



Ofcom response to the European Commission

Green Paper: Preparing for a Fully Converged
Audiovisual World: Growth, Creation and Values

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Section 1

Executive summary

- 1.1 Ofcom is the independent regulator and competition authority for the UK communications industries, with responsibilities across television, radio, telecommunications, wireless communications and postal services. Our core duties are to further the interests of citizens and the interests of consumers in relevant markets, where appropriate by promoting competition.
- 1.2 Ofcom welcomes the opportunity to respond to this Green Paper. We want to see the audiovisual sector continue to make a valuable cultural and economic contribution to the overall EU economy and play a significant role in the protection and promotion of democracy and freedom of expression.
- 1.3 Across Europe we are moving towards an increasingly connected society. This will challenge and change audiovisual business models, public policy and, over the long term, consumer behaviour. Although we may not yet have become a fully connected society, now is a good time to reflect on a policy and regulatory framework that will support and enable the creation and availability of great digital content and promote effective competition, but will also ensure appropriate levels of protection and assurance from illegal and potentially harmful material.
- 1.4 The internet has brought significant benefits to consumers and citizens and made the media a much more social, global and participative environment. The nature of communications and content services has also changed. We have seen a growth in the importance of search and in social networking, an explosion in user-generated content and the development of new kinds of content services, both managed by Internet Service Providers (ISPs) and delivered over-the-top (OTT).
- 1.5 The mass market adoption and usage of connected audiovisual services poses a number of key challenges to the existing policy framework and we have drawn the following conclusions:
 - a) There are many more ways for audiovisual content to be delivered to consumers with multiple routes for distribution. However, some elements of the distribution chain may continue to demonstrate gateway or bottleneck characteristics, including content rights, platforms and access networks. Vertically integrated distribution models will continue to play an important role, but players involved in the production, packaging and delivery of audiovisual content will also become increasingly interdependent.
 - b) This interdependence between players in different sectors is leading to problems in defining the scope of future audiovisual regulation, particularly because of the growing interaction with other key regulatory frameworks, including the telecoms framework and the E-commerce Directive.
 - c) The emergence of new players in the value chain may change the balance of power between traditional and new bottlenecks and gateways.
 - d) The globalisation of parts of the audiovisual sector is also posing challenges. The rise in influence of international players in the audiovisual sector may lead to more difficulties in securing European and national broadcasting objectives and interests.

- e) The distinction between linear and non-linear content distribution and consumption is blurring. Linear viewing remains resilient, but the potential for a greater shift to on-demand viewing remains.
- f) The current digital media landscape is already a complex one for consumers to navigate, both in terms of the services they use and in terms of their understanding of the regulatory framework. Reform should simplify, not complicate, the picture.
- g) There is continued uncertainty amongst businesses and policy makers on how to strike the right balance between ensuring the continued availability of the “open internet” and ensuring continued investment in networks and services.

1.6 In our response we have focused on themes and priorities that we believe will be pivotal over the next decade – concentrating on areas where our experience as a regulator can add most value.

1.7 Our response identifies two distinct sets of policy issues that we believe will still be relevant in a connected society. Even if the emergence of a connected society fundamentally alters business and consumer behaviours, we believe that today’s underlying audiovisual policy goals will remain relevant well into the future, regardless of how services are delivered:

- a) **Non-negotiable rights and protections:** There are policy areas where rights and protections must be guaranteed, regardless of technology. These are rights and protections that people will always expect to be safeguarded.

There are also other rights and protections which exist now because of current consumer and cultural expectations. These are areas where it is important that policy makers actively monitor changing consumer expectations and where regulation should be able to adapt, and if appropriate be removed, as consumer expectations change.

- b) **Public policy actions to achieve a stronger society:** areas where policy makers choose to intervene positively to promote certain good outcomes for citizens and consumers.

1.8 We open our response with a consideration of the market context and a discussion of the range of policy principles under consideration. To that end we have identified four priority areas for review of the current regulatory framework:

Priority 1: Modernising the audience protection and assurance regime for television content

The distinction between “push” and “pull” media is becoming less relevant to consumers and they increasingly expect that there should be more consistent regulation across services. The protection of minors continues to be the priority.

