewed internet-based offerings such as the Seven day TV catch-up over the internet and Simulcast TV over the internet as being particularly important in achieving this goal. The former was thought to be central to building digital Britain as it was the most likely to encourage people to use broadband. When trialled, the majority of individuals in the quantitative research agreed that a product like the iMP would encourage broadband take-up (average score of 6.8 out of 10). They also said they would be encouraged to experiment with other new digital products, such as Sky+, as a direct result of their experience of BBC on-demand.

#### **4.8.4**

At launch, the BBC iPlayer will only be available to those with broadband access. Issues of 'universality' are raised by the launch of all new BBC offerings based on new technologies. Broadband penetration is currently at about 40% of UK households and is predicted to continue to grow to around 70% by 2011<sup>38</sup>.

#### **4.8.5**

The BBC can play a positive role in this 'second' wave of broadband growth which will most likely to be driven by the enhanced features, content and applications offered by higher speed broadband. Such enhancements will attract existing users to higher speed connections, but may also bring the next wave of users into the broadband universe.

#### **4.8.6**

Existing broadband households who do not yet consume any video-on-demand will benefit from an easy to use, BBC-branded offering. The availability on-demand of a strong BBC content offering, free at the point of use, should contribute to growth. The reach forecasts suggest that 31% of UK households will be using at least one of the proposed BBC internet offerings.

#### **4.8.7**

The BBC has a critical role as a 'trusted guide' through the technologies of the future. It will ensure that its on-demand offerings provide a safe viewing environment for children and one in which all licence fee payers can make informed choices about what content they choose to watch or listen to. All strong post-watershed programmes and very strong radio content will be flagged with a G (for Guidance) and will carry text advice (e.g. contains strong language). PIN protection will be available to prevent access to post-watershed material. These measures are designed to provide audiences with the same information that pre-programme

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<sup>38</sup> Human Capital, Reach Model

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announcements and the watershed currently offer in the linear environment. The BBC has developed this system through consumer research and trials. The ambition is that labelling on the BBC iPlayer will encourage other industry members to offer similar tools and work towards an industry standard.

**4.8.8**

The value of the BBC's on-demand offerings will be enhanced by linking them into existing BBC services such as BBCi and bbc.co.uk. As with other BBC digital services, BBC on-demand offerings will be introduced to audiences using BBC terrestrial television and radio channels. The BBC will support those who are using broadband for the first time to ensure that they are able to master and then manipulate this new distribution method in order to enhance their viewing and listening experiences.

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## Section 5

### Quality and Distinctiveness

#### 5.1.1

This section assesses the extent to which the proposals will meet an acceptable standard of quality and distinctiveness. It is divided into four parts:

- The overall quality and distinctiveness of the proposals
- Audience perceptions of each individual proposition
- Quality and distinctiveness of the BBC iPlayer user interface
- Technical quality

## 5.2

### The overall quality and distinctiveness of the BBC's offerings

#### 5.2.1

Given that on-demand services are in their infancy in the UK, it is difficult to predict with certainty in what ways and to what degree the BBC's new offerings will be distinctive from other services, both at launch and over time. However, analysis commissioned by BBC Management of industry developments suggests that the BBC's direct-to-consumer proposition, BBC iPlayer, is likely to be distinctive in a number of important respects:

- It will provide on-demand access to the same unique range of high-quality, public service content that is available on the BBC's linear services
- It will provide on-demand access free-at-the point of use and without advertising to licence fee payers
- It will package and present BBC audio-visual content in a way consistent with the BBC's public service remit and will link to supporting web functionality such as additional material and search to create an overall experience that is greater than the sum of its parts (see 'BBC iPlayer user interface' below)

#### 5.2.2

How might commercial on-demand services develop?

There is considerable uncertainty about how the on-demand market will develop and about the nature of and the sustainability of commercial business models. There are many examples of content providers and broadcasters experimenting with different options for charging for and delivering audio-visual content. From the available evidence in UK and elsewhere, especially the US, the key developments can be summarised as follows:

**In the US**

- Digital cable offers a type of catch-up version of some of the key broadcast channels, either at no charge, or for a small extra subscription (e.g. HBO for an extra \$4.95 a month).
- The network broadcasters are offering downloads of some key programming shortly after first transmission – either via intermediaries like AOL and Apple, or via their own websites. Typically, a new episode of a popular drama, like CSI would be offered for \$1.99 (without ads) or \$0.99 (with ads) and most recently, ABC has announced it will offer streamed access to programmes free of charge, but with advertisements included in the streamed content.
- Broadband sites, such as AOL's In2TV are offering access to a wide range of archive programming – In2TV's streamed shows are free but contain 2 minutes of ads
- Push video technology is being introduced by the digital cable and satellite services, by which programmes are transmitted over the air and stored in the PVR for later on-demand usage.
- Google is developing a video search tool, which will allow online access to a huge range of audiovisual content, much of it free and user generated
- Managed IPTV services are being introduced by some of the major telcos – for example AT&T.
- Universal and others are experimenting with permanent downloading of movies, at DVD price points

**5.2.3**

**In the UK**

- BSkyB has launched 'Sky by Broadband' – with on-demand access to certain types of content, currently offered free as part of the premium Sky subscription package. Through the purchase of Easynet, Sky could launch a wide-ranging on-demand offer.
- Home Choice offers a range of on-demand content using a managed IP service
- ntl/Telewest offers limited on-demand content as part of its basic tier package
- BT Vision plans to launch a hybrid DTT/broadband on-demand service later this year, which is expected to offer paid for on-demand content, alongside the free to air TV broadcasts, with a PVR capability in the set top box.
- ITV and Channel 4 have both announced plans for a mix of advertiser-funded and pay on-demand content. MTV plans a service that will be funded by short

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advertising breaks that consumers will not be able to skip.

#### **5.2.4**

Market analysis commissioned by the BBC<sup>39</sup> suggests that a mixed model might emerge in the UK, with a combination of free to air conventional broadcasting, and a range of on-demand services – with their precise nature depending on the content genres and platforms involved. The strategic dynamics of UK broadcasting suggest that all the major commercial operators will launch on-demand services as a matter of course, whatever the BBC decides to do.

#### **5.2.5**

Alongside conventional linear broadcast channels, we are likely to see the development of:

- A range of free or low cost limited-period catch-up versions of programming from network and niche channels, funded by advertising, or included as part of a bundled subscription package, with “tethering” – typically for 7 days
- Individual episodes of leading network TV premium content available on a catch-up basis for a fee per download, along the lines of the US experiments
- The development of largely premium content on-demand services (e.g. for big movies, concerts, dramas and possibly comedies)
- Archive and niche material – broadband distribution enabling exploitation of the “long tail” of content which would not until now have been viable for commercial release

#### **5.2.6**

These new on-demand services are likely to be supplied in broadly three ways:

- Over the open internet
- Via managed cable and IPTV services
- Using push technology – broadcast to the storage capability of next generation PVRs

Ultimately, all three services are likely to converge in the sense that content delivered via each system will be available for viewing on all screens within the home.

#### **5.2.7**

How will the BBC fit into this environment?

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<sup>39</sup> Background analysis prepared in May 2006 by Oliver & Ohlbaum on the likely development of on-demand services in the UK. See also the preliminary assessment of the market impact of the BBC's new on-demand offerings, carried out by Human Capital.

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The distinctiveness of the BBC's on-demand offerings will be directly related to the BBC's unique public service mission and method of funding. It is possible that, as a result of lower cost delivery routes to consumers, and increased use of direct payments, a wider range of content than is currently provided by commercial broadcasters might emerge in an on-demand world. However, it is unlikely that the range, diversity and quality provided by the BBC could be guaranteed and, in any event, much of the content is unlikely to be free at the point of use. It is the distinctiveness of the BBC's overall content proposition that will underpin the distinctiveness of its proposed new offerings.

#### **5.2.8**

The way in which the BBC makes its on-demand content available will also be a source of distinctiveness. As the above analysis suggests, some commercial catch-up TV services are likely to be funded via advertising revenue. The lack of advertising on the BBC is felt by audiences to be a vital distinguishing characteristic. 60% of those responding to the Government's Charter Review consultation process said that advertisements would interfere with their enjoyment of BBC programmes<sup>40</sup>. Early signs are that commercial on-demand services are also likely to use subscription or per-download models which target those most able or willing to pay for high-value content. In contrast, the range and diversity of the BBC's on-demand content offering will not be driven by commercial imperatives.

#### **5.2.9**

Are the new on-demand proposals innovative?

Each of the new on demand proposals reflect propositions that were technically and editorially innovative at the time they were trialled. For example the BBC was the first broadcaster to trial a legalised peer to peer distribution technology while editorially the BBC was the only terrestrial broadcaster to provide catch-up content for the cable and Homechoice trial. The extent to which the new proposals will be innovative at launch is dependent on the speed with which the market launches similar services. Critically the BBC also has a role of introducing mainstream audiences to innovative new service concepts such as on-demand audio and video content over the internet. The BBC pioneered on demand radio with the Radio Player in 2002 and was the first UK broadcaster to offer podcasts.

## **5.3**

### **Audience perceptions of each individual proposal**

#### **5.3.1**

Seven day TV catch-up over the internet

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<sup>40</sup> DCMS, Review of the BBC's Royal Charter: What You Said about the BBC, July 2004

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Of those involved in the trial research, 93% gave it a score of five or more (out of ten) for being innovative or original, 83% did for excellence, and 84% did for its design<sup>41</sup> (Figure 2). However, in terms of meeting their perceptions of quality, audiences raised three key issues:

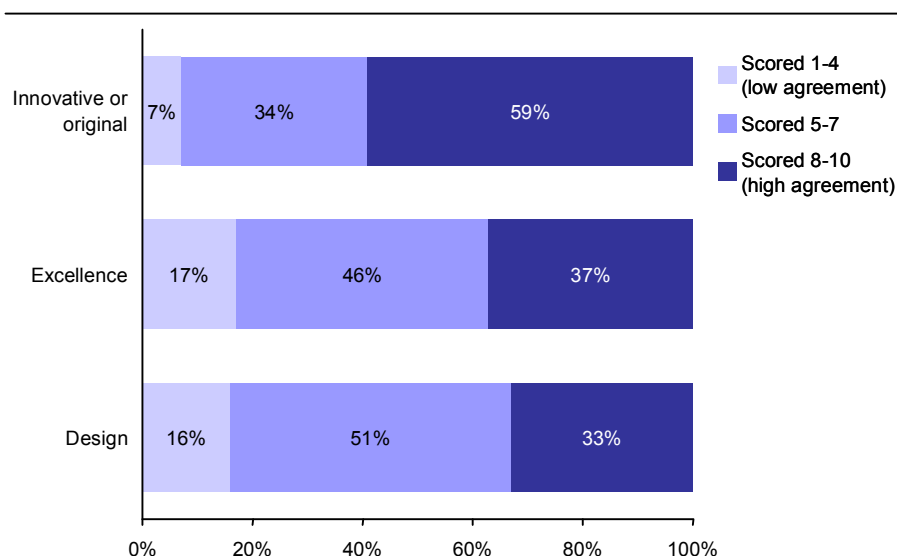
- Audiences had expected download times to be quicker. The BBC is working with industry to optimise the performance of its services offered over the public internet and expects that the natural evolution of the UK's internet infrastructure will help alleviate this problem over time.
- The range of content available. The BBC expects its new on-demand proposals to make available the vast majority of the output broadcast on its linear channels.
- The seven day limitation on the availability of programming. The BBC has carefully considered the seven day limitation and, subject to rights agreements, programmes will be available for downloading up to seven days after the first broadcast and can be viewed for up to seven days after first viewing the file. In addition the new on-demand proposals will support the concept of 'series stacking'. Should audiences encounter a series well into its run this enhancement allows them to catch up on previously broadcast episodes outside of the seven day distribution window (see section 3).

*Figure 2: Summary of quality and distinctiveness scores for iMP<sup>42</sup>*

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<sup>41</sup> It is worth noting that overall BBC approval levels among these respondents were significantly higher than those scored by the general population. This was also a technologically savvy group - their access to Sky+ was around twice as high as the overall UK population as a whole.

<sup>42</sup> The grouping of these scores has been weighted to reflect the high proportion of early adopters in the sample, who are likely to be sympathetic to the products



Source: BBC, iMP trial research, November 2005 - February 2006

**5.3.2**

The concept of “seven day catch-up” was also evaluated in the BBC’s new service proposition research<sup>43</sup>. Here 68% felt that such a service would be “original, different or distinctive”. Where there was disagreement, it was because respondents felt that Sky+ already offered something similar to the seven day service proposition<sup>44</sup>. As outlined earlier the key differentiators for the BBC’s proposal will be the retrospective catch-up facility which is not offered by PVRs, the absence of any subscription and the wider context of [bbc.co.uk](http://bbc.co.uk) in which the catch-up content will be presented.

**5.3.3**

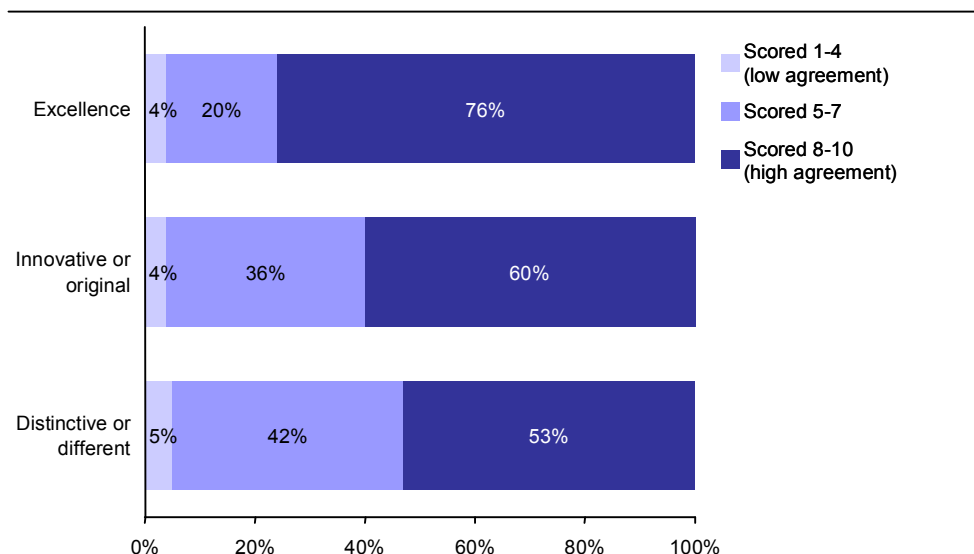
Seven day catch-up over cable

In research on the cable VoD trial respondents were asked to rate the service out of 10 on a number of different dimensions (Figure 3). 96% gave a score of five or above for excellence, 96% for innovative or original and 95% on distinctive or different. 39% had used other on-demand products, so had a point of reference against which to rate the distinctiveness of the service.

*Figure 3: Summary of quality and distinctiveness scores for cable VoD*

<sup>43</sup> MORI, New Service Proposition Research, Jan-March 2005. For a detailed explanation of the different research methodologies see Annex 4

<sup>44</sup> The proposition was defined as: “You could watch any BBC TV programme you had missed, or wished to see again, at any time you wish, in the seven days since it was broadcast.”



Source: BBC, cable VoD PVA research, January – July 2005

**5.3.4**

Simulcast TV over the internet

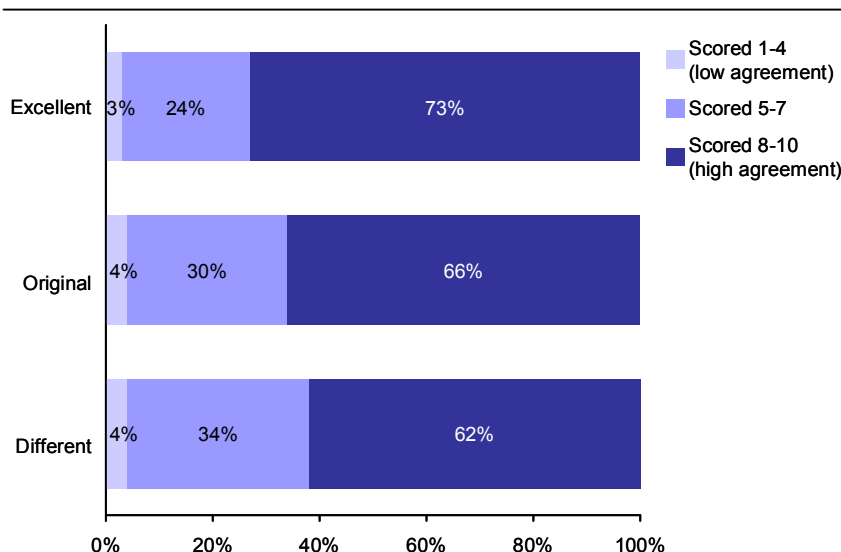
Simulcast TV over the internet will make existing high quality and distinctive BBC television channels available over new devices and through this into new environments. It will extend the current live streaming activity (news, sport) to offer all of the BBC's television output, subject to rights agreements.

**5.3.5**

Non-DRM downloads over the internet

In research on the podcasting trial, respondents were asked to rate the proposal out of 10 on a number of different dimensions (Figure 4). 97% gave the proposition five or above for excellence, 96% gave five or above for innovation and originality, and 96% for distinctiveness. Of all the proposals that underwent this research non-DRM downloads scored highest on these dimensions.