Our research tells us that people’s expectations of protections on their TV are different from their expectations on a PC. Therefore, in an era of connected TVs, we need a more consistent minimum standard to reduce the asymmetries between linear and non-linear content in line with these expectations. This should be accompanied by a mix of regulation, self-regulation and measures that empower

people to manage their and their families' own access to content.

**Priority 2:
More effective
approaches to
protecting people online**

People are entitled to protection from harm online as much as they are offline. They are also entitled to know where there is and is not protection or regulation, in particular where they will need to make a decision about whether they trust or use a particular service. The new regulatory challenges which the internet brings do not preclude the need for effective protection.

The existing broadcasting model of audience protection, which focuses on placing editorial obligations on editorially responsible service providers, is unlikely to translate to the online environment where the concept of editorial responsibility is more difficult to establish and, even if established, may sit beyond national or EU borders.

For protection online, we need to consider the roles and responsibilities of different players in the value chain to ensure they make an appropriate contribution to protecting people. Policy makers will need to create an environment within which relevant intermediaries have incentives to provide consumers with appropriate tools, weighing the need for protection against the benefits of the limited liability framework set out under the E-commerce Directive.

**Priority 3: Supporting
viewing and investment
in Public Service
Content**

For Public Service Content to remain both widely available and easily discoverable in a connected society, the current regulatory frameworks in relation to availability (e.g. "must carry/must offer") and discovery (EPG prominence) will need modernising.

In particular, further consideration may be needed of how future regulation defines which platforms are subject to such rules and whether the current definitions (for the purposes of must carry, in particular) are sustainable in a connected society.

**Priority 4: Promoting
effective competition in
content markets**

Concentration continues to be a feature of broadcast and content markets. In addition, consumers are increasingly purchasing bundles of communications services including content.

A connected society requires effective competition in both broadcasting and telecoms services. We should explore whether ex ante competition regulation for content markets is fit for purpose given technological change and market developments. The UK Government is currently considering how the ex ante competition broadcasting regime in the UK might be modernised to ensure it remains fit for purpose.

- 1.9 In addition to these priority themes, our response covers a number of other significant issues:
- Spectrum, including the future of DTT and IPTV, spectrum sharing and dynamic spectrum access.
 - the future regulation of commercial communications; and
 - future regulation of accessibility and inclusion.
- 1.10 This response focuses on the issues raised in the Commission's Green Paper. It does not cover other important issues, such as switching, which we note the Commission is addressing in its "Connected Continent" initiative.
- 1.11 There are two issues that we would highlight at the start of this process, which, while dealt with substantively elsewhere, may be relevant to the issues covered in the Green Paper.
- 1.12 Firstly, traffic management and net neutrality policy is an area which is not explicitly referred to in the Green Paper, but which is increasingly important across the range of issues under consideration. In particular, there are a number of specific considerations relevant to audiovisual policy that may have a bearing on the overall policy approach to traffic management:
- **Audience protection:** it would not be desirable for any net neutrality rules to preclude appropriate levels of audience protection and assurance where this is necessary.
 - **Protecting people online:** any net neutrality rules must not prevent proportionate restrictions on illegal or harmful content.
 - **Supporting investment in PSC:** a potential future benefit for public service content providers could be protection from future traffic management approaches and charges to help support wide scale reach and impact of these public services.
 - **Promoting effective competition:** it will be important to ensure that innovative content and approaches to content distribution can find cost effective models of distribution, while mitigating the risk of anticompetitive conduct.
 - **Audiovisual distribution and IPTV:** the evolution of network capacity and traffic management policies could have a significant bearing on the future development and viability of IPTV.
- 1.13 Secondly, across the policy issues discussed in this response, there is a pressing need to consider how the regulatory framework should develop in response to the changing technology underlying key platforms. The scope of the current regulatory framework is based around the concepts of Electronic Communications Networks (ECNs) and Electronic Communications Services (ECSs) (established in the EU Framework Directive). We need to consider whether that scope remains appropriate in light of the evolving technological landscape, which can blur the distinction between regulatory boundaries, for example in relation to transmission and content. Further discussion is needed about the scope of the regulatory framework for electronic communications in this context.

- 1.14 Finally, any new regulatory framework will need to be flexible enough to avoid regulation becoming quickly obsolete due to the speed of technological development and adoption we can expect over the next decade and beyond. It must also be clear and easily understood by the public. We are beginning to approach a stage where adding more incremental regulation onto existing regulation risks creating a system which is overly complex and therefore difficult to both understand and implement in practice.
- 1.15 Over the past seven years, we have contributed to several areas of the Commission's Content Online initiative and the wider Digital Agenda. We have shared our experience and knowledge, as a converged regulator, through formal responses to consultations and informal discussions. This document is therefore intended to complement our contributions a number of recent consultations on topics such as the "Online Distribution of Audiovisual Works in the European Union"¹ (which we understand is still under consideration); and the "Public Consultation on the Independence of Audiovisual Regulatory Bodies".²
- 1.16 We look forward to the Commission's considerations. We anticipate that responses to this Green Paper – together with all of the input on previous consultations and analysis conducted by the Commission in this area – will feed into the Commission's thinking not only on the eventual review of the Audiovisual Media Services (AVMS) Directive, but also on the future of the E-commerce Directive, any future review of the Telecoms Framework. We will continue to offer our expertise to support and inform any future work to develop this regulatory agenda.

¹ <http://stakeholders.ofcom.org.uk/binaries/international/responses/Nov2011.pdf>

² http://ec.europa.eu/information_society/newsroom/cf/itemdetail.cfm?item_id=11491

Section 2

Market and consumer context

Section summary

- There has been a significant fragmentation of the traditional models of both distribution and access, particularly in the platforms over which consumers access audiovisual content.
- This is shown by an increasing range of connected devices and services and corresponding increased levels of take-up and usage of those devices and services.
- The mix of funding and investment in the production of content is gradually changing, with new funding coming from beyond public service broadcasters. Television advertising has remained resilient, but there is potential for significant change as advertisers look for new ways to engage with consumers.
- Consumer expectations of regulation and protection are adapting to technological change. While parents have adopted multi-faceted strategies to protect their children online, expectations of regulation across television and television-like content remain high.

- 2.1 This section provides an overview of our observations on the effects of convergence on the way consumers and industry engage with media. It provides a snapshot of the current audiovisual content market and consumer expectations. Ofcom holds a significant body of consumer and industry related information on convergence and would be pleased to provide a deeper and wider ranging discussion of our evidence base should the Commission wish.
- 2.2 Convergence is a broad term that is taken to mean the “progressive merger of traditional broadcast services and the internet” as defined in the Commission’s Green Paper, and, as Ofcom defined it in 2007, “the ability of consumers to obtain more services on a single platform or device – or obtain any given service on multiple platforms or devices”.

Ofcom regularly carries out research into the markets it regulates

- 2.3 Our research informs the delivery of our duties and our programme of work. It also keeps us, and others, informed about new technology developments and the impact these may have on the sectors that we regulate.
- 2.4 There are a number of reports which contribute to our understanding of convergence and its impact on the communications market. Key publications include:

- the UK and Nations' Communications Market Report³, last published in August 2013;
- the International Communications Market Report⁴, last published in December 2012;
- the Consumer Experience Report⁵, last published in January 2013; and
- the Infrastructure Report, last published in November 2012.⁶

2.5 Taken in combination, the reports above contribute to our picture of the market as a whole. The information provided within them also helps us to consider future developments in the light of current trends and to identify evidence for any changes in regulatory approach.

The effects of convergence have been felt across the communications sector

2.6 The communications sector is constantly changing, driven by a mix of technological development, new business models, and changing consumer preferences and behaviours. At the centre of all of these changes is the internet along with technological advances in digital coding, increasing capabilities of hardware in terms of computational power, and increasing affordability of large amounts of storage. Convergence has been possible through the universal adoption of internet protocol standards (IP) across a range of networks, services and devices. This has enabled the distribution of the same content over a large number of different devices and networks.

2.7 For industry, convergence means a change to the underlying economics of distribution for many services and the launch of new services. For consumers, it means accessing content, services and applications in new ways and on new devices anywhere and anytime.

2.8 These changes offer huge potential benefits for consumers and for industry, lowering entry barriers to content creation, distribution and sharing, and offering an array of opportunities for participation (for example user generated content and the use of social media for increased participation in political and public debates). Technological developments also allow for innovation, easier (and cheaper) access to public services, and greater engagement with political discourse.