*Figure 4: Summary of PVA quality and distinctiveness scores for podcasting*



Source: BBC, Podcasting research, November 2005

## 5.4

### The distinctiveness of the BBC iPlayer interface

#### 5.4.1

Seven day TV catch-up over the internet and Simulcast TV over the internet will be combined with all existing BBC on-demand offerings and integrated throughout [bbc.co.uk](http://bbc.co.uk) as well as provided through a specially designed section of the site. Non-DRM material will also be available through the same user interface, but not exclusively so. The BBC iPlayer interface will enable audiences to find, download, manage and play a range of public service material. The integration of the interface within [bbc.co.uk](http://bbc.co.uk) will enable audiences seamlessly to access content related to broadcast programmes.

#### 5.4.2

Customisation to suit different user needs

The complete user interface used to access the new on-demand proposals will be based on core BBC design principles. It will be clear, straightforward and easy to use but with a richness and depth below the surface for those looking for more from the experience. The playback window will provide a consistency to the experience when launched from different areas of [bbc.co.uk](http://bbc.co.uk). The context of the surrounding web pages will provide depth to the total offer. Areas of the site are already optimised for different audiences and the supporting information and functionality that can be delivered through [bbc.co.uk](http://bbc.co.uk) will be a key source of distinctiveness.

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### 5.4.3

Search and navigation will guide the audience to BBC programmes

The user interface will transfer familiar player controls – play, stop, pause, fast forward and rewind – and add the search functionality developed for [bbc.co.uk](http://bbc.co.uk). The BBC website encourages a sense of shared experience, letting users know what other audience members are searching for. A similar feature is being developed for the BBC iPlayer involving 'Britain's favourite downloads'.

The underlying search engine will enable the audience to navigate through the range of BBC programmes using intuitive and simple search terms. It will also help audiences to find and enjoy the unexpected. Over time on-demand programmes will be linked to the [bbc.co.uk](http://bbc.co.uk) search engine, offering, for example, a relevant episode of EastEnders in response to a search for domestic violence.

### 5.4.4

Accessibility Standards and Services

The BBC iPlayer at launch will provide a minimum level of service to licence fee payers with physical, cognitive and sensory disabilities though the ambition is to go much further than this:

- BBC iPlayer will include British Sign Language (BSL) and Audio Description (AD) where weekly scheduled television programmes carry these capabilities (subject to Rights agreements and excluding live content)
- BBC iPlayer will also offer subtitling on 25% of non-live weekly scheduled television programmes.
- The user interface will have adjustable colour contrast settings to enable dyslexic audience members to find their optimum visual comfort level, as well as providing dynamic text re-sizing, visible highlighters and full colour/contrast adjustment tools for users with poor vision.
- A roadmap of accessibility will be published to enable future releases of BBC iPlayer to meet the requirements laid out in the Disability Discrimination Act.

### 5.4.5

Developing media literacy

The on-demand proposals will contribute to the BBC's important role in the development of media literacy, helping people to understand and access new communications technologies. Those who are currently wary of the technological aspects of the internet should be reassured by the BBC's presence and this reassurance may encourage them to join the new digital world. The (technologically savvy) iMP triallists were initially critical of the simplicity of the user interface but

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grew more accepting during the course of the pilot. Moreover, they recognised their view came from the relative sophistication of confident broadband users. The BBC iPlayer takes into account this feedback and will be designed to be as easy to use for a first time user as it would be for more experienced on-demand consumers. In terms of protecting audiences from offensive content, the BBC's role as a trusted guide will include developing mechanisms to prevent children from viewing unsuitable content.

#### **5.4.6**

Interface for Seven day TV catch-up over cable

The BBC will not be able to control fully the user interface for Seven day TV catch-up over cable, as audiences will access BBC programmes via the Electronic Programme Guide (EPG) provided by the relevant cable operator. However, the BBC is evaluating the opportunity to use the interactive bridge on BBCi as a navigation point to BBC on-demand content

## **5.5**

### **Technical quality will be defined in Service Level Agreements (SLAs)**

#### **5.5.1**

The BBC will set appropriate technical quality levels in its various SLAs with its technical partners. Given that this is a new market, it is inevitably subject to technical development. The BBC will wish to drive that development in the interests of licence fee payers to ensure that the quality of their viewing experience is the highest possible for that distribution method.

#### **5.5.2**

The BBC approach will be driven by two criteria. In the case of viewing in a television environment the standard should be comparable to linear analogue television and no worse than Video Home System (VHS). In the case of a new environment, such as viewing on a computer screen, the standard should be considered in the context of any equivalent internet service. The BBC is an active participant in the international bodies responsible for setting viewing and listening standards (such as encoding<sup>45</sup>). Audience panels are used to ensure that technical decisions on standards are acceptable in a variety of different viewing and listening situations.

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<sup>45</sup> The BBC participates in: SMPTE (Society on Motion Picture Engineers), DVB (the EU digital TV body), ITU (International Telecommunications Union), and ETSI (EU Technical Standards Institute)

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### 5.5.3

SLAs for Simulcast TV over the internet, Seven day TV catch-up over the internet, Non-DRM downloads over the internet

For the BBC on-demand proposals which are provided over the internet, SLAs will create targets for completeness, accuracy and timeliness of capture of the individual programmes involved. They will also set standards for providing associated data, having programmes available for downloading by viewers, ensuring compliance with rights permissions and providing subtitles and other audiovisual aids. For Seven day TV catch-up over the internet and Simulcast TV over the internet the delivery speeds and picture quality will depend in part on the service delivered by Internet Service Providers (ISPs). Audience feedback will be used to monitor their perception of quality.

### 5.5.4

SLAs for Seven day TV catch-up over cable

SLAs will specify the non-commercial nature of the BBC environment (i.e. no third party association or implied endorsement), the timeliness and availability of the programmes and the video quality (to be at least as good as any other on-demand proposal). In addition, the BBC will uphold the interests of rights owners in BBC programmes by ensuring that delivery partners adhere to the appropriate broadcast windows. Compliance with BBC Editorial and Producers' guidelines will inform the SLAs in order to protect the BBC brand in the on-demand environment.

## 5.6

### Future development of quality and distinctiveness

The quality and distinctiveness of the BBC on-demand offering will increase as additional features are added, such as providing links between the BBC's interactive services, BBCi, and on-demand programmes. A single "sign-on" service for the BBC website and the BBC iPlayer will allow viewers and listeners to bring with them their personal details, their preferences and, if appropriate, their accessibility options when moving around the site. BBC Management will endeavour to match the proportion of subtitling of non-live programming available in the linear schedule within 12 months from launch. It is expected that the user interface will develop over time in response to the needs and tastes of changing audiences. An audience panel will be recruited to help maintain and improve the quality of the whole proposition, including the user interface.

## Section 6

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## Consumer and Citizen Benefits

### 6.1.1

This section assesses the extent to which the BBC's proposals are likely to create value for licence fee payers as consumers and as citizens by contributing to the delivery of public purposes.

## 6.2

### Approach to measuring impact and value

#### 6.2.1

The unique public service remit of the BBC means that all four on-demand offerings are required to deliver citizen benefits to society as a whole, over and above the consumer benefits they generate for individuals and their households. As portmanteau concepts, consumer and citizen benefits are each best explored through a basket of measures which focus on the different components of impact and value.

#### 6.2.2

Both the consumer and citizen benefits of the different offerings have been researched using a complementary range of measurements. These include:

- Consumer impact: Respondents were asked to what extent they appreciated and enjoyed each of the offerings.
- Consumer value: Respondents were asked how much the offerings were worth to them as individuals.
- Citizen impact: Respondents were asked whether they considered the offerings would deliver social, democratic and/or cultural benefits to the UK as a whole<sup>46</sup>.
- Citizen Value: Respondents were asked to quantify the total value of the offerings, that is the value for society as a whole as well as for individuals<sup>47</sup>. The advantage of asking about total value instead of willingness to pay is that it avoids upweighting the preferences of the better off. This would be undesirable since everybody pays the same amount for the licence fee.

#### *Measuring consumer and citizen benefits*

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<sup>46</sup> It is beyond the scope of this assessment to assess actual outcomes or points of impact beyond broadcast (e.g. impact on educational levels).

<sup>47</sup> Differentiating consumer value and total value will never be completely accurate, but is a helpful filter through which to analyse the proposals.

	<b>Consumer</b>	<b>Citizen</b>
<b>Impact</b>	Appreciation and enjoyment of proposal	Perceived societal benefits of proposal
<b>Value</b>	Willingness to pay/perceived worth of offering to them as consumers	Perceived worth to society as a whole
<b>Research</b>	Quantitative and deliberative	Quantitative and deliberative

**6.2.3**

It is important to note that this type of audience research can never provide an entirely accurate measurement of the proposals’ benefits. Firstly, respondents often under-appreciate the real “externality” benefits flowing to others as a result of BBC offerings. Secondly, the research only arrives at respondents’ perceptions of the BBC’s public value, not its real value. The very nature of “merit goods”, for example, means that their true value can only ever really be known in the future.

**6.3**

**Research methods**

**6.3.1**

Several complementary research methods have been used to understand the types of consumer and citizen benefits generated by the new on-demand proposals<sup>48</sup>. The audience research covered both individuals who had trialled versions of the new offerings as well as the wider UK public. The research included:

- RQIV questionnaire linked to the trials: quantitative research investigating the proposals’ citizen and consumer benefits through the Reach, Quality, Impact, and Value for money (RQIV) framework. This was conducted amongst participants of the iMP, cable VoD and podcasting trials and therefore tended towards the technologically literate.

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<sup>48</sup> The research methods are outlined in Annex 1. Not all of the research methods have been carried out on all of the proposed offerings. Nevertheless, the different research findings help to create an overall picture of the range of consumer and citizen benefits provided by the offerings. It is beyond the scope of this assessment to assess actual outcomes or points of impact beyond broadcast (e.g. impact on educational levels).

- Quantitative traffic reporting for the duration of the trials: to assess how many people are using the services, what programmes they are consuming and when, and how the offerings complement other TV and radio consumption
- Human Capital deliberative jury research: this was carried out on all four of the proposed proposals, investigating their consumer and citizen benefits. The sample consisted mainly of early-adopters in order to understand the opinions of those who best understand the issues surrounding on-demand media
- MORI research on new BBC service ideas: this assessed the general public’s initial reactions to the BBC’s key new investment proposals for the next Charter period, including “seven-day TV catch-up” (the research did not specify which distribution method would be required to watch on-demand programmes).

**6.3.2**

The research arrived at monetary valuations for the different proposals.

*Figure 5: Valuations of the different proposals*

	<b>RQIV questionnaire Consumer value (£ / household / month)</b>	<b>RQIV questionnaire Total value (£ / household / month)</b>	<b>Deliberative Research Citizen Total value (£ / household / month)</b>
<b>Seven day TV catch- up over the internet</b>	3.05	3.72	2.82
<b>Seven day TV catch- up over cable</b>	4.71	4.44	4.01
<b>Simulcast TV over the internet</b>	N/A	N/A	2.16
<b>Non-DRM downloads over the</b>	N/A	N/A	2.23

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<b>internet</b>			
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**6.3.3**

In addition, this section draws on the main findings of a one-day citizens' forum conducted by Opinion Leader Research (OLR) for the BBC Governance Unit in March 2006. The forum explored how audiences prioritise resource allocation within (a) the BBC's new service ideas for the next Charter period, including on-demand TV and radio, and (b) a combination of new and existing BBC services<sup>49</sup>.

**6.4****Assessment of overall consumer and citizen benefits****6.4.1**

Much of the deliberative research conducted by Human Capital asked respondents about the BBC's on-demand offerings as a whole. It is helpful to consider these general reactions before examining audience perceptions of the benefits of the four individual proposals.

**6.4.2****Consumer impact**

Overall respondents in the deliberative research were very positive about the on-demand proposals. There was a strong feeling that these proposals would provide greater access to the BBC content that interested them, and therefore offer them a richer TV experience. In addition the participants felt that the proposals would give them more flexibility to get on with other activities in their lives (e.g. sports, social and leisure pursuits).

**6.4.3****Consumer value**

The deliberative research measured the perceived worth of the individual proposals to society, not respondents' willingness to pay. This is described below.

**6.4.4****Citizen impact**


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<sup>49</sup> The main results from the OLR forum are reviewed in greater detail in BBC Licence Fee Bid: What does the public think? – An independent report by Professor Patrick Barwise for the BBC Board of Governors, April 2006

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The deliberative respondents saw high-quality programmes as fundamental to the BBC's delivery of its purposes, and they valued these on-demand proposals as a way of improving the availability and accessibility of this quality content. In this way, they saw the consumer value of the on-demand proposals playing an intrinsic role in generating the citizen value. Unusually, all 120 respondents voted in favour of the BBC's investment in on-demand<sup>50</sup>. Participants envisaged a future world in which on-demand would become the norm and they feared a BBC without on-demand offerings might be left lacking relevance and impact among audiences.

#### **6.4.5**

Respondents felt that the BBC's on-demand proposals would enable it to exploit its quality content even further to offer important educational and cultural benefits to society. 82% agreed that they would make it easier to find out about other cultures, and 67% thought people would be able to learn more effectively by choosing to watch educational programmes, typically broadcast off-peak. 49% believed creativity and the arts would benefit as more special interest programmes would be easier to access. In particular they felt that the relatively low barriers to entry for podcasting, in particular, would encourage experimentation in user-generated content. Since niche programmes, which are traditionally pushed to the margins of the schedule, might attract bigger audiences if available on-demand, it was thought there would be a stronger economic case for them being made in the first place. These special interest programmes were seen as core to the BBC's purposes of representing communities and the nations and regions, as well as stimulating creativity and cultural excellence.

#### **6.4.6**

There was a feeling that the on-demand offerings would contribute to the delivery of the BBC's public purposes. Respondents imagined education and learning would benefit the most as people would be able to watch informative programmes if they missed them in the broadcast schedules. It was thought that all the proposals would have an important role to play in building digital Britain, encouraging more people to use new and digital technology. The promotion of citizenship was the purpose respondents thought would benefit the least. This may have been because it was the least understood of the BBC's purposes, and because some respondents associated it with government interference.

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<sup>50</sup> Note that respondents were not told about the costs of launching the products.

Figure 6: How important do you think each service will be in fulfilling the BBC's purposes? (Mean scores, where 0 = not very important and 10 = very important)

	Sustaining citizenship	Provide education and learning	Stimulate creativity and cultural excellence	Represent the UK, its nations, regions and communities	Building digital Britain
<b>iMP</b>	4.6	7.5	6.2	6.5	7.6
<b>Cable VoD</b>	4.1	7.5	6.1	6.2	7.3
<b>Podcasting</b>	4.4	7.0	6.5	6.5	7.0
<b>Live TV streaming</b>	4.6	6.0	5.5	6.4	7.1

Source: Human Capital, Deliberative Research, March 2006

#### 6.4.7

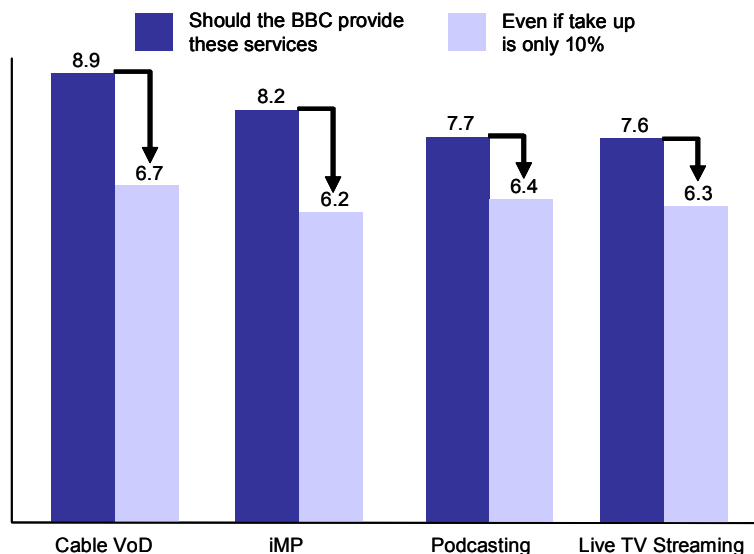
There was considerable debate about the potential negative effects on society of a move to on-demand media. Respondents spoke about the possibility of society fragmenting, with people living in their own 'iPod bubbles', or about people becoming "couch potatoes". Another concern about the future digital age was the potential for children to be exposed to inappropriate online material.

#### 6.4.8

When asked to think about the extent to which the BBC should offer on-demand products, even if take-up was limited to a proportion of the UK population, there was still considerable support for the proposals. This may reflect an element of self-interest as the sample was skewed towards the technologically literate. However, it also reflected the view that part of the role of the BBC is to cater for the needs of groups with different tastes and interests.