2.9 There are three headline trends that drive and reflect increased levels of convergence in the communications market:

- i) Significant fragmentation of the traditional models both of distribution and access, particularly in the platforms over which consumers access audiovisual content, manifesting itself in an increasing range of connected devices and services;

³ <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr13/>

⁴ <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr12/international/>

⁵ <http://stakeholders.ofcom.org.uk/market-data-research/market-data/consumer-experience-reports/>

⁶ <http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/broadband-speeds/infrastructure-report-2012/>

- ii) increasing levels of take-up and usage of a variety of different devices and services; and
- iii) the mix of funding and investment in content is gradually changing in the UK, although, in the UK, public service broadcaster investment still makes up the vast majority of spend on UK-originated content.

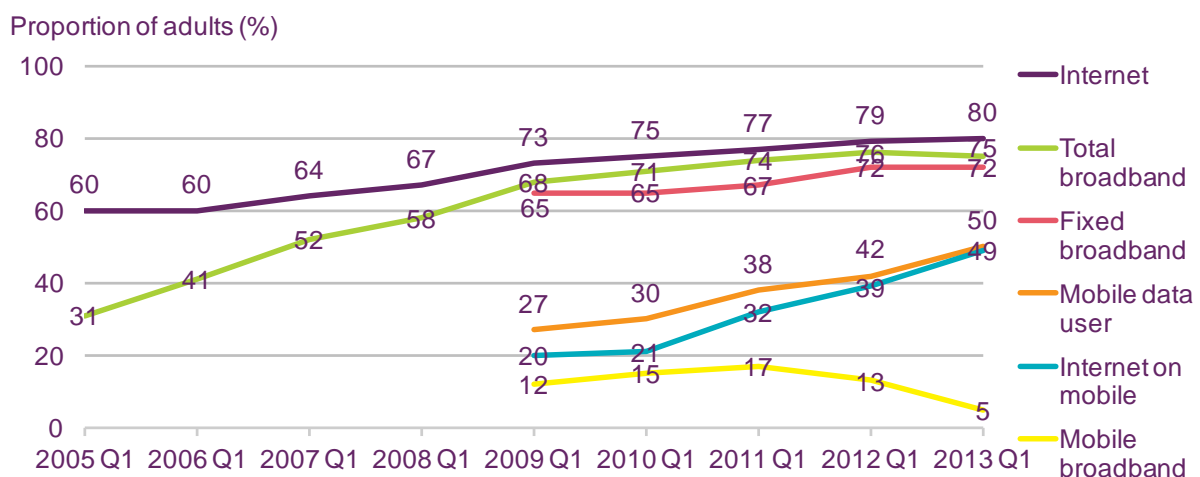
2.10 The paragraphs below examine the historical development of media consumption, our current observations of the market, and how we believe these trends are likely to develop in the future.

2.11 We also observe certain elements of stability: traditional television viewing over broadcast channels remains very strong, as does TV advertising revenue (although new techniques are emerging). Consumer attitudes and expectations, moreover, remain consistent, and we also look at these and at the ways in which audiences' behaviour adapts to the challenges posed by convergence.

There is an increasing range of connected devices and services

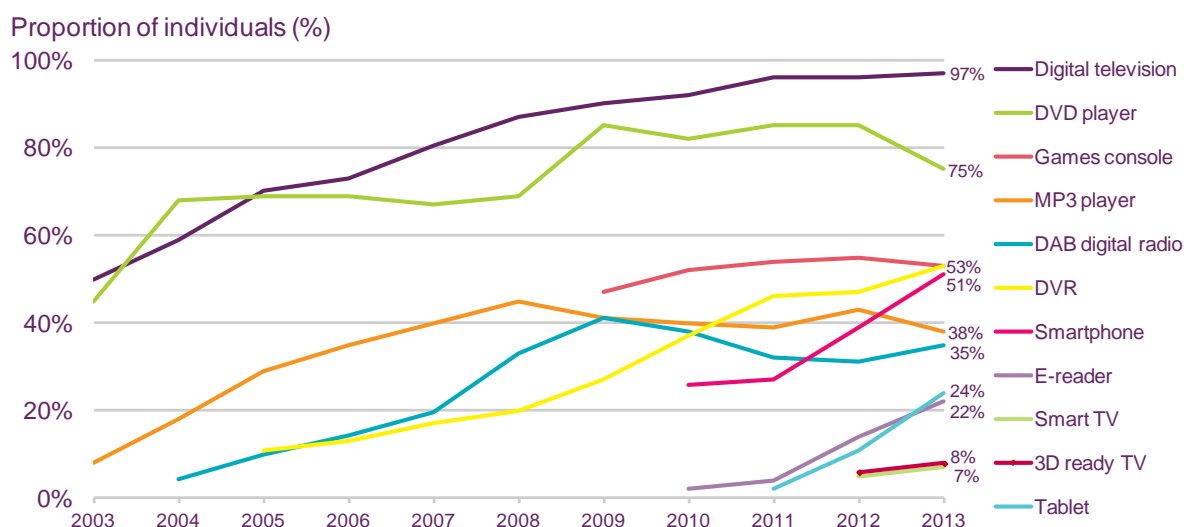
2.12 UK household internet access rose to 80% in Q1 2013, just one percentage point higher than in Q1 2012. However, mobile internet access rose ten percentage points to 49% of adults, the second fastest growth on record.

Figure 2.1 Household internet access: 2005-2013



Source: Ofcom technology tracker, Q1 2013. Base: All adults aged 16+ (n=3750).

2.13 The power and functionality of devices connected to the internet are making them increasingly attractive to consumers, especially the scope that they give consumers to access, create and share content across different devices. The majority of devices continue to grow in terms of penetration. Those devices that have suffered a decrease in take-up – DVD players, games consoles and MP3 players – may be less popular as their primary functions are increasingly available on devices such as smartphones and tablets.

Figure 2.2 Household take-up of digital communications/ AV devices, 2003-2013

Source: Ofcom technology tracker, Q1 2013. Base: All adults aged 16+ (n=3750).

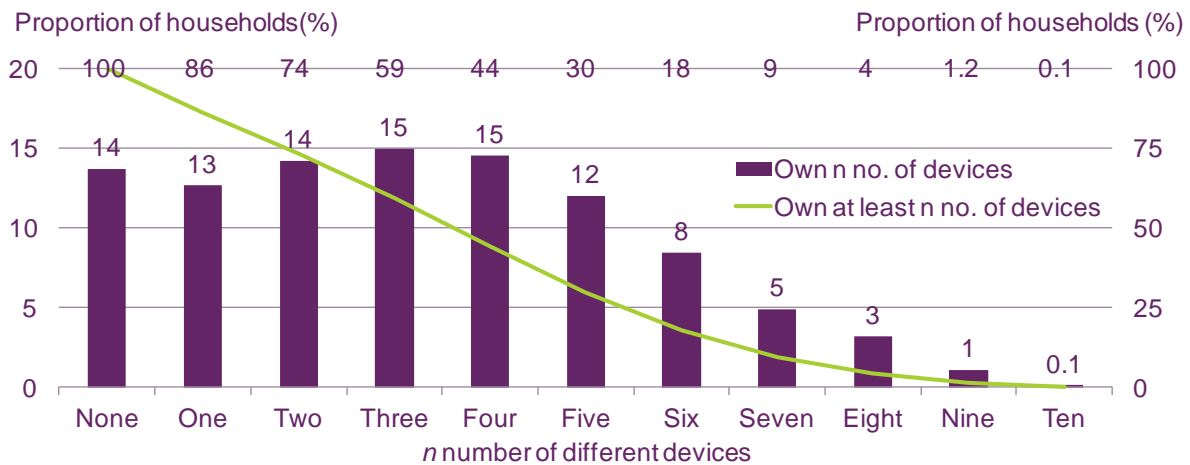
- 2.14 Many of the devices named are now connectable to the internet, where they were not five or ten years ago. This trend will continue in the future as consumers increasingly demand connectivity from devices, and connectivity offers industry new revenue streams and opportunities to sell content direct to consumers.
- 2.15 There has been particularly remarkable growth in use of tablets. In spite of their relative novelty, in February 2013 tablets accounted for 8% of web-page views, doubling from a year before. Tablets are viewed as the main method of connecting to the internet by a third of users and just over half (56%) of tablet owners use their device for watching AV content.⁷
- 2.16 As relatively new devices, smart TVs have a low penetration in the UK (7%), but internet functionality is increasingly built into new televisions as standard (one in five television sets sold in the last two years has internet functionality). More significantly, consumers are using a range of devices to connect their television sets to the internet. Decipher, a UK digital media consultancy, estimates that 7 million households in the UK (27% of total UK households) had active internet enabled set-top boxes in March 2013.⁸ The television is also very quickly becoming the primary platform for watching on-demand content. Industry estimates indicate that the share of “long form” VOD viewing accounted for by PC and laptops fell to 38% in the year to H2 2012, overtaken by TVs, with a 42% share.⁹
- 2.17 This reflects a broader trend, where a greater variety of devices are owned simultaneously by UK consumers, with households more likely to have three or four different types of internet-enabled device than just one or two. However, it should also be noted that 14% of households have no connected devices at all, leaving a significant minority without any form of access to the internet or online services.