Figure 7: Bearing in mind the BBC's public purposes and how the world of media is likely to change over the next five years, do you think that these specific types of services feel like things that the BBC should be doing (thinking of the concepts, rather than the versions currently being tested)? (0 = no, definitely should not and 10 = yes, definitely should)

Imagine a world in which only a small proportion of licence fee payers ever used these four services. To what extent do you think the BBC should still offer these four services? (0 = definitely should not, 10 = definitely should)



Source: Human Capital, Deliberative Research, March 2006

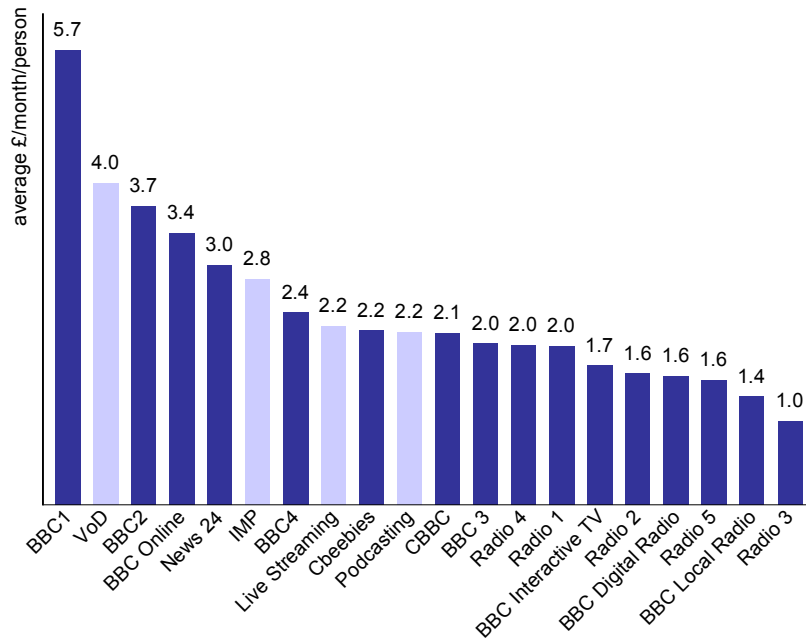
**6.4.9**

Citizen value

When asked to quantify the total value generated by each of the BBC's on-demand propositions, respondents valued them more highly than many of the existing BBC services. Cable VoD received the highest valuation from respondents, because it could be accessed through the television screen rather than being restricted to the computer. Podcasting received the lowest valuation as it was thought to represent the smallest departure from existing services and because it had no televisual element.

Figure 8: Imagine you no longer had to pay the BBC licence fee. We are curious to know what the different BBC services are worth to the average person<sup>51</sup>. To help us understand this could you tell us what you think each of these is worth, to each person, please?

<sup>51</sup> This question referred to the worth to the average person not the individual in order to get respondents to think about the population and society as a whole.



Source: Human Capital, Deliberative Research, March 2006

## Consumer and citizen benefits of the individual proposals

### 6.5

#### Seven day TV catch-up over the internet<sup>52</sup>

##### 6.5.1

##### Consumer impact

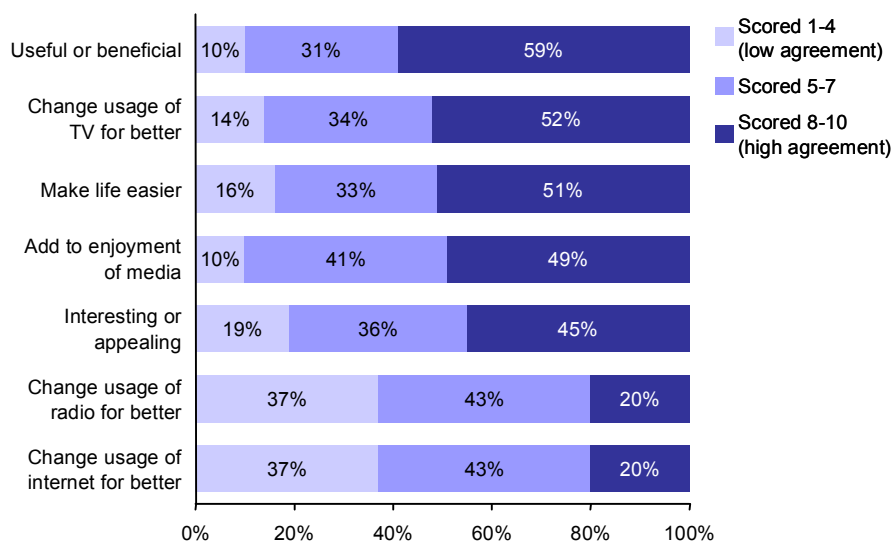
The iMP triallists rated Seven day TV catch-up over the internet extremely highly in terms of its consumer impact. They particularly valued the prospect of independence and choice which Seven day TV catch-up over the internet offered. They mentioned the annoyance of missing programmes as a result of their busy lives or because they were unaware of the schedules. One of the key factors behind the iMP's appeal was the ability to watch programmes retrospectively. 77% of triallists used it when they missed a favourite programme and 75% used it to watch programmes at a more suitable time. Personalisation was another factor that was fundamental to the iMP's consumer value. When asked about how the iMP could be developed further, the most popular requests were for personalised recommendations according to the triallist's download history (59% of triallists) and an increased number of programmes on the list of most popular downloads (54%). Trialist also felt that a

<sup>52</sup> Seven day TV catch-up over the internet was trialled through the BBC Integrated Media Player (iMP).

broader range of programmes should be available through the service including titles from other broadcasters.

The RQIV questionnaire among triallists also generated positive result. 59% of respondents strongly agreed that the iMP was 'useful or beneficial'. 52% strongly agreed that it was very likely to change the way they use television for the better and 51% strongly agreed that it would make their life easier.

*Figure 9: Summary of PVA consumer impact scores for iMP (where 0 = strongly disagree and 10 = strongly agree)*



Source: RQIV research on triallists

High take-up during the trial reinforces these findings. The programmes viewed were not limited to the BBC's most powerful brands such as EastEnders and Little Britain. The big titles may have brought triallists in to the iMP, but they fuelled a long tail effect whereby triallists also enjoyed watching programmes which they may not necessarily have watched on linear television like Rough Science and Egyptian Journeys with Dan Cruikshank.

**6.5.2**

Respondents commented that the impact of the iMP on their viewing behaviour during the trial may well have been even greater if more BBC programmes had been available and download times had been shorter. 72% of triallists used it at least once a week, but only 8% used it every day. Generally, the hours of usage coincided with linear television viewing, although they tended to peak a little later.

**6.5.3**

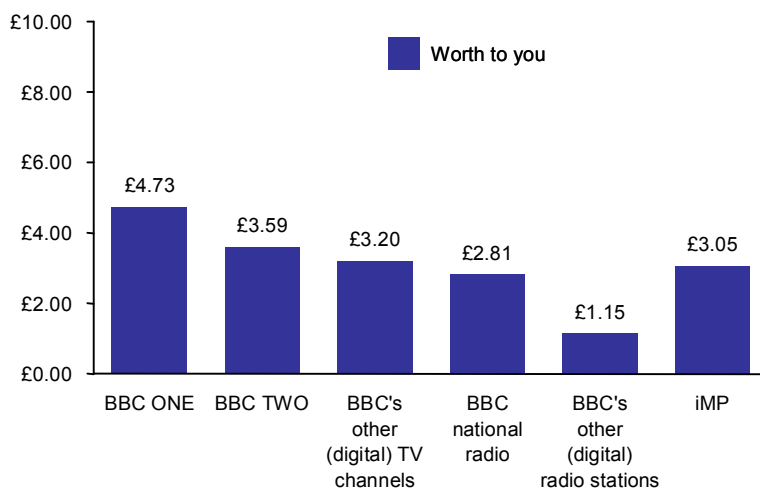
Based on the brief description of seven day TV catch-up used in the MORI research, members of the public responded positively<sup>53</sup>. Seven day TV catch-up rated very highly in terms of its consumer impact. 80% of respondents said the proposal would be of interest to them and their household and 76% said they were likely to use it providing 'it was easy to use at no extra cost'. Those most in favour tended to be the young (16-34 year olds) and wealthy (annual incomes of over £35,000).

**6.5.4**

Consumer value

When asked to place a monetary value on the iMP, respondents to the RQIV research valued it on average at £3.05 per month to themselves. This was almost as much as the BBC's digital TV channels which were valued on average at £3.20.

*Figure 10: Imagine you no longer had to pay the BBC licence fee. We are curious to know what some of the different BBC services are worth. To help us understand this, could you please tell us what you think each of the services below is worth to you, to the nearest pound per month?*



Source: RQIV research on trialists

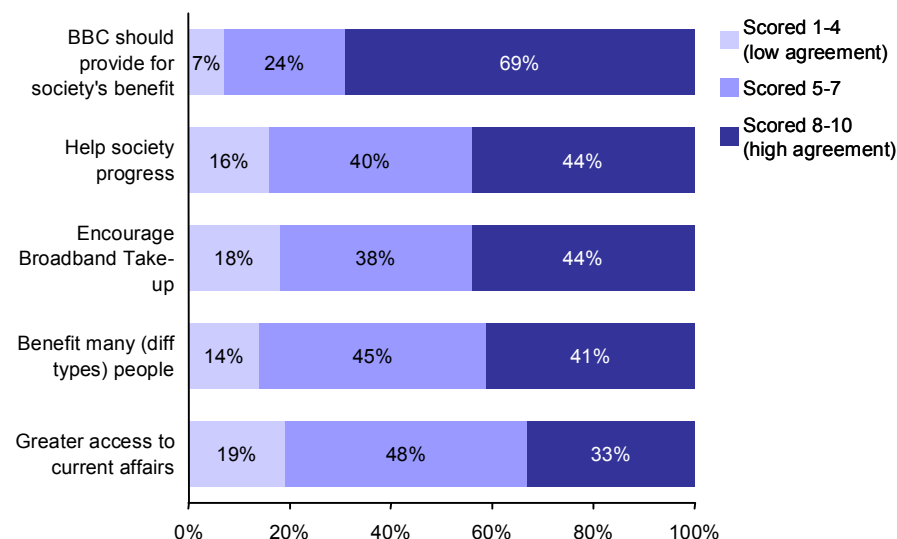
**6.5.5**

Citizen impact

<sup>53</sup> 'Seven day TV catch-up' was described as: 'You could watch any BBC TV programme you had missed, or wished to see again, at any time you wish, in the 7 days since it was broadcast'. The distribution mechanism was not specified; the results are therefore relevant to both Seven day catch-up over the internet and over cable

The triallists were also positive about seven day catch-up's potential to generate citizen impact. 44% strongly agreed that it was very likely to encourage other people to take up broadband, but agreed less strongly that it would encourage people to access news and current affairs (33%). 41% strongly agreed it would benefit different types of people and 44% strongly agreed it would help UK society to progress and stay up to date with new technology.

Figure 11: Summary of PVA citizen impact scores for iMP (where 0 = strongly disagree and 10 = strongly agree)



Source: PVA research on iMP triallists

**6.5.6**

In the Human Capital deliberative research, when asked on a scale of 0 to 10 for their approval of the widespread availability of the seven day TV catch-up, respondents gave an average score of 7.9. This rose to 8.2 when they were asked to what extent it represented something the BBC ought to be offering in the changing media world. In terms of its impact on viewing habits during the trial it scored only 3.1 out of 10, but thinking about the full offering at launch, respondents imagined its impact on viewing increasing to 6.9 out of 10.

**6.5.7**

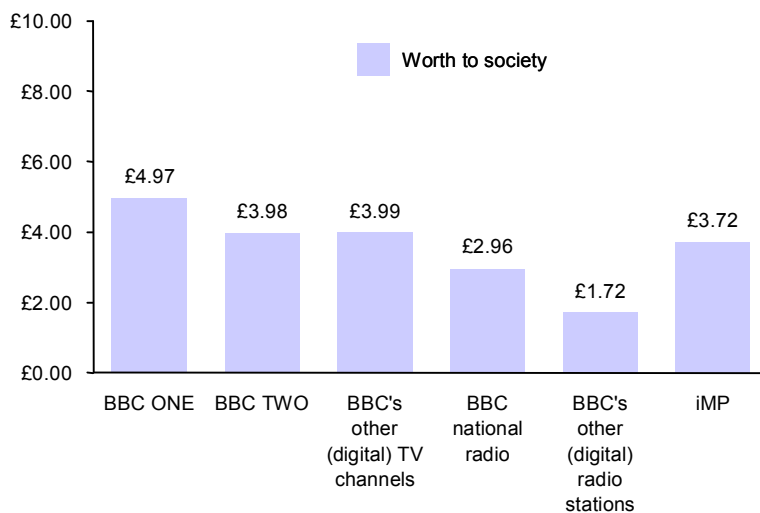
In the MORI research on new BBC service ideas, seven day catch-up over the internet was also perceived to generate considerable citizen impact. 78% of respondents said the BBC should definitely go ahead with it for “greater good of others, society and the country as a whole”, and 64% of respondents believed it was worth spending the licence fee on.

**6.5.8**

Citizen value

When asked about its value to society as a whole, respondents to the trial research valued it at an average of £3.72 per household, per month (Figure 12). This was considerably higher than the average consumer value of £3.05, suggesting that respondents believe it will generate significant benefit to society, over and above the value it generates to individuals and their households. This total valuation is slightly higher, but roughly in line with the average citizen valuation reached in the deliberative research of £2.82<sup>54</sup>.

*Figure 12: Imagine you no longer had to pay the BBC licence fee. We are curious to know what some of the different BBC services are worth. To help us understand this, could you please tell us what you think each of the services below is worth to society, to the nearest pound per month?*



Source: RQIV research on triallists

**6.6**

**Seven day TV catch-up over cable**

**6.6.1**

Consumer impact

Those who took part in the cable VoD trial rated the proposal highly from a consumer perspective. 'Series stacking' accounted for between 10 and 15% of

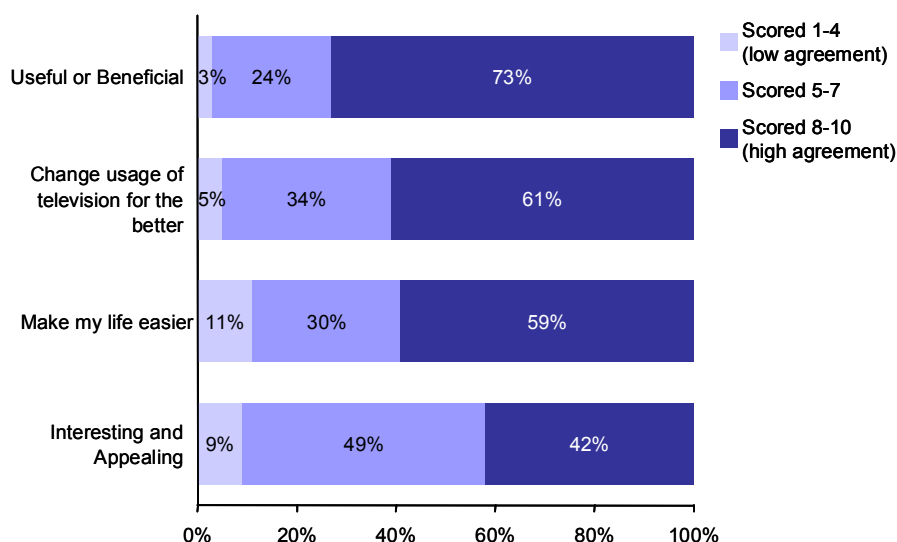
<sup>54</sup> This may be because respondents were given a shorter list of (aggregated) component BBC services to value and therefore gave a slightly higher value to each.

viewing. This was most popular on Saturday and Sunday afternoons, although it was less popular in the early evening when the big entertainment shows are broadcast on linear television. Viewing roughly followed linear viewing patterns, but as with seven day catch-up over internet, peaked slightly later in the evening.

**6.6.2**

In the RQIV research among triallist, Seven day TV catch-up over cable was valued highly from a consumer perspective. It rated particularly well on consumer impact. 73% of respondents gave it a high rating for being useful or beneficial, 61% strongly agreed that it could change the way they use television for the better and 59% agreed strongly that it would make their life easier.

*Figure 13: Summary of PVA consumer impact scores for cable VoD (where 0 = strongly disagree and 10 = strongly agree)*



Source: RQIV research on cable VoD triallists

**6.6.3**

In the Human Capital deliberative research, Seven day TV catch-up over cable was rated the highest of all the offerings on a number of measures, and received an average overall rating of 7.5 out of 10. It was seen to offer all the benefits of the Seven day catch-up over the internet (e.g. choice, personalisation and time-shifting), but it was also seen to be simple to use and could be accessed easily through a television screen interface. Some found the seven day window frustrating. The key issue raised was the limited range of BBC programmes and respondents agreed that the proposition could be improved if it also offered non-BBC content. Those who had used it rated the impact on their viewing habits at 4.9 out of 10, although they imagined this would increase to 8.3 once the full proposal was rolled-out.

Respondents gave an approval rating of 8.7 out of 10 for its widespread availability, and 8.9 out of 10 in favour of the BBC providing it.

**6.6.4**

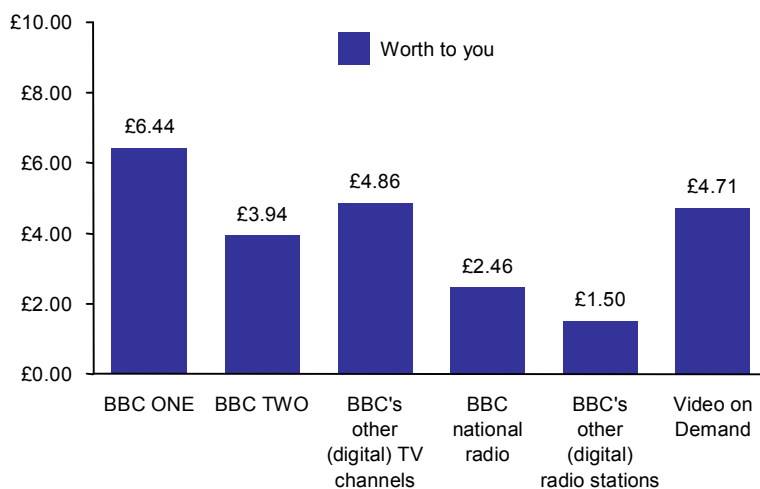
The “seven day catch-up” proposition in the MORI research on the new BBC services ideas research was as relevant to both Seven day TV catch-up over cable as well as to Seven day catch-up over the internet. Here, 76% of respondents said they were likely to use it at no extra cost, and 80% said it would be of interest to them and their household.

**6.6.5**

Consumer value

When asked for the consumer value of cable VoD in the RQIV research among trialists, the average response was £4.71<sup>55</sup>. This was almost as high as the BBC’s digital channels which were valued at £4.86 per person per month.

*Figure 14: Imagine you no longer had to pay the BBC licence fee. We are curious to know what some of the different BBC services are worth. To help us understand this, could you please tell us what you think each of the services below is worth to you, to the nearest pound per month?*



Source: PVA research on cable VoD trialists

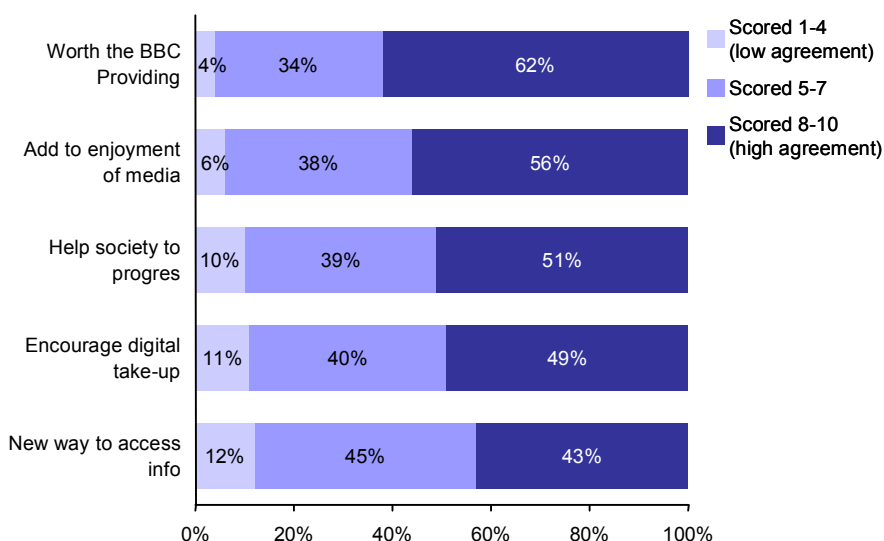
**6.6.6**

Citizen impact

<sup>55</sup> There is some discrepancy between the valuations of the BBC’s existing services in the cable VoD trial and the iMP trial. This is to be expected owing to the different timings of the research. It nevertheless gives a helpful snapshot of the relative values of the different services at a particular moment in time.

In the RQIV research, respondents acknowledged the citizen impact of cable VoD. 43% strongly agreed that it would provide a new way to access news, information and analysis about social and political issues. 51% strongly agreed it would help British society to stay up to date with new technology, and 49% strongly agreed it would encourage people to take up digital television. Overall, 62% thought the BBC should provide it for the benefit of others and society as a whole.

Figure 15: Summary of PVA citizen impact scores for cable VoD (where 0 = strongly disagree and 10 = strongly agree)



Source: PVA research on cable VoD triallists

### 6.6.7

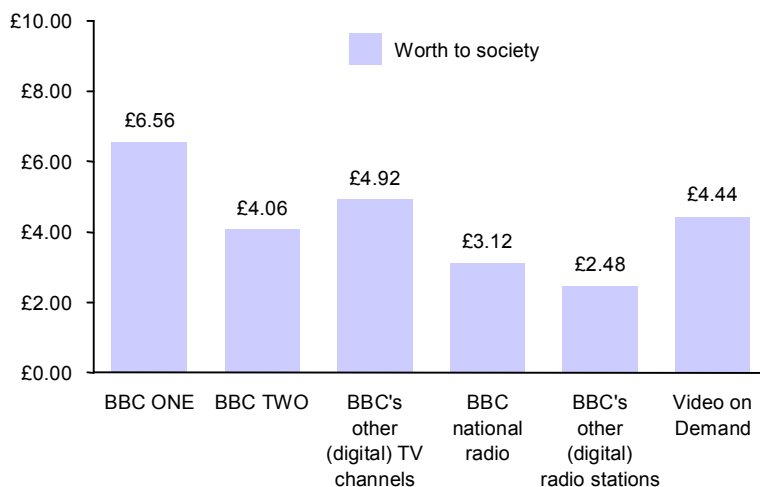
#### Citizen value

When asked to value the offering, the triallists in RQIV research thought it was worth, on average, £4.44 per person per month to society as a whole<sup>56</sup>. This was lower than the consumer valuation of £4.71. This was relatively unusual as participants in the research tended to regard on-demand offerings as being worth more to society than to the individual. It may have occurred because triallists were aware that as cable subscribers, they were in the minority and that therefore the proposal was probably worth more to them than to the average person in society.

Figure 16: Imagine you no longer had to pay the BBC licence fee. We are curious to know what some of the different BBC services are worth. To help us understand this,

<sup>56</sup> This is slightly higher than the deliberative valuation to society as a whole of £4.01. This may be because respondents were given a shorter list of component BBC services to value and therefore gave a slightly higher value to each.

could you please tell us what you think each of the services below is worth to society, to the nearest pound per month?



Source: PVA research on cable VoD trialists

**6.6.8**

The deliberative juries valued Seven day TV catch-up over cable at £4.01 per person, per month from a citizenship perspective. It was given the highest value of all the four proposals tested in the deliberative research, coming just higher than BBC Two at £3.70 but below the highest valued service, BBC One, at £5.70.

**6.7**

**Simulcast TV over the internet**

**6.7.1**

Consumer impact

Simulcast TV over the internet is the only one of the proposed new offerings not to have been researched during a trial. However, it was discussed in considerable detail during the deliberative jury groups where it was thought to have high consumer impact as an extension of the BBC's existing live streaming of sport, news, weather and radio, allowing audiences to place-shift their media consumption.

**6.7.2**

Most of the deliberative respondents only had limited experience of live TV streaming. This was mainly through watching breaking news, often at work. (In addition, some had tried watching live streaming of foreign television channels.) Those who had tried similar BBC offerings on the internet gave the proposed Simulcast TV over the internet an average score of 6.3 out of 10. Some deliberative

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respondents expressed mild dissatisfaction at the small screen size and poor picture quality of existing activity, but in general it was an offering that respondents had found useful and easy to use. They felt that Simulcast TV over the internet, as so far experienced, would only have limited impact on their TV viewing (rated at 2 out of 10) but they felt that the concept, once fully developed as whole channels, could have a significantly greater impact (6.4 out of 10).

### **6.7.3**

#### Consumer value

As Simulcast TV over the internet has not been trialled there is no quantitative estimation of its consumer value. Its total value to society was researched in the deliberative juries and is set out below.

### **6.7.4**

#### Citizen impact

Simulcast TV over the internet was thought to offer a wide range of citizen benefits in the deliberative research. When asked on a scale of 0 to 10 to what extent they approved of the widespread availability of Simulcast TV over the internet, the average answer was 8. When asked for their approval of the BBC's investment in this type of offering, the average answer was 7.6. Even if only 10% of the population ever used the offering, respondents still agreed at an average score of 6.3 out of 10 that it was worth the BBC doing.

### **6.7.5**

#### Citizen value

The deliberative jury participants valued Simulcast TV over the internet a little lower than Seven day catch-up over the internet and over cable. This was because they felt its use was somewhat limited when they could watch the same programmes on the television screen. However, they recognised that simulcasting would enable them to place-shift consumption of BBC TV channels. It scored higher than the Non-DRM downloads over the internet and a number of existing BBC offerings, with an average valuation of £2.23 per month per household.

## **6.8**

## **Non-DRM downloads over the internet**

### **6.8.1**

#### Consumer impact

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The consumer impact of Non-DRM audio downloads over the internet was explored through the BBC's podcasting trial. On average, the proposal was rated 8 out of 10, and this was reflected fairly consistently across all the questions asked.

### 6.8.2

In the RQIV research, 69% of triallists strongly agreed that downloading or podcasting BBC content would change for the better the way they used radio, and 53% strongly agreed they could make their life easier. 74% said they were highly likely to regularly download or podcast BBC content and 78% said they were highly likely to keep on using it. The respondents gave the BBC podcasting proposition an average score of 8.7 out of 10 for being interesting and appealing, and 73% agreed that it was an excellent offering overall.

### 6.8.3

Respondents in the deliberative research were equally positive about being able to listen to radio programmes at their own convenience. In the deliberative research, those who had used the Non-DRM downloads over the internet gave it an average rating of 6.6 out of 10. Levels of interest in the portability of content were mixed, with many respondents preferring to listen at their computers. In terms of the impact it had on their viewing and listening, it was rated at only 2.2 out of 10 on average. However, this increased to 6.9 when they considered the impact the proposal would have at its fully-finished stage. Respondents gave it a score of 8.1 out of 10 in favour of its widespread availability and 7.7 out of 10 in approval of its provision by the BBC. This only fell to 6.4 out of 10 if take-up did not exceed 10%.

### 6.8.4

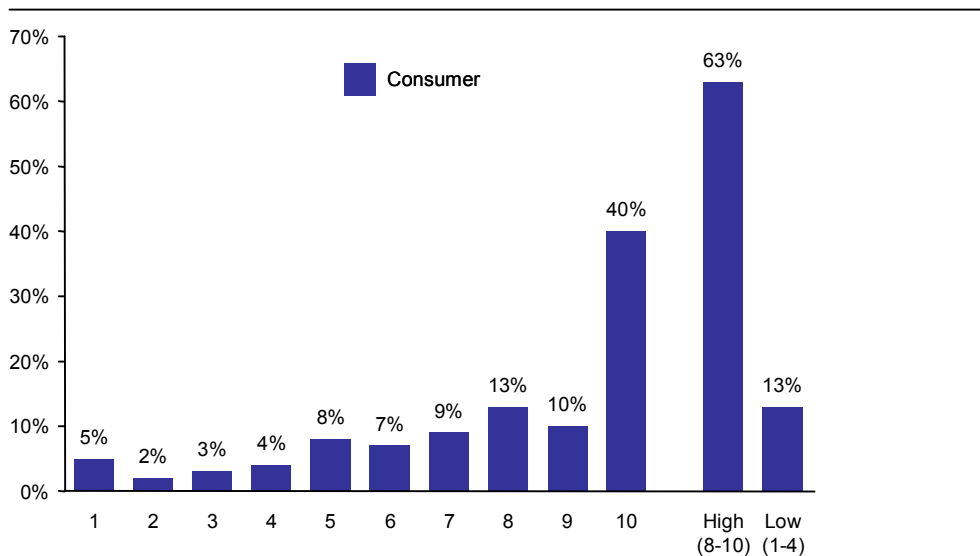
#### Consumer value

The podcasting triallists were asked to think about the consumer value of the proposal (Figure 17). 67% thought it was worth the BBC spending some licence fee money on, and 63% thought on a personal level it would represent good value for money if their household had to pay an extra £1 a year on top of the existing licence fee for the proposal to be available<sup>57</sup>. Only 13% thought it would be very poor value for money.

*Figure 17: Imagine providing this service adds another £1 a year to the amount your household pays would you personally consider this as good or poor value for money? (Where 0 = very bad value and 10 = very good value)*

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<sup>57</sup> Non-DRM downloads over the internet were valued using a different methodology to 7-day catch-up over the internet and over cable



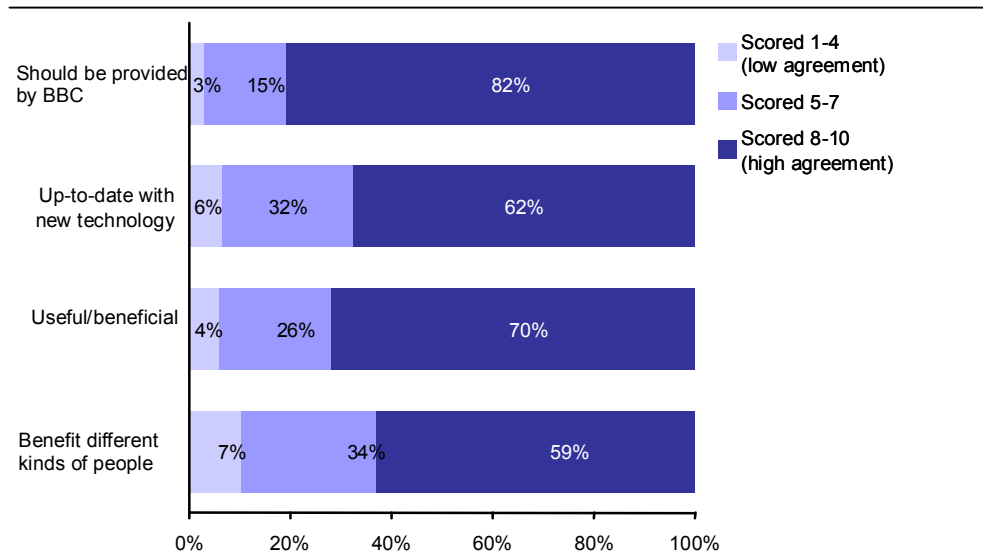
Source: PVA research on podcasting triallists

**6.8.5**

Citizen impact

When asked to think about the potential citizen impact of Non-DRM downloads over the internet, 82% of triallists strongly agreed that radio content should be provided for download by the BBC as part of its role in catering for a wide variety of audiences. 70% strongly agreed that it is the kind of offering people would find useful or beneficial, and 78% strongly agreed it would benefit different types of people. 62% strongly agreed that the offering would help British society to progress and stay up to date with new technology.

*Figure 18: Summary of PVA citizen impact scores for podcasting (where 0 = strongly disagree and 10 = strongly agree)*



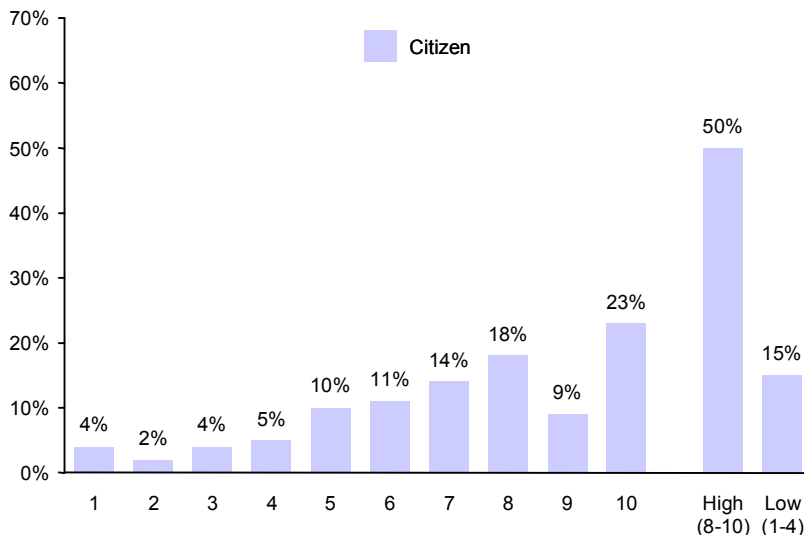
Source: PVA research on podcasting triallists

**6.8.6**

Citizen value

When asked about the benefit to others and to society of the BBC providing Non-DRM downloads over the internet in return for an extra £1 on top of the annual licence fee, 50% thought it represented very good value. A 15% minority thought it represented very poor value.

*Figure 19: Thinking of the value of this service from the point of view of the benefit to others and to society - would adding another £1 a year to the licence fee for this service provide the country as a whole with 'good' or 'poor' value for money? (where 0 = very bad value and 10 = very good value)*



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Source: RQIV research on podcasting trialists

### **6.8.7**

In the deliberative research, Non-DRM downloads over the internet were valued the lowest of the four proposals, although this was only a few pence per month lower than Simulcast TV over the internet. This was mainly due to the fact that they were seen as the least radical of all the new propositions, given the on-demand availability of BBC radio through RadioPlayer, and the only one not to involve televisual content. Deliberative respondents valued Non-DRM downloads over the internet at £2.16 per month to society as a whole.

### **6.8.8**

The main results of the one-day citizens' forum conducted by OLR for the Governance Unit are in line with the main findings of the research outlined above. The forum explored how audiences prioritise resource allocation within (a) the BBC's new service ideas for the next Charter, including on-demand TV and radio, and (b) a combination of new and existing BBC services<sup>58</sup>. One of the key conclusions was that the perceived value of the BBC's new investment ideas is substantial<sup>59</sup>. In particular, the provision of on-demand BBC TV and radio was valued highly by participants after taking account of both the costs and opportunity costs of the proposals.

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<sup>58</sup> The main results from the OLR forum are reviewed in greater detail in BBC Licence Fee Bid: What does the public think? – An independent report by Professor Patrick Barwise for the BBC Board of Governors, April 2006

<sup>59</sup> The OLR forum explored on-demand TV and radio, local TV news, open archive, creative archive, HDTV and the investment in digital infrastructure.

## Section 7

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### Reach

#### 7.1.1

This section aims to forecast volumes and reach for each of the four new proposals from launch onwards. The BBC has looked year by year up to 2013, although the key focus is on the five years to 2011. These next five years are somewhat more predictable than the longer term, and this period also matches the cost forecast horizon.