⁷ <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr13/market-context/uk-1.035>

⁸ <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr13/tv-audio-visual/uk-2.04a>

⁹ Estimates by 3Reasons LLP. Ofcom Communications Market Report 2013 (<http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr13/tv-audio-visual/uk-2.14>)

Figure 2.3 Number of different types of internet-enabled device per household: Q1 2013



Source: Ofcom research, Q1 2013, Base: Adults aged 16+ n = 2256.

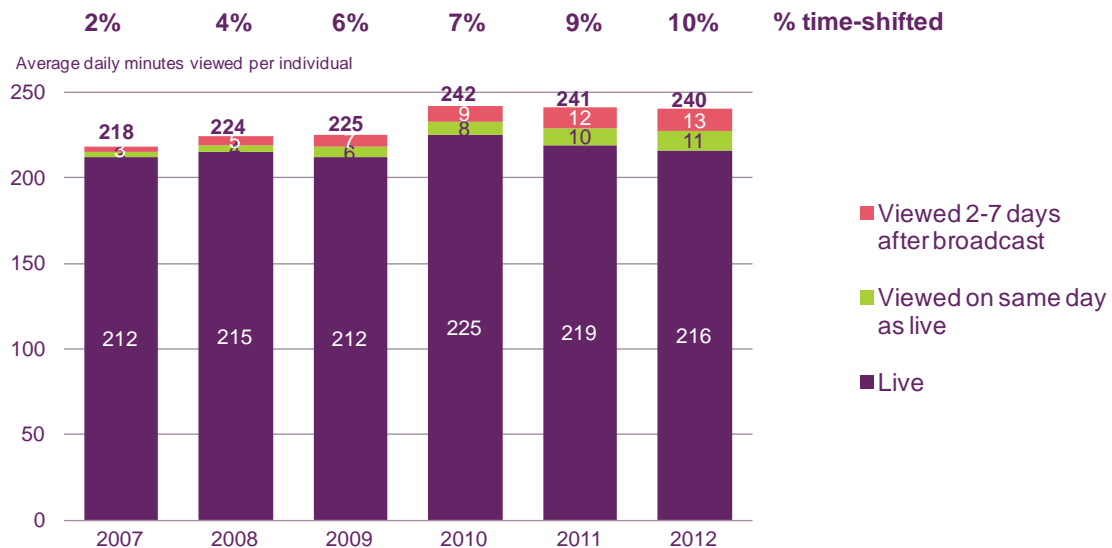
- 2.18 This increased take-up of devices is causing, and is caused by, the greater availability of services. These services include the ability to watch linear content, more commonly associated with the traditional TV screen, catch-up viewing services, other video-on-demand (VOD) services and user generated content, for example social media and other audiovisual and blogging services.
- 2.19 We expect the trend of growing mobile device penetration to continue, driven by the industry continuing to develop devices which take advantage of consumer demand for services on-the-go such as music streaming, films and live football. The recent auction of spectrum for the delivery of 4G services shows the level of importance attached to mobile data by industry players.
- 2.20 We also expect new types of device to be brought to market. In recent years we have seen smartphones, e-readers and tablet devices experience strong growth in a short space of time. The advent and popularity of these types of consumer equipment were difficult to predict and there is no reason not to think that certain new devices will experience equal rates of growth in the future.
- 2.21 At the same time, as smarter more powerful devices become the norm for consumers, operating systems and device platforms are becoming a key element of the market. There has been continued concentration in the number of operating system providers although choices remain between open platforms and managed ecosystems. Greater interoperability is reducing the significance of the underlying operating systems, but commercial barriers (Digital Rights Management, licensing agreements) still exist.

There are increasing levels of take-up and usage of internet delivered services

- 2.22 Services which enable non-linear viewing have become more commonplace in the market. However, despite the resultant growth in time-shifted viewing and usage of VOD services, traditional linear TV consumption retains the majority of viewing share with no sign of significant decline. To illustrate, on average in 2012 viewers watched

4 hours of TV per day; linear viewing still dominated, with just 10% of viewing being time-shifted across all homes.

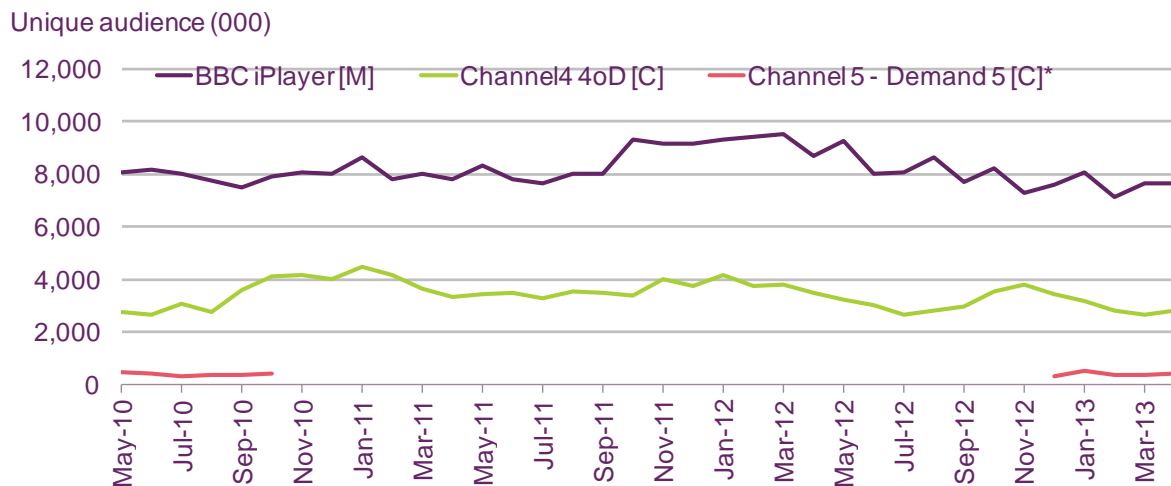
Figure 2.4 Live versus time-shifted viewing, all homes



Source: BARB, all individuals. Note: New BARB panel introduced in 2010. As a result, pre- and post-panel change data must be compared with caution. Time-shifted viewing defined as total minutes of viewing on same day as live (VOSDAL) + Viewing 2-7 days after broadcast (Coded Playback). All viewing (via a TV set) of broadcast content viewed within 7 days after broadcast is reported by BARB. This will include viewing to catch-up TV services and content viewed via player services such as BBC iPlayer, ITV Player, 4OD etc

2.23 This contrast between the rate of take-up of devices and the impact these have had on non-linear viewing may be a result of new services complementing rather than rivalling existing services. This is true for new, over-the-top (OTT) services such as Netflix (2.3 million unique UK users in April 2013) or LoveFilm (1.6 million) as well as catch-up and on-demand services offered by existing, traditional broadcasters, for example BBC, ITV and Sky with iPlayer, ITV Player and Sky Go respectively. As the figure below shows, these new services have maintained usage levels while linear TV has also remained robust.