#### 7.1.2

The BBC has forecast reach for each of these new on-demand proposals based on a three stage process:

- 1 Forecast overall usage by reference to platform penetration and usage by household based on trial data
- 2 Forecasting share of each new on-demand proposal
- 3 Applying a standard share / reach formula to derive reach for each new proposition

#### 7.1.3

In line with the analysis outlined elsewhere in the document, the model assumes that usage of the new on-demand offerings will be largely substitutional over time, and therefore does not markedly affect overall BBC TV or radio consumption. As on-demand, however, offers the opportunity for the BBC to re-connect with audiences who have already drifted away from traditional linear TV, there may be some potential for uplift in reach and usage.

#### 7.1.4

The model focuses on PC and media centre<sup>60</sup> based distribution predominantly in the home. It does not look at over the air consumption on portable devices, such as streamed TV being watched on a mobile handset on public transport, or on a laptop using wireless internet outside the home. Over time this type of consumption may represent appreciable upside to these forecasts, particularly if wireless internet access becomes widespread.

#### 7.1.5

There are a number of reasons why developing forecasts for these proposals is particularly challenging:

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<sup>60</sup> A media centre is PC and software solution that enables multimedia content to be shared across multiple devices in the home; in particular, enables content from the internet to be watched on a TV

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- The novelty and complexity of the new proposals has meant that research on propensity to consume has been limited to early adopters and not extended to the general population.
  - Some of the proposals require appreciable changes in user behaviour (for instance, to watching TV on the PC), which is hard to predict.
  - The forecasts depend in part on levels of adoption of other new technologies, such as media centers and PVRs, which are also highly uncertain.
  - The business models of competing offerings are largely unknown at this time.
  - The market is already seeing many new, non-traditional entrants (e.g. Google Video), and their impact is not yet known.

As a consequence there is an unavoidable range of uncertainty associated with these forecasts.

#### 7.1.6

To reflect this uncertainty, in addition to the base case the BBC has developed two other scenarios to describe different potential market outcomes. These are laid out in further detail below, but key assumptions and structures in the base case are outlined first. The base case represents a 'steady-uptake' case, with no dramatic changes to trends in market structure (e.g. continued adoption of broadband), and with usage of the new proposals closely tied to results of the trials.

## 7.2

### Projecting the environment for the new proposals

#### 7.2.1

In looking at the market environment for on-demand products, the BBC has used existing BBC forecasts<sup>61</sup> that split households between Sky, cable, hybrid (e.g. Homechoice), Freeview/Analogue and Non-TV. This mix is fundamental to assessing demand for the new products – to take an obvious example, only cable households can possibly use Seven day TV catch-up over cable.

#### 7.2.2

The BBC has also projected broadband penetration, based partially on Enders forecasts<sup>62</sup>. Broadband penetration is expected to rise to around 70% in 2011<sup>63</sup>. This is an important driver, since in practice households without broadband will have less use of any of the proposals except Seven day TV catch-up over cable.

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<sup>61</sup> BBC, Platform Model, April 2006

<sup>62</sup> Enders Analysis, UK PC Video-on-demand, March 2006

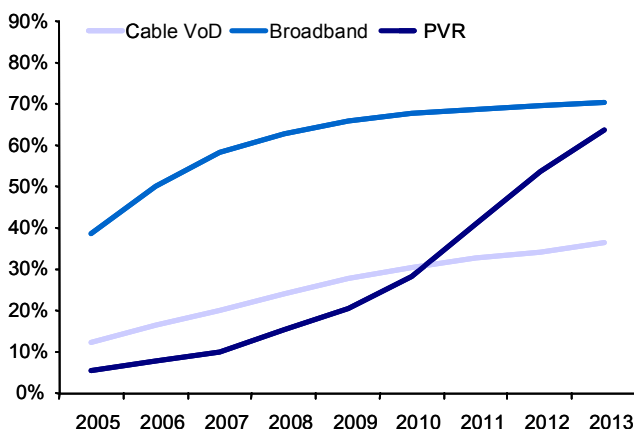
<sup>63</sup> Unless otherwise specified, forecasts in this section are from Human Capital, Reach Model, April 2006

In projecting cable households, the BBC has concentrated on digital cable, since these are the ones where cable on-demand will be enabled. The BBC predicts digital cable plus hybrid households (not including Sky) to total 6.11m in 2011.

**7.2.3**

The BBC has forecast PVR adoption, based on Sky's targets for Sky+ adoption<sup>64</sup> and wider market forecasts from Enders<sup>65</sup> and Jupiter/Strategy Analytics<sup>66</sup>. PVR penetration is projected to rise to around 40% by 2011. This is relevant since PVRs are a partial substitute for on-demand products. For instance, in the iMP trial households with PVRs had a 31% lower use of the iMP than those without.

*Figure 20: Penetration of consumer media devices and services (households)*



Sources: Human Capital, Reach Model

**7.2.4**

In addition to looking at these three technologies (PVRs, broadband and cable on-demand enablement) separately (Figure 20), the BBC has also looked at them in combination, to understand how TV households break out across the eight possible combinations<sup>67</sup>. This is relevant to the forecasts since usage of the new proposals is not additive – for instance, in the trial, households with only the iMP used that proposal on average for 2.03 hours per week to access BBC content. However, in cable VoD-enabled households BBC content was viewed for an average 0.88 hours per week. In households with both the iMP and cable VoD aggregate viewing to on-demand BBC content was 1.78 hours per week.

<sup>64</sup> 25% by 2010. British Sky Broadcasting Group PLC Annual Report and Accounts 2005, August 2005

<sup>65</sup> Enders Analysis, UK PC Video-on-demand, March 2006

<sup>66</sup> Quoted in David Docherty (Chief Executive of YooMedia) Next Generation Public Service Publishing, December 2004

<sup>67</sup> The eight combinations are: household has each of broadband, cable VoD and a PVR; broadband and cable VoD only; broadband and PVR only; cable VoD and PVR only; broadband only; cable VoD only; PVR only; none of the above.

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Against this environment the BBC has forecast take-up of the individual proposals.

## 7.3

### Methodologies

#### 7.3.1

Seven day TV catch-up over the internet methodology

For Seven day TV catch-up over the internet the BBC has first forecast adoption – that is, the portion of broadband households using the offering. The BBC has based this on take-up of the BBC Radio Player. This achieved 20.4% penetration<sup>68</sup> in the UK after three years, or an average of 6.8% per year. In forecasting Seven day TV catch-up over the internet the BBC has used double this rate: 13.6% per year. It is likely that greater promotion and marketing (there was almost none for Radio Player) and greater familiarity with online media than today will drive more rapid adoption of Seven day TV catch-up over the internet.

#### 7.3.2

The BBC has applied this adoption to broadband households, split by those with and without PVRs, and those with and without cable on-demand. The BBC has then multiplied these households by usage assumptions for that type of household to get total volumes for Seven day TV catch-up over the internet. The usage assumptions are based on usage in the iMP trial (for instance, 2.03 hours/week for those without cable VoD or a PVR, and 0.46 hours/week for those with both), with an increase of 25%. This 25% uplift is to reflect improvements in the proposed offering relative to that in the trial. These include improved download speeds, more content choice and an extended window for consumption (see Section 5).

#### 7.3.3

Usage rates have been kept fixed over the forecast period. In practice, improved download times and increased familiarity might increase usage per user, but conversely the triallists tended to be early adopters and the expansion of the offering to the mass market is likely to lessen average usage levels.

#### 7.3.4

The BBC has also assumed that initially one hour of Seven day TV catch-up over the internet usage is equivalent to one viewer hour. In other words, only one person at a time is watching the screen. This seems likely if that screen is on a PC. However, by 2011 this is increased to 1.5, driven by the adoption of home media centres which

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<sup>68</sup> Unique UK users divided by UK broadband households in June 2005. Unique users from internal BBC data

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will deliver a portion of online content to the television and enable several members of the family to watch the same content simultaneously.

### **7.3.5**

For 2011 the methodology provides the following results: 18.6m households will have broadband. Of those 68% will be using Seven day TV catch-up over the internet, and given the availability of PVRs and cable on-demand in these households, they will on average consume 1.93 hours a week of programming via that route. This will represent 2.9 viewer hours per week since some of the programming will have more than one person per screen watching. Multiplying user households by hours per household gives a total of 1,898 million viewer hours for the year.

### **7.3.6**

Seven day TV catch-up over cable methodology

At the time of the trial 18% of cable VOD enabled households accessed BBC content on-demand. The BBC forecasts that 96%<sup>69</sup> of cable households will be accessing on-demand by 2011 and growth is forecast to be straight-line. Usage of BBC content in the same trial was 0.88 hours per set-top box per week. As the breadth and volume of programming available during the trial was limited the BBC has applied an uplift of 75% at launch over the level of trial usage growing to 100% by 2011<sup>70</sup>. Increased familiarity with on-demand media will also support this increased usage. Finally, the BBC has multiplied the uplifted usage figures by two<sup>71</sup> (an estimate of the average number of viewers watching the TV at any time) to get to total viewer hours.

### **7.3.7**

Simulcast TV over the internet methodology

The BBC has based its forecast of Simulcast TV over the internet on the historic adoption of live streamed radio. Internet radio as a portion of total radio in broadband

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<sup>69</sup> This is the current monthly 15minute reach of BBC TV

<sup>70</sup> Only 20 hours of programming were available during the trial. The model estimates the amount of usage that would have occurred within the trial had the trial contain all the programmes that would be available at launch. This calculation suggests approximately a four-fold increase in usage over the trial usage. For the purpose of this model, the BBC has used a conservative estimate of a two-fold increase i.e.100%.

<sup>71</sup> Human Capital estimate

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households has grown steadily at about 2% points per year since the offering was launched four years ago<sup>72</sup>.

### **7.3.8**

However the parallel of internet radio to simulcast TV is obviously not exact. For instance, radio demands less attention than TV and takes up no 'screen real estate', and therefore may be more likely to be used in the background while a consumer is doing something else on the PC. It is also more likely to be acceptable to use internet radio rather than Simulcast TV over the internet in the office. In general our expectation is that Simulcast TV over the internet will be a secondary means of TV consumption relative to broadcast.

### **7.3.9**

Therefore the model uses 1% point per year as the take-up of Simulcast TV over the internet, one half the rate seen for internet radio. Note that the model does not break out home vs. office usage, but combines the two within this figure.

### **7.3.10**

The BBC has also constrained Simulcast TV over the internet volumes by the adoption of multicast technology by ISPs. To keep costs manageable, the BBC will not unicast TV, but will instead multicast<sup>73</sup>. However, this depends on ISPs having installed and configured the relevant equipment to support multicasting of content (by the BBC and many others). 100% of broadband households are assumed to be reachable by multicast in 2010, starting from 1% today.

### **7.3.11**

Non-DRM downloads over the internet methodology

For Non-DRM downloads over the internet the BBC has compared download volumes from the recent trial to listener hours for the matching program, to generate a 'downloads per linear listener hour' measure. The BBC has then consolidated across programmes from a particular station, to get the same measure for each station. For instance, Radio 1 had 0.3 non-DRM downloads per 100 linear listener hours for the podcast programmes. These ratios were applied to total listener hours<sup>74</sup> for each station, to estimate potential Non-DRM download volumes if the

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<sup>72</sup> BBC internal data. Note that there is not data to split usage of internet radio between the office and the home – in practice some of this usage will in fact be in the workplace, though the model operates off households

<sup>73</sup> When a content provider unicasts content, they provide one stream of the content for each user wanting to watch it. When the provider multicasts it, it provides one stream to each ISP, and each ISP replicates this stream for all their users who wish to watch

<sup>74</sup> Sourced from RAJAR

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entire schedule was made available. These volumes were then scaled down by 50% since:

- Some parts of the schedules will not be made available due to rights restrictions.
- Some parts will be uneconomic to prepare for distribution.

### 7.3.12

This gave a base volume of downloads for the full proposal. To grow this over time the BBC has worked from Forrester forecasts for podcast penetration of broadband households<sup>75</sup> - this rises to 19.6% in 2011 from 3.9% today. Increasing familiarity and greater penetration of MP3 players (including MP3 capable phones) will both drive this. The model also assumed that broadcast radio content (BBC and commercial) represents 50% of total podcast volumes.

### 7.3.13

For all the new on-demand proposals the BBC has forecast market share based on existing BBC projections for the total market, and then put these share figures into standard equations to estimate reach<sup>76</sup>.

## 7.4

## Results

### 7.4.1

Seven day TV catch-up over the internet results

Seven day TV catch-up over the internet achieves 7.5% of total BBC TV consumption and 10% of BBC viewing in broadband homes (equivalent to 1.9 billion viewer hours) in 2011, and has a reach<sup>77</sup> of 19.8 % across all TV households (Figure 21). Growth to this date is driven primarily by increased adoption in broadband households, and to a lesser extent by the increase in such households. While growth continues after 2011, supported by increasing broadband penetration and greater adoption, it is somewhat suppressed by increased penetration of cable on-demand and PVRs, both of which substitute for time spent watching Seven day TV catch-up over the internet TV.

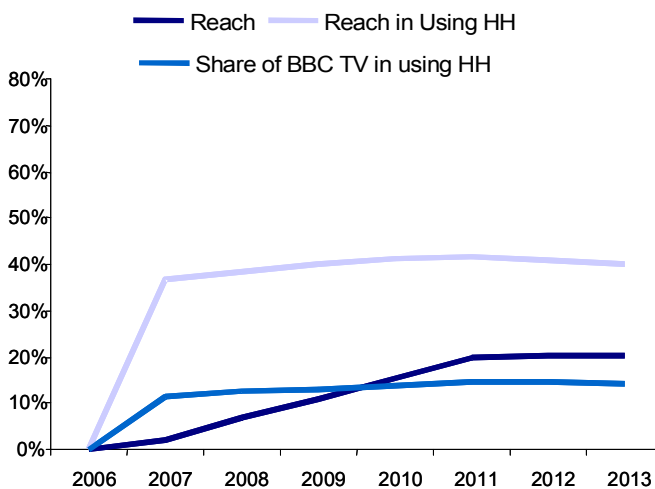
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<sup>75</sup> Forrester, Podcasting Hits The Charts, March 2006. Note that this forecast was for the US. Absent UK forecasts, and given that current penetration rates are similar between the US and the UK, the model uses this percentage unadjusted

<sup>76</sup> The equation is of the form  $Y=A(1-\exp(-B*x))$  where Y is reach, x is volume of viewing and A and B are constants. A is the biggest possible audience that the product could ever reach and B is a constant that roughly corresponds to the diversity of the channel audience. There is a purely theoretical derivation of the equation but actual data about listening, viewing, consumption and reach fit it well.

<sup>77</sup> 'Reach' in this document relates to 15 minute non-consecutive weekly reach

Figure 21: Seven day TV catch-up over the internet reach and share



Source: Human Capital, Reach Model

**7.4.2**

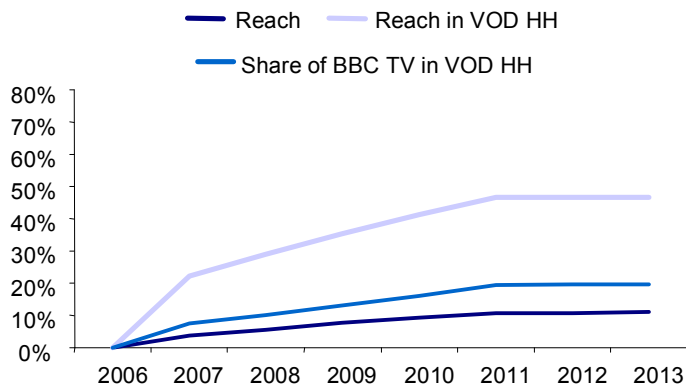
Reach across all households grows slowly as the number of broadband households using the offering grows (Figure 21). Reach in using households and share of BBC TV in using households both rise sharply, since the BBC believes that within a using household usage grows quickly to a steady state. (A similar pattern is seen for Seven day TV catch-up over cable, Figure 22).

**7.4.3**

Seven day TV catch-up over cable results

By 2011 Seven day TV catch-up over cable is projected to deliver 1,081 million viewer hours (Figure 22). This is equivalent to 4.3% of total BBC TV consumption or 19% of BBC consumption in cable on-demand households, and a reach of 11.0% in all TV households. The offering is relatively stable, with growth driven by the gradual expansion of digital cable.

Figure 22: Seven day TV catch-up over cable reach and share



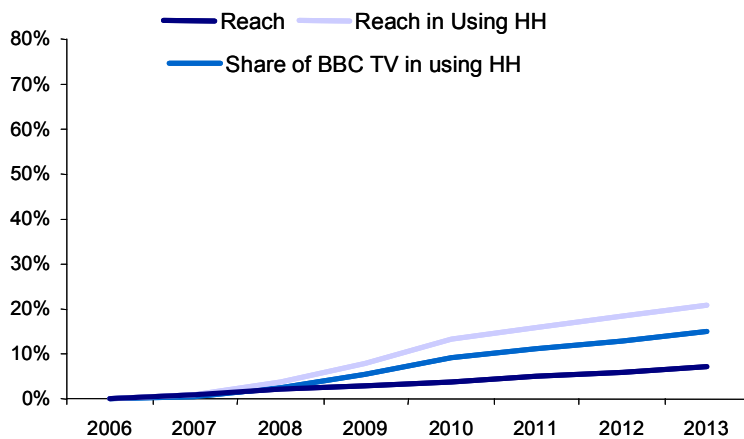
Source: Human Capital, Reach Model

**7.4.4**

Simulcast TV over the internet results

In the base case Simulcast TV over the internet rises to be 5% of BBC TV consumption in broadband households in 2011, or a total of 857 million viewer hours across the year (Figure 23). This translates to 11% reach across all TV households.

Figure 23: Simulcast TV over the internet reach and share



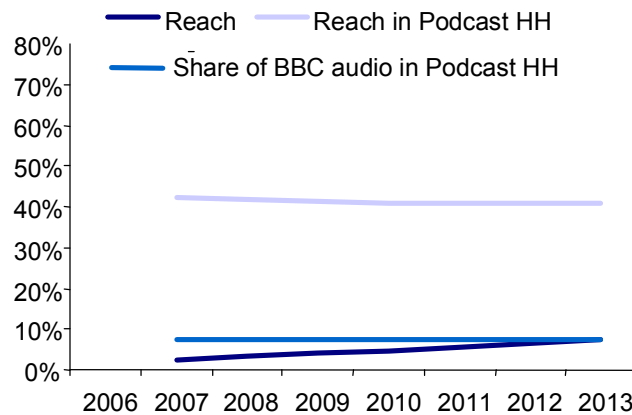
Source: Human Capital, Reach Model

**7.4.5**

Non-DRM downloads over the internet results

Non-DRM downloads over the internet deliver 304 million hours per year by 2011 (Figure 24). This represents 7.4% of the total consumption of BBC radio content for non-DRM downloading households, and 1.5% of BBC radio consumption for broadband homes. It delivers a reach of 5.5% of all homes. Broadcast radio remains the dominant method of receiving audio content.

Figure 24: Non-DRM downloads over the internet reach and share



Sources: Human Capital, Reach Model

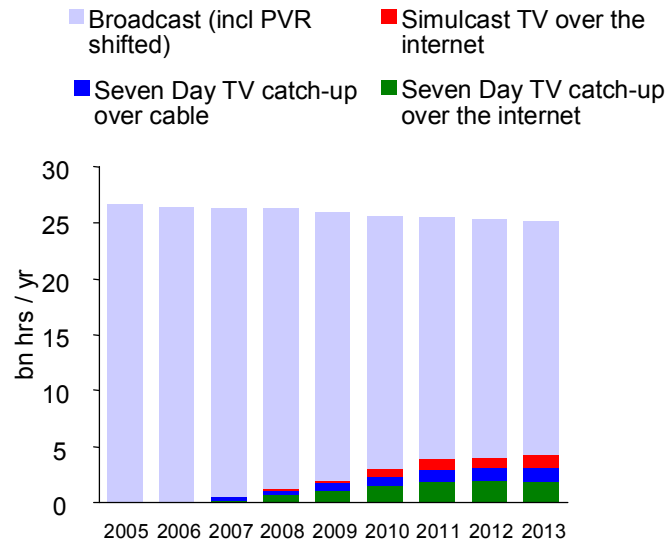
## 7.5

### Aggregate impact of the new on-demand TV proposals

#### 7.5.1

In total the new TV on-demand proposals represent 2,979 million viewer hours in 2011, or 12% of total BBC TV consumption (Figure 25).

Figure 25: BBC TV viewer hours by proposal



Sources: Human Capital, Reach Model

## 7.6

### Alternative scenarios

#### 7.6.1

Given the uncertainty of these new markets, the BBC has looked at two other scenarios in addition to the base case:

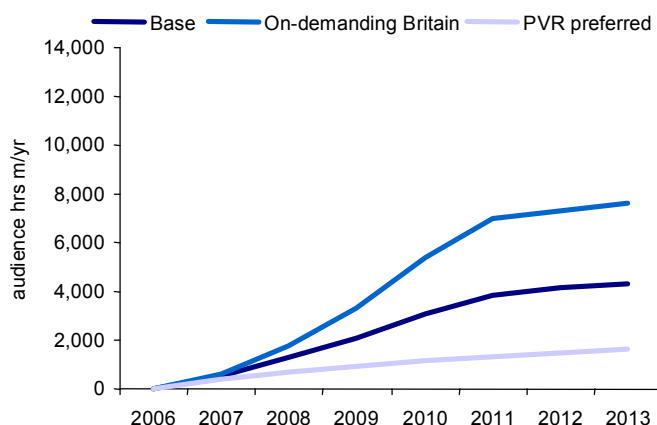
- *On-Demanding Britain*. A high case, assuming an enthusiastic market response to the offerings, and a substantial shift in consumption away from linear schedules. This involves:
  - Accelerated Seven day TV catch-up over the internet penetration from an increase of 13.6% per year to 15%, and increased usage by 25%.
  - Media centers increasing the number of viewers per download for Seven day TV catch-up over the internet programmes from 1.5 to 2 in 2011.
  - Broadband penetration increasing from 69% to 81% in 2011.
  - A 50% increase in Seven day TV catch-up over cable usage, after 2007
  - Annual growth in movement to Simulcast TV over the Internet raised to 1.5% points from 1%.
- *PVR Preferred*. A low case, with consumer needs for time-shifting being met by increasingly powerful and cheap PVRs, rather than network based offerings provided by the BBC and others. This involves:
  - A 25% reduction in Seven day TV catch-up over the internet usage, and a halving of the rate of adoption.

- A 50% decrease in Seven day TV catch-up over cable usage, after 2007
- An increase in PVR penetration in 2011 from 41% to 65%.
- Annual growth in movement to Simulcast TV over the Internet reduced to 0.5% point from 1%.

**7.6.2**

In the base case, the new on-demand TV proposals in combination represent 12% of the consumption of BBC TV (measured by viewer hours) in 2011 (Figure 26). In On-Demanding Britain this rises to 21%, whilst in PVR Preferred it falls to 3%.

*Figure 26 : Volumes for all new proposals by scenario*



Sources: Human Capital, Reach Model

The aggregate impact of the scenarios is very largely driven by the effects on Seven day TV catch-up over the internet and Seven day TV catch-up over cable. The impact on the other two proposals is relatively minor.

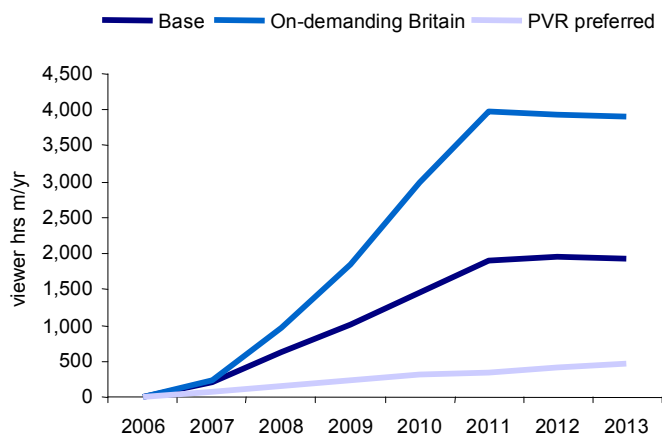
**7.6.3**

Seven day TV catch-up over the internet is the proposal that is most sensitive to the different scenarios (Figure 27). In ‘On-Demanding Britain’, accelerated penetration, usage growth, adoption of media centers and more broadband all combine to almost triple rates of usage. Reach is 34% by 2011 and in homes using this offering, 25% of BBC TV consumption is by this means.

**7.6.4**

In ‘PVR Preferred’, lower adoption, a general decline in usage and the increasing portion of households that have PVRs reduce Seven day TV catch-up over the internet usage by three quarters by 2011 (relative to the base case).

*Figure 27: Seven day TV catch-up over the internet volumes by scenario*

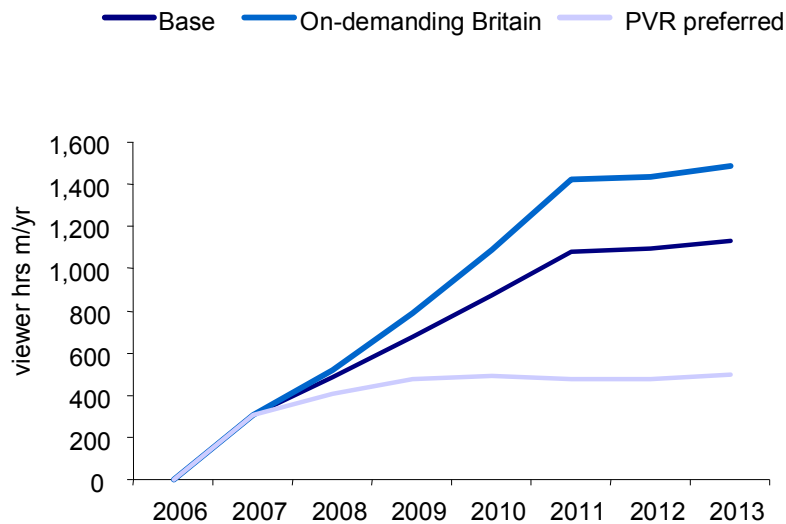


Sources: Human Capital, Reach Model

**7.6.5**

Seven day TV catch-up over cable usage is increased by half in 'On-demanding Britain', and reduced by roughly the same amount in 'PVR Preferred' (Figure 28). In both cases usage per household is the most important factor.

Figure 28: Seven day TV catch-up over cable volumes by scenario



Sources: Human Capital, Reach Model

**7.7**

**The period beyond 2011**

**7.7.1**

In preparing these forecasts the BBC has focused on the period to 2011 as a reasonable planning horizon. Any projections beyond this date inevitably have an

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even greater degree of uncertainty. However, particularly in the base case the proposals have by no means reached a 'steady state' by 2011.

### **7.7.2**

A number of important supporting technologies may be achieving mass market status by this date, including:

- In-home networks and multiple PCs in the home, which will enable more PCs in the home to make use of the same broadband connection for downloading content and enabling more convenient consumption of content from the internet
- Media centers which will enable internet content to be viewed on the TV set, which may be preferred to watching it on a PC.
- Widely available wifi outside the home, which will allow people with laptops or pocket PCs to consume broadband content while in public spaces.

Moreover, the size of the technology-sophisticated younger generation that has grown up in an online world will continue to grow. The BBC believes these trends will support continuing substantial growth of the new proposals.

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## Section 8

### Cost

#### 8.1

#### Predicting the costs of the new proposals

##### 8.1.1

The BBC has approximated the cost of delivering the proposals over the five year period 2006/7 to 2010/11<sup>78</sup> using a bottom-up approach (assessing likely costs of each individual line item). However, as with any forecast take-up of a new product, there is inherent and substantial uncertainty. In particular the cost of rights acquisition, which may be substantial, is subject to negotiation.

##### 8.1.2

The BBC has considered only incremental costs for the new proposals. For instance, the cost of content creation has not been allocated to these proposals. This is because the linear TV channels and radio networks will continue to produce the relevant BBC content regardless of whether the on-demand proposals are launched. Also not included are already planned infrastructure improvements (such as distribution and search) that will be an important enabler of the new proposals, but which will be deployed for bbc.co.uk regardless of whether these proposals are approved.

##### 8.1.3

In aggregate the four proposals have expected start-up and build costs of [ x ], and operating costs of [ x ] through 2010/11, with a total cost of £131m (or approximately £26m per year).

#### 8.2

#### Structure of the costs of the proposals

##### 8.2.1

A significant proportion of the costs are shared across two or more of the proposals. For instance, the cost of rights<sup>79</sup> and playout, which represent [ x ] of the total costs for all four proposals, are shared across Seven day TV catch-up over the internet and Seven day TV catch-up over cable.

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<sup>78</sup> For completeness, sunk 2005/6 R&D costs for the new products of [ x ] have been included.

<sup>79</sup> Cost forecasts include estimated rights costs for all BBC programming with the exception of some acquired programming and some films. Sports rights costs (estimated for a limited number of Sports where rights may be available) have been included for financial years 06/07 and 07/08 but not included for later years due uncertainty of availability and the potential cost impact of renegotiating existing long term contracts.

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### 8.2.2

This is of critical importance since it means the proposals cannot be readily assessed individually. For instance, if the decision has been made to launch Seven day TV catch-up over the internet, then the incremental cost to launch Seven day TV catch-up over cable is only [ x ], the direct costs of that proposal. Conversely, without Seven day TV catch-up over the internet, the incremental costs of Seven day TV catch-up over cable is [ x ], made up of the direct costs plus the full load of rights and playout costs.

### 8.2.3

In practice this means there are significant economies of scope from doing all the TV proposals in conjunction – the cost of doing all three together is much less than the sum of doing each of them individually. Conversely Non-DRM downloads over the internet, which do not share costs with the TV proposals, can be more reasonably considered in isolation.

### 8.2.4

The great majority of the costs are stepped-fixed (i.e. independent of usage), including distribution costs for Seven day catch up over internet and cable and TV simulcasting.

### 8.2.5

In assessing the individual proposals below, the BBC has estimated fully incremental shared costs for each proposal, and unit costs using volumes projected in Section 7. However, such costs should be used with caution, since:

- The BBC has allocated the shared costs across the relevant proposals. In the absence of a standardised cost methodology, the BBC has chosen to allocate costs on hours of usage as this is the most appropriate driver of the shared costs. It also assumes that the other relevant proposal(s) will be offered. For example, if Seven day TV catch-up over the internet is not offered, Seven day TV catch-up over cable's share of rights and playout cost jumps to 100%, rather than the lower percentage shown in the allocated costs.
- The great majority of costs are fixed, and therefore unit costs vary highly according to volumes.

## 8.3

### Cost breakdown and description

#### 8.3.1

The estimated incremental costs of the new proposals through 2010/11 break down as follows:

Figure 29: Total costs, 2006/07 to 2010/11

	Simulcast TV over the internet	Seven day TV catch-up over the internet	Seven day TV catch-up over cable	Non-DRM downloads over the internet	Total
<b>Direct Costs (£m)</b>					
Build/Start up	x	x	x	x	x
Opex (Fixed)	x	x	x	x	x
<b>Total</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
<b>Shared Costs (£m)</b>					
BBC iPlayer					
Marketing		x			x
Build		x			x
Operational		x			x
<b>Total</b>		<b>x</b>			<b>x</b>
Common Costs (rights and playout)					
			x		x
<b>Grand Total Costs (£m)</b>					
Start up					x
Operating					x
<b>Total</b>					<b>131.2</b>

Source: BBC Corporate Finance

### 8.3.2

The direct costs of the individual proposals will be described below, but the key shared costs are as follows:

- BBC iPlayer: a [ x ] cost shared between Simulcast TV over the internet and Seven day TV catch-up over the internet. Marketing to promote the BBC iPlayer is an incremental [ x ] cost incurred in 2006/07. Build costs are [ x ] while operational costs are mainly audience response expenses, including Customer Relationship Management (CRM) and statistical data collection.
- Rights & playout: a [ x ] block of costs shared between Seven day TV catch-up over the internet and Seven day TV catch-up over cable.

### 8.3.3

The BBC has also looked at the same costs on a per user hour basis, allocating shared costs in proportion to hours of usage of the respective proposals projected in Section 7 (Figure 30). For instance Seven day TV catch-up over cable has direct costs through to 2010/11 of [ x ] per user hour ( [ x ] per user hour), and an additional [ x ] per user hour of rights and playout cost (based on rights and playout costs being allocated between Seven day TV catch-up over the internet and Seven day TV catch-up over cable based on hours of usage). Added together this represents a total cost of 1.85p per user hour.

Figure 30: Audience hours and cost per audience hour, aggregate over 2006/07 to 2010/11

	Simulcast TV over the internet	Seven day TV catch-up over the internet	Seven day TV catch-up over cable	Non-DRM downloads over the internet	Average
<b>Cumulative audience hrs, m</b>	1,476	3,738	2,610	819	
<b>Direct costs (per user hour)</b>	x	x	x	x	
<b>Shared costs</b>					
BBC iPlayer	x				
Rights & Playout		x			
<b>Allocated cost per user hour</b>	0.22p	1.95p	1.85p	0.81p	1.52p

Source: BBC Corporate Finance, Human Capital analysis

### 8.3.4

The overall average cost across five years of the new proposals is 1.52p per user hour. Simulcast TV over the internet is the cheapest at an average of 0.22p per user hour, and Seven day TV catch-up over the internet the most expensive at 1.95p per user hour. As these proposals are primarily new means of distribution, they are not directly comparable to the costs per viewer hour typically quoted for broadcast channels (5p per viewing/listening hour), since these include the cost of content creation. The BBC has also calculated cost per user hour by year for each of the new proposals, for each of the three scenarios described in Section 7.

### 8.3.5

In general all the new proposals show a similar pattern:

- Since costs are largely fixed, costs per user hour start high in the early years, but fall rapidly as volumes 'grow into' the cost base.
- For the same reason, costs per hour vary significantly by scenario. For instance, the 2011 cost per user hour for both Seven day TV catch-up over the internet and Seven day TV catch-up over the cable decrease by just over a third in the high usage, On-demanding Britain case.

### 8.3.6

Costs of Seven day TV catch-up over the internet

Seven day TV catch-up over the internet is the most expensive of the proposals, particularly in the early years. The proposal has appreciable direct costs and also carries a significant share of both the BBC iPlayer and on-demand rights and playout costs (Figure 31). Start-up costs are driven by hardware and development staff costs. Ongoing costs are driven primarily by the P2P<sup>80</sup> licence, support and infrastructure upgrades.

Figure 31: Seven day TV catch-up over the internet total and unit costs

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
<b>Costs (£m)</b>						
Direct						
Infrastructure/Build	x	x	x	x	x	x
Operational	x	x	x	x	x	x
Allocation of shared costs						
Base	x	x	x	x	x	x
On-demanding Britain	x	x	x	x	x	x
PVR preferred	x	x	x	x	x	x
Total						
Base	0.45	10.30	13.72	14.14	15.42	14.74
On-demanding Britain	0.46	10.45	15.60	16.31	17.83	17.19
PVR preferred	0.37	8.00	7.86	7.93	9.20	9.25
<b>Viewer Hours (m)</b>						
Base		49	299	710	1,120	1,560
On-demanding Britain		56	411	1,187	2,131	3,239
PVR preferred		21	105	186	257	312
<b>Cost per Viewer Hour (p)</b>						
Base		21.11	4.59	1.99	1.38	0.94
On-demanding Britain		18.56	3.79	1.37	0.84	0.53
PVR preferred		38.22	7.52	4.27	3.58	2.96

Source: BBC Corporate Finance/Human Capital Reach Model

### 8.3.7

#### Costs of Seven day TV catch-up over cable

The cost of Seven day TV catch-up over cable is primarily driven by an allocation of rights and playout costs (Figure 32).

Figure 32: Seven day TV catch-up over cable total and unit costs

<sup>80</sup> P2P or Peer to Peer, is the technology being used to distribute content to consumers through Seven day TV catch-up over the internet. While efficient it does require proprietary software for which a licence is required

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
<b>Costs (£m)</b>						
Direct						
Infrastructure/Build	x	x	x	x	x	x
Operational	x	x	x	x	x	x
Allocation of shared costs						
Base	x	x	x	x	x	x
On-demanding Britain	x	x	x	x	x	x
PVR preferred	x	x	x	x	x	x
Total						
Base	0.08	8.40	15.05	10.58	9.84	9.36
On-demanding Britain	0.08	7.97	13.15	8.41	7.45	6.93
PVR preferred	0.08	10.57	20.85	16.66	15.68	14.75
<b>Viewer Hours (m)</b>						
Base		77	351	529	727	926
On-demanding Britain		77	361	589	864	1,169
PVR preferred		77	332	423	479	488
<b>Cost per Viewer Hour (p)</b>						
Base		10.91	4.29	2.00	1.35	1.01
On-demanding Britain		10.35	3.64	1.43	0.86	0.59
PVR preferred		13.74	6.28	3.94	3.27	3.02

Source: BBC Corporate Finance/Human Capital Reach Model

### 8.3.8

#### Costs of Simulcast TV over the internet

Simulcast TV over the internet is the cheapest of the proposals to provide on a per hour basis. If the BBC iPlayer is being developed anyway for the Seven day TV catch-up over the internet proposal, the marginal cost of providing Simulcast TV over the internet is very low.

Figure 33: Simulcast TV over the internet total and unit costs

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
<b>Costs (£m)</b>						
<b>Direct</b>						
Infrastructure/Build	x	x	x	x	x	x
Operational	x	x	x	x	x	x
<b>Allocation of shared costs</b>						
Base	x	x	x	x	x	x
On-demanding Britain	x	x	x	x	x	x
PVR preferred	x	x	x	x	x	x
<b>Total</b>						
Base	0.14	0.91	0.28	0.30	0.66	0.21
On-demanding Britain	0.13	1.19	0.31	0.31	0.63	0.20
PVR preferred	0.22	1.04	0.35	0.44	1.04	0.31
<b>Viewer Hours (m)</b>						
Base		9	69	217	455	726
On-demanding Britain		15	115	372	805	1,308
PVR preferred		5	35	110	231	369
<b>Cost per Viewer Hour (p)</b>						
Base		9.69	0.41	0.14	0.15	0.03
On-demanding Britain		7.76	0.27	0.08	0.08	0.02
PVR preferred		21.78	1.00	0.40	0.45	0.08

Source: BBC Corporate Finance/Human Capital Reach Model

### 8.3.9

#### Costs of Non-DRM downloads over the internet

Non-DRM downloads over the internet do not share any costs with the other proposals – all its costs are direct (Figure 34). They are primarily production work and distribution.

Figure 34: Non-DRM downloads over the internet total and unit costs

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
<b>Costs (£m)</b>						
<b>Direct</b>						
Start-up	x	x	x	x	x	x
Operational	x	x	x	x	x	x
<b>Allocation of shared costs</b>						
Base	x	x	x	x	x	x
On-demanding Britain	x	x	x	x	x	x
PVR preferred	x	x	x	x	x	x
<b>Total</b>						
Base	0.16	0.27	1.29	1.52	1.68	1.68
On-demanding Britain	0.16	0.27	1.29	1.52	1.68	1.68
PVR preferred	0.16	0.27	1.29	1.52	1.68	1.68
<b>User Hours (m)</b>						
Base		29	127	174	222	268
On-demanding Britain		31	137	195	256	317
PVR preferred		29	127	174	222	268
<b>Cost per User Hour (p)</b>						
Base		0.95	1.02	0.87	0.76	0.63
On-demanding Britain		0.88	0.94	0.78	0.65	0.53
PVR preferred		0.95	1.02	0.87	0.76	0.63

Source: BBC Corporate Finance/Human Capital Reach Model

## 8.4

### Cost efficiency

#### 8.4.1

BBC Management has sought to ensure cost efficient delivery of the proposals given their stated aims in terms of quality and distinctiveness.

The proposals will benefit from the BBC's current investment programme in internet distribution technologies, such as peer-to-peer and content delivery networks, which will improve the delivery of its existing rich media offerings. Central serving can be highly efficient for well-controlled volumes of content delivered into a limited geographical area. Content delivery networks are useful to provide additional capacity during planned and unexpected peaks in traffic demand, and where they can otherwise offer a better price/performance. Peer-to-peer provides a potentially highly efficient distribution network where the number of users is very large compared to the number of distinct items of content being distributed. Together these technologies allow the BBC's technology suppliers to provide the BBC with an optimal network to meet specific distribution requirements for individual services. Over time, technology improvements are likely to enable even more efficient methods of delivery. BBC Management will continuously monitor and deploy those technologies that will deliver the best solution balancing quality of service with cost.

For Simulcast TV over the internet, multicasting technology will enable a scalable solution for serving large audiences. Section 7 sets out the BBC's assumptions around adoption of multicast technology by ISPs.

Where the BBC procures such technology services, it does so under the terms of the Technology Framework Contract (TFC) with Siemens Business Services. This contract was awarded following a full competitive EU procurement process, and has been in place for 18 months.

## Section 9

### Value for Money

#### 9.1.1

The new on-demand offerings are an integral part of the BBC's strategy to deliver public value in the next Charter period. Other key aspects of this strategy include developing digital infrastructure, investing in quality content and adding a range of new services that reflect the changes in markets, technologies and the needs of consumers and society at large. Each of the new offerings, including on-demand, open archive, high definition television and local TV news, is designed to meet specific audience needs and will play a complementary role in the BBC's portfolio. The overarching rationale is that the BBC must make use of the best new digital technologies to make its public service content more convenient, more compelling and more relevant for all licence fee payers.

#### 9.1.2

The BBC's investment proposals, as outlined in its Licence Fee submission to Government, are grouped under four main headings:

Areas of investment	Annual 2013/14	Cumulative 2007/08-2013/14
Digital infrastructure	189m	0.7bn
Digital services	226m	1.2bn
Quality Content	256m	1.6bn
Local relevance	107m	0.6bn

Note – all figures related to the BBC's future licence fee bid are quoted in £2006/7m.

#### 9.1.3

In total the BBC is bidding to spend an extra £226 million p.a. on new digital services by 2013/14, a total of £1.2 billion over the seven year licence fee bid period. The estimated incremental costs of the BBC's new on-demand proposals, outlined in this document, are £26 million in 2011 (c10% of digital service spend).

#### 9.1.4

An assessment of the public value of the BBC's new on-demand proposals cannot be reduced to a mathematical calculation. It must be based on a structured, evidence-based framework that marshals quantitative data and qualitative

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information. The final section of this report takes into account both the benefits of the BBC's new on-demand offerings, expressed through purpose alignment and Reach, Quality and Impact, and the cost of delivering them, in order to provide an assessment of gross public value.

As part of this analysis, it combines the valuation work in Section 6 with the usage forecasts in Section 7 to calculate the likely value that would be generated by the proposals. This is then compared to the cost data in Section 8 to derive surpluses and value-yields for the proposals over time.

#### **9.1.5**

##### Fit with BBC strategy and purposes

The BBC can only deliver its public purposes if it maintains the reach and appeal of its content. As technologies and the market evolve, the BBC must ensure its content is available to audiences in the ways that they expect. The BBC's on-demand strategy is to provide 'Martini media' which is available 'anytime, anyplace, anywhere'. The four new proposals outlined in this document are a logical extension of the BBC's existing on-demand strategy. Specifically, the new offerings will help to drive uptake of broadband and improve media literacy, making them consistent with the BBC's purpose of building digital Britain.

#### **9.1.6**

##### Quality and Distinctiveness

Audience research commissioned by the BBC suggests that audiences recognise the quality of the new on-demand proposals. Whilst a number of commercial providers are set to launch on-demand services in the near future, the BBC's offerings will be distinctive in a number of ways:

- The full range and diversity of the BBC's public service output will extend beyond commercially attractive programming
- As in linear broadcasting, the BBC's on-demand provision will be free at the point of use and advertising free
- The proposals are designed to support the BBC's role as a 'trusted guide' within the on-demand environment. BBC iPlayer will generate public value in the distinctive way in which it presents its content in a rich context and through a public service focused user interface.

#### **9.1.7**

##### Consumer and Citizen Benefits

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The proposals are valued highly from both a consumer and citizenship perspective. Extensive audience research suggests that individuals welcome the opportunity to access the BBC content they value in more convenient and flexible ways. Audiences also recognised that in many areas – knowledge-building, culture and building digital Britain – the new on-demand offerings will enable the BBC to deliver greater value to society. Taken together, the new proposals were seen to be worth £11.20 per person per month. This amounts to more than the current monthly cost of the licence fee. In deliberative research, 100% of the 120 respondents thought that, taking all of the issues together, the BBC should launch these types of proposals.

### **9.1.8**

#### Reach

In a world in which audiences will increasingly access content through on-demand means, these proposals will help the BBC to reach the UK population. The BBC expects that over time on-demand television viewing in the home will in aggregate be a substitution of linear viewing. On-demand, however, offers the opportunity for the BBC to re-connect with audiences who have already drifted away from traditional linear TV. For instance, the proposals will create new opportunities for place-shifted consumption. Crucially, more of the BBC content that audiences do consume should be more directly relevant and attractive to them.

### **9.1.9**

The proposals contribution to the delivery of the BBC's public purposes will largely be a function of their reach. The modelling work carried out for this assessment forecasts the following reach figures for 2011:

- Seven day TV catch-up over the internet: 20% of TV homes
- Seven day TV catch-up over cable: 11% of TV homes
- Simulcast TV over the internet: 11% of TV homes
- Non-DRM downloads over the internet: 5.5% of all homes<sup>81</sup>

BBC Management has not attempted to forecast usage beyond this five year planning horizon. There are however strong reasons to believe that the reach generated by these proposals will continue to grow significantly in a fully digital Britain.

### **9.1.10**

#### Cost

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<sup>81</sup> Human Capital, Reach Model

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In aggregate the four proposals have expected start-up and build costs of [ x ], and operating costs of [ x ] through to 2010/11, with a total incremental cost of £131m (or approximately £26m per year). This represents around 1% of the BBC's current total programme and distribution spend. BBC Management believes it is cost effective to make this investment in on-demand as the proposals are forecast to contribute to future BBC reach and consumption more effectively than an equivalent level of incremental investment in linear channels.

The average cost per user hour of the proposals in 2011 is estimated to be 0.63p. This looks low compared to the cost of the BBC as a whole (5p per viewer/listener hour in 2004/05) because they are primarily methods of distribution and do not incur increased content creation costs beyond additional rights payments and limited re-purposing.

## 9.2

### Comparison between costs and audience valuations

#### 9.2.1

By comparing the perceived value of the new proposals with their cost of provision, one can calculate a "value yield". The "value yield" is defined as the total perceived value of the proposal in reached households divided by the total cost. The average across the current BBC is approximately two. By 2010/11 these proposals, taken together, will be generating an average value yield of 14. These figures are high because the expense figures only include incremental costs. Content creation costs are not allocated since the existing channels and their content costs will continue independently of a decision on these proposals.

#### 9.2.2

Calculation of value yield

The calculation of a value yield in the base case, outlined in section 7, for each of the proposals is as follows:

*Figure 35: Base case cost and value by proposal*

**Citizen reported value per household per month (£)**

<i>Seven day TV catch-up over the internet</i>	2.80
<i>Seven day TV catch-up over cable</i>	4.00
<i>Simulcast TV over the internet</i>	2.20
<i>Non-DRM downloads over the internet</i>	2.20

	2006/07	2007/08	2008/09	2009/10	2010/11
<b>Reach, m households</b>					
<i>Seven day TV catch-up over the internet</i>	0.14	0.84	2.00	3.14	4.34
<i>Seven day TV catch-up over cable</i>	0.24	1.09	1.60	2.09	2.54
<i>Simulcast TV over the internet</i>	0.03	0.25	0.78	1.62	2.52
<i>Non-DRM downloads over the internet</i>	0.14	0.63	0.85	1.07	1.29

**Aggregate Annual Value, £m**

<i>Seven day TV catch-up over the internet</i>	4.6	28.2	67.1	105.4	146.0
<i>Seven day TV catch-up over cable</i>	11.6	52.5	76.6	100.5	121.9
<i>Simulcast TV over the internet</i>	0.9	6.6	20.7	42.7	66.5
<i>Non-DRM downloads over the internet</i>	3.8	16.6	22.5	28.3	34.0
<b>Total</b>	<b>20.9</b>	<b>104.0</b>	<b>187.0</b>	<b>276.9</b>	<b>368.3</b>

**Annual Cost, £m**

<i>Seven day TV catch-up over the internet</i>	10.3	13.7	14.1	15.4	14.7
<i>Seven day TV catch-up over cable</i>	8.4	15.1	10.6	9.8	9.4
<i>Simulcast TV over the internet</i>	0.9	0.3	0.3	0.7	0.2
<i>Non-DRM downloads over the internet</i>	0.3	1.3	1.5	1.7	1.7
<b>Total</b>	<b>19.9</b>	<b>30.4</b>	<b>26.5</b>	<b>27.6</b>	<b>26.0</b>

**Value Yield (Value / Cost)**

<i>Seven day TV catch-up over the internet</i>	0x	2x	5x	7x	10x
<i>Seven day TV catch-up over cable</i>	1x	3x	7x	10x	13x
<i>Simulcast TV over the internet</i>	1x	23x	68x	64x	311x
<i>Non-DRM downloads over the internet</i>	14x	13x	15x	17x	20x
<b>Average</b>	<b>1x</b>	<b>3x</b>	<b>7x</b>	<b>10x</b>	<b>14x</b>

Source: BBC Corporate Finance/Human Capital Reach Model

**9.2.3**

Any yield over one suggests that the investment would create value for licence fee payers. In calculating the yields above, the BBC has used a conservative assumption to calculate aggregate citizen and consumer value – multiplying the reported total value per user by reached households. In fact, un-reached households may ascribe citizen value to the proposals, even if they themselves do not use them.

**9.2.4**

Despite this conservative assumption, for all the proposals the total value is an appreciable multiple of their costs, and these multiples are higher than those for the BBC as a whole (after the initial year, which has lower audiences and higher start-up costs). This is to be expected, since these proposals benefit from the investment already made by the BBC, not least in content creation, and therefore should have a higher 'marginal return'. Note that the multiple for any individual proposal is highly dependent on the allocation of shared costs. For instance, Seven day TV catch-up over cable has a lower multiple than Seven day TV catch-up over the internet in part because its greater volumes mean a high percentage of content rights and payout

are allocated to it. By extension, if Seven day TV catch-up over the internet were to be offered stand-alone, without Seven day TV catch-up over cable to share the costs of rights and payout, its multiple would fall dramatically.

### 9.2.5

Comparison between costs and valuations in alternate scenarios

The BBC has also reviewed the value/cost multiples in the different scenarios outlined in section 7. Even in the downside scenario, the multiples remain value-enhancing after the initial year.

Figure 36: Value/cost by scenario

	2006/07	2007/08	2008/09	2009/10	2010/11
<b>Base</b>					
<i>Seven day TV catch-up over the internet</i>	0x	2x	5x	7x	10x
<i>Seven day TV catch-up over cable</i>	1x	3x	7x	10x	13x
<i>Simulcast TV over the internet</i>	1x	23x	68x	64x	311x
<i>Non-DRM downloads over the internet</i>	14x	13x	15x	17x	20x
<b>On-demanding Britain</b>					
<i>Seven day TV catch-up over the internet</i>	0x	3x	7x	11x	17x
<i>Seven day TV catch-up over cable</i>	1x	4x	8x	12x	15x
<i>Simulcast TV over the internet</i>	2x	39x	114x	110x	536x
<i>Non-DRM downloads over the internet</i>	15x	14x	17x	20x	24x
<b>PVR preferred</b>					
<i>Seven day TV catch-up over the internet</i>	0x	1x	1x	2x	2x
<i>Seven day TV catch-up over cable</i>	1x	3x	6x	7x	8x
<i>Simulcast TV over the internet</i>	0x	12x	35x	34x	165x
<i>Non-DRM downloads over the internet</i>	14x	13x	15x	17x	20x

Source: BBC Corporate Finance/Human Capital Reach Model

### 9.2.6

Note that the BBC has treated costs as fixed across the three scenarios, as explained in section 7. In fact, they would be marginally higher in "On-demanding Britain", and slightly lower in "PVR preferred". This would have the effect of slightly decreasing the above ratios in "On-demanding Britain", and slightly increasing them in "PVR preferred".

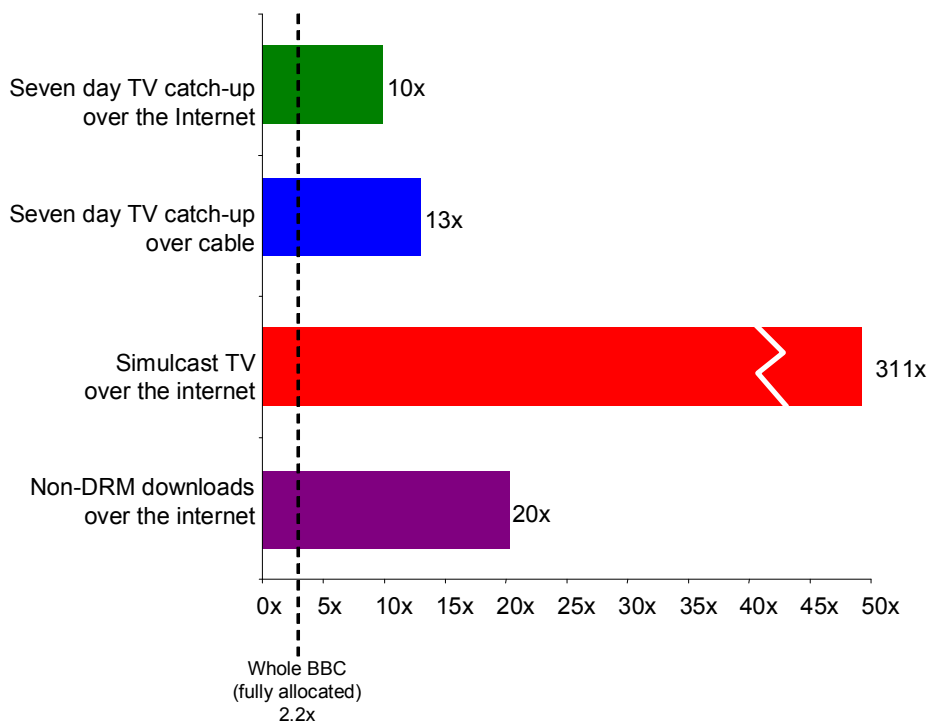
### 9.2.7

Comparison of value yield to the BBC total value yield

These calculated value yields are higher than the aggregate value yield of the BBC estimated in earlier research<sup>82</sup>.

<sup>82</sup> Human Capital, Measuring the Value of the BBC, July 2004 for existing products

Figure 37: Base case marginal value yield for BBC new proposals (2010/11) and the BBC as a whole (2004)



Source: Human Capital Reach Model/Human Capital, Measuring the Value of the BBC, 2004

**9.2.8**

By 2010/11 we estimate that these proposals, taken together, will be generating an average value yield of 14. The value yields for these proposals will improve over time as usage and reach grow. Note that the yields for the new proposals are not directly comparable to the aggregate yield for the whole of the BBC. The former measure marginal yields, so for example the cost of content creation is not factored in since the relevant content already exists. The latter is fully allocated, and includes all BBC costs. However, the comparison does confirm that the new proposals will not be dilutive to the BBC's existing value yield – in other words, choosing to invest in the new proposals will not reduce the BBC's total yield.

**9.2.9**

Calculation of total surplus

The BBC has also considered the 'total surplus'<sup>83</sup> of these proposals, that is the difference between the total amount of value which the proposals are perceived to

<sup>83</sup> Total surplus is defined as consumer surplus plus externalities

deliver and their cost. In 2010/11 the model suggests that this would have increased to £342m, made up as follows:

Figure 38: Total Surplus, £m

	2006/07	2007/08	2008/09	2009/10	2010/11
Seven day TV catch-up over the internet	-6	15	53	90	131
Seven day TV catch-up over cable	3	37	66	91	112
Simulcast TV over the internet	0	6	20	42	66
Non-DRM downloads over the internet	4	15	21	27	32
<b>Average</b>	<b>1</b>	<b>74</b>	<b>160</b>	<b>249</b>	<b>342</b>

In summary, having assessed the proposals against the framework set out by the BBC Governors, it is BBC Management's view that the public value generated will justify the planned investment. The proposals will generate significant public value for audiences over the next five years, but will also ensure the BBC has established its strategic position in readiness of potentially more fundamental changes in both technology and in audience expectations.

## 9.3

### Alternative BBC investment options

#### 9.3.1

Any organisation investing in new services needs to evaluate the opportunities against the alternative of investing more in its existing activities. A critical issue for the BBC is which investment options are likely to maximise public value. The BBC could spend the investment earmarked for its new on-demand proposals on additional content for its existing linear TV and radio services. Modelling undertaken by BBC Management shows viewing share declining to [ x ] for the Corporation in 2010/11 based on achieving the licence fee settlement outlined in our submission to Government. If a further £26m per annum, being the estimated cost of the on-demand proposals, is invested in content on linear TV channels then the model predicts the BBC's share will fall by [ x ] less all else being equal. For this level of spend, BBC Management believes that the new on-demand proposals will have a more positive impact on maintaining BBC reach and usage over time, and thereby its ability to deliver its public purposes in a fully digital Britain.

#### 9.3.2

Other options for addressing the challenges posed by accelerating changes in technology and audience expectations have also been examined. These include doing nothing, wait and see or a fully commercial on-demand model. An appraisal of these options follows:

#### 9.3.3

Doing nothing

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The evidence and analysis presented in this report suggests that this option would be sub-optimal for the BBC and for licence fee payers. It would almost certainly lead to a decline in the consumption and reach of BBC output over time, particularly among those audiences, such as younger people, who are drifting away from traditional linear TV. On-demand provision is vital to maintain the relevance and appeal of the BBC's output in an environment in which audiences will increasingly access content at their convenience, over a variety of fixed and mobile distribution mechanisms. Not investing in new on-demand proposals would reduce the value delivered to licence fee payers and restrict the ability of the BBC to deliver its public purposes.

#### **9.3.4**

Wait and see

There are a number of important drivers influencing the timing of the launch of the new on-demand proposals outlined in this document. First and foremost, the proposals are a direct response to rapidly changing technology and the expectations of audiences. Based on audience research carried out over the last eighteen months and an assessment of the UK market, BBC Management believes it is in the interests of licence fee payers to expand the scope and functionality of the BBC's on-demand offerings in the near future. Audiences are becoming more discriminating and demanding; they expect greater choice and control over all media. In order to continue delivering to licence fee payers, the BBC must offer them greater convenience and choice over how they access the content they have already funded. The second major driver behind the launch of the proposals is the BBC's commitment to helping to build digital Britain. The BBC has a long heritage of introducing mainstream audiences to new technologies (e.g. the introduction of colour, digital television, digital radio and the web) and acting as a 'trusted guide'. The availability on-demand of a strong, distinctive BBC content offering, free at the point of use, will contribute to the 'second' wave of broadband growth

#### **9.3.5**

A fully commercial model

The BBC's new on-demand proposals are an extension of linear broadcasting and should be provided on the same terms as its existing public service offerings i.e. universally available and free at the point of use. They are designed to make existing BBC content more accessible to all licence fee payers who fund it in the first place. Providing these on-demand proposals on a commercial basis would have the following major drawbacks:

- An advertiser funded model would restrict the range and breadth of the content available and undermine the perceived value of an advertising free environment

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- A subscription or pay per view approach would inevitably compromise the universality of the BBC's on-demand offer
  - BBC Management believes that reinvesting revenue generated through a seven day catch up commercial model in linear services would create less public value than making BBC content available on a free-to-view basis in this window.

As an extension of free to air linear broadcasting, these proposals relate to the primary consumption window. It should be noted that the BBC is intending to offer on-demand content within the secondary window on a commercial basis.

### **9.3.6**

In summary, BBC Management believes that none of the alternative approaches outlined above represents an appropriate response to the second wave in digital, characterised by revolutionary and accelerating changes both in technology and in audience demands. The extensive analysis and evidence presented in this report suggests that none of the alternative options would deliver an equivalent level of gross public value as the BBC's new on-demand proposals.

## Section 10

### Annex 1: Audience Research

#### 10.1.1

The audience research covered both individuals who had trialled versions of the proposed new offerings as well as the wider public. Overall, the research was weighted towards individuals who had direct experience of the new offerings. As 'early adopters', this group may not be truly representative of the UK population as a whole. However, when researching innovative new services, such as on-demand television and radio, it is important for respondents/participants to understand them as fully as possible.

#### 10.2 Research linked to trials

##### 10.2.1

Trials have been carried out on three of the four new proposals: Seven day TV catch up over the internet and cable and Non-DRM audio downloads over the internet. They enabled respondents to gain real experience of the different offerings, before taking part in quantitative research. The quantitative questions covered the four drivers of public value outlined by the BBC Governors – reach, quality, impact and value for money - and were drawn from a pool approved by the BBC Governance Unit.

- Seven day TV catch-up over the internet was trialled via the BBC Integrated Media Player (iMP). The closed trial involved 5,000 triallists across the UK and took place between September 2005 and February 2006. The triallists were self-selected so they tended to be 'early adopters'. It is important to note that the iMP that was trialled is different in a number of respects to the Seven day TV catch-up over the internet that will form part of the BBC iPlayer. In the trial, for example, the amount of BBC content was limited and downloaded content had to be watched within the seven days following broadcast otherwise it expired<sup>84</sup>.
- Non-DRM audio downloads. The quantitative research was carried out on a sample of 3,469 podcast triallists in November 2005. They tended to be male, young, 'early adopters' from London and the South-East. Most were technologically aware, with 44% having downloaded non-BBC radio programmes and 74% having previously downloaded non-BBC music files from the internet.
- The trial of Seven day catch-up over cable was carried out amongst subscribers to Telewest, ntl and Homechoice with access to their on-demand services<sup>85</sup>. Again, the offering that will be launched will differ in certain respects from the trial.

<sup>84</sup> The proposed catch-up service will have an extended seven day window as described in Section 1.

<sup>85</sup> The ntl research took place in January 2005, HomeChoice in March 2005 and Telewest in July 2005

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Most significantly, the vast majority of BBC content from the last seven days will be available as opposed to a limited selection in the trial.

## 10.3 Human Capital Deliberative research<sup>86</sup>.

### 10.3.1

This was carried out on all of the four new BBC proposals. Deliberative research is a technique often used to explore policy-making decisions. It involves a process that combines the depth and interactivity of qualitative groups with a statistical significance close to that of quantitative research.

### 10.3.2

Deliberative research can be a particularly effective way of carrying out quantitative research which requires complex concepts to be explored. The style of deliberative moderation emphasises rational argument, rather than the empathetic or reflective listening used in qualitative research. It is good at exploring respondents' judgments about ethics (what should happen?), where qualitative research can help to understand aesthetics (do people like it?).

### 10.3.3

The research involved six, four-hour juries, held over a period of 2 weeks with 120 respondents across Britain. The sample reflected a spread of age, gender and SEG. Respondents were selected from BBC iMP triallist and cable (ntl, Telewest) and Home Choice subscribers with access to Video-on-Demand. In addition, all were asked to try non-DRM audio downloads (podcasting) in advance of the groups. Most respondents had used two or three of the four proposals. Since these respondents had experienced the offerings first-hand, they were essentially "early adopters" and so not truly representative of the population as a whole.

## 10.4 MORI research on the BBC's new service propositions<sup>87</sup>

### 10.4.1

This quantitative research set out to understand the perceived consumer and citizen benefits of a range of ten new BBC service ideas for the next Charter period. Six qualitative research groups were used to refine the propositions and to develop a questionnaire which was then used in 1,640 face-to-face interviews across the UK.

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<sup>86</sup> Human Capital, Deliberative Research, March 2006

<sup>87</sup> MORI, New Service Proposition Research, January-April 2005

Amongst the ten service ideas was seven day TV catch-up<sup>88</sup>. The research did not include Simulcast TV over the internet or Non-DRM audio downloads.

**10.4.2**

The particular advantage of this research is that enables an assessment of the initial attitudes of the general population (as opposed to the ‘early adopters’ in the deliberative research and the RQIV trial research described below). Its key drawback is that the research did not allow for a detailed explanation of each service or for respondents to request further clarification of the propositions.

**10.4.3**

The table below outlines which bespoke audience research findings can be used to assess each of the four on-demand proposals.

Proposal	Relevant Research
Simulcast TV over the internet	Deliberative
Seven day TV catch-up over the internet	Quantitative research on iMP triallists New service proposition research of “seven day catch-up” Deliberative
Seven day TV catch-up over cable	New service proposition research of “seven day catch-up”. Quantitative research on cable VOD triallists Deliberative
Non DRM downloads over the internet	Quantitative research on podcasting triallists Deliberative

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<sup>88</sup> The proposition was described as follows: “you could watch any BBC TV programme you had missed, or wished to see again, at any time you wish, in the seven days since it was broadcast”. The distribution method was not specified.

## Section 11

## Annex 2: Key assumptions for reach modelling

### 11.1.1

Assumption	2011 value: Base	2011 value: On Demand Britain	2011 value: PVR Preferred	Source/Basis	Increased by	Decreased by
Seven day TV catch-up over the internet usage (hrs/wk/using household)	1.93	2.49	1.42	iMP Trial [2.71 hrs]	<p>Increased familiarity with service over time</p> <p>Media centres bring internet content to TV</p> <p>Improved functionality (e.g. decreased download time)</p> <p>Multiple PCs/HH</p> <p>Expansion of digital-savvy generation</p>	<p>Availability of expanding range of internet video options</p> <p>Trial was primarily early adopters</p> <p>Trial was primarily BBC fans</p> <p>Loss of Novelty</p> <p>BBC loss of TV share</p>
Seven day TV catch-up over the internet annual increase in penetration of broadband households	13.6%	15%	5%	Double the uptake of BBC RadioPlayer (unique user/broadband household) [6.8%/yr]	<p>Greater interest in downloading video content</p> <p>Greater promotional power of TV to push online use</p> <p>Pre-existing familiarity with online media</p>	<p>Lesser interest in downloading video content</p> <p>Mass take-up of PVRs decrease interest in catch-up</p> <p>Less interest in higher attention TV content on PC</p> <p>Greater network congestion/degraded quality risk</p>

Broadband Penetration	69%	81%	69%	Enders (adjusted)	Cheaper Broadband deals driving uptake  New online services driving uptake	Uptake amongst non early adopters slowing  Cost increasing
PVR penetration	41%	41%	65%	Jupiter / Strategy Analytics, Enders	Decreasing cost of mass market PVRs  Promotion of PVRs by Sky and Cable	Overestimated Sky+ penetration (target 25% by 2010)  On-Demand services decrease demand for PVRs
Seven day TV catch-up over cable usage (hrs/wk/household)	1.77	2.32	0.77	Q4 2005 average from NTL trial	More BBC content available  Increased familiarity  Multiple cable VoD boxes in the home	Mass take-up of PVRs  Increased 3rd party cable VoD content  BBC loss of TV share
Viewers per cable VoD set-top box	2.00	2.00	2.00	HC Estimate	Larger Households	Smaller Households  In home audience fragmentation
Viewers per Seven day TV catch-up over the internet stream	1.50	2.00	1.00	HC Estimate	Media centres bring internet content to TV  More PCs in communal rooms	
Broadband penetration of cable households	75%	75%	75%	HC Estimate	Cheaper broadband deals drive uptake  New online services driving	Costs increasing

					broadband uptake	
Annual increase in Simulcast TV over the internet share of TV	1.0%	1.5%	0.5%	BBC streaming radio/BBC radio	<p>Incremental value of new 'TV' greater than new 'radio'</p> <p>Greater promotional power of TV to push online use</p> <p>Expansion of digital-savvy generation</p> <p>Value add features (e.g. attached links)</p> <p>Second streaming service adopted more quickly than first</p>	<p>Radio more compatible with multitasking on PC</p> <p>In-workplace use of TV less 'defensible' than radio</p> <p>Greater network congestion/degraded quality risk</p> <p>Fewer PC/broadband access set-ups 'video-streaming ready'</p>

## Section 12      Annex 3: Corrections

Document reference	Description	Value	Revised value
2.5.2	Cable CU Share of viewing in BBC VOD Homes	19%	19%
2.5.2	Cable CU Reach	11%	8%
2.7.1	Average value yield	14x	13x
7.4.3	Cable CU viewer hours	1,081	850
7.4.3	Cable CU share of total BBC consumption	4.3%	3.3%
7.4.3	Cable CU share of BBC consumption in VoD HH	19%	19%
7.5.1	TV on-demand viewer hours	2,979	2,747
7.5.1	Share of total BBC consumption	12%	11%
7.6.2	Share of total BBC consumption (Base)	12%	11%
7.6.2	Share of total BBC consumption (On-demand)	21%	20%
7.6.2	Share of total BBC consumption (PVR Preferred)	3%	3%
8.3.3	Cable CU total cost per viewer hour	1.85	2.02
8.3.4	Overall cost per audience hour	1.52	1.60
8.3.4	Internet CU cost per viewer hour	1.95	2.08
9.1.9	Cable CU Reach	11%	8%
9.1.10	2011 cost per audience hour	0.63	0.75
9.2.1	Average value yield	14x	13x
9.2.8	Average value yield	14x	13x