Figure 2.5 Unique audience of online catch-up services on PC/laptop



Source: comScore MMX, home and work panel, May 2010 to April 2013

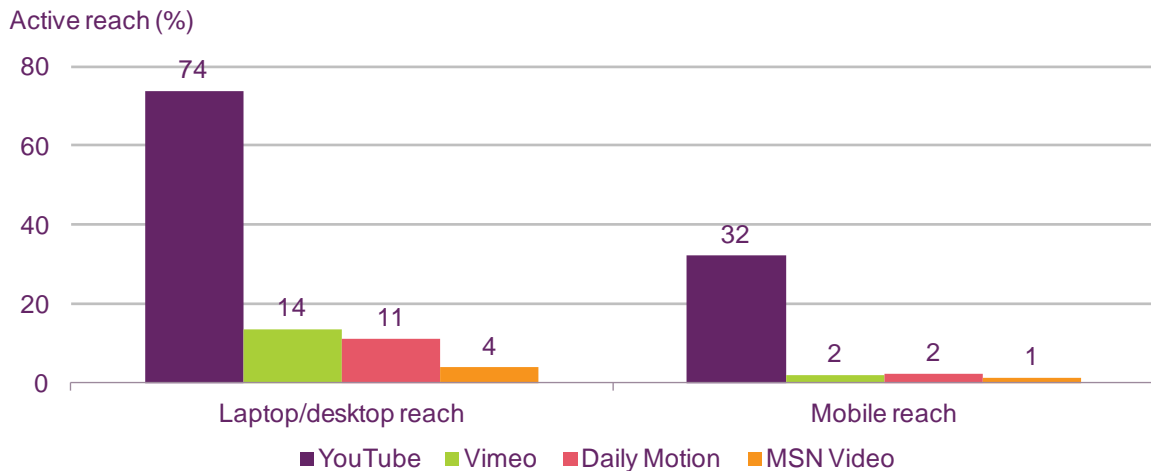
Notes: * Between May-10 and Oct-10 data is reported as Five – Demand Five [C], a subsidiary of the RTL Group; data between Nov-10 and Nov-12 is unavailable; from Dec-12 onwards data is reported as Channel 5 – Demand 5 [C], a subsidiary of the Northern & Shell Network.

- 2.24 This equilibrium of existing and new services may be due to consumers automatically defaulting to consuming content on the best screen available at the time of watching. This means that at home the TV screen trumps all other devices as the main point of viewing. Other devices are preferred when the main TV set is being used by another household member or when a television screen is not present in limited windows of opportunity, for example while commuting or otherwise on-the-go.
- 2.25 There continues to be a demographic split in use of the internet. Younger people are more likely than older people to use the internet for activities related to converged media and this becomes more marked the older the age bracket. Conversely, younger people are more likely to access their media simultaneously meaning that, while they are consuming a greater volume of media than older people, they are doing so in a shorter time-period.¹⁰
- 2.26 There will continue to be a role both for OTT and vertically-integrated players. They may start to adopt each others' characteristics to gain market share, for example:
- OTT players may seek the benefits of vertical integration;
 - both OTT and traditional platforms may compete in the same big-ticket content rights space;
 - more traditional platforms are increasingly seeking to complement their "core" platforms and services with anytime, anywhere, on-demand propositions; and
 - all players are seeking to develop a presence on as wide a range of devices as practically and economically possible.
- 2.27 Linear television is currently very resilient and there are reasons to believe it will continue to maintain its share of viewing. Traditional mass-market services and devices are running alongside ubiquitous, always-on connected devices. Viewing habits are only beginning to change at the margins, but equally funding could move to more non-linear programming if there are significant changes in consumer behaviour or the market. It is therefore important that policy makers continue to monitor developments closely.
- 2.28 There is also evidence of growth in online video consumption. YouTube in particular has experienced strong growth in the last year with three quarters (74%) of laptop and desktop internet users visiting YouTube. Its unique audience grew 4% in the year to May 2013.¹¹ Take up of online video via mobile is clearly still relatively low, and while the figure below does not differentiate whether mobile users used a WiFi or mobile connection to use these services, it is likely that the greater bandwidth (and cost) required to consume video, compared to text or static images, may deter some mobile internet users.

¹⁰ <http://stakeholders.ofcom.org.uk/binaries/research/811898/consumers-digital-day.pdf>

¹¹ Ofcom commissioned qualitative research earlier this year to give us a better insight into the complex and diverse phenomenon of UGC. This provides a snapshot of the different players, types of content, business models and opportunities in this sphere.
<http://stakeholders.ofcom.org.uk/binaries/research/research-publications/content.pdf>

Figure 2.7 Reach of online video services on laptop, desktop and mobile: April 2013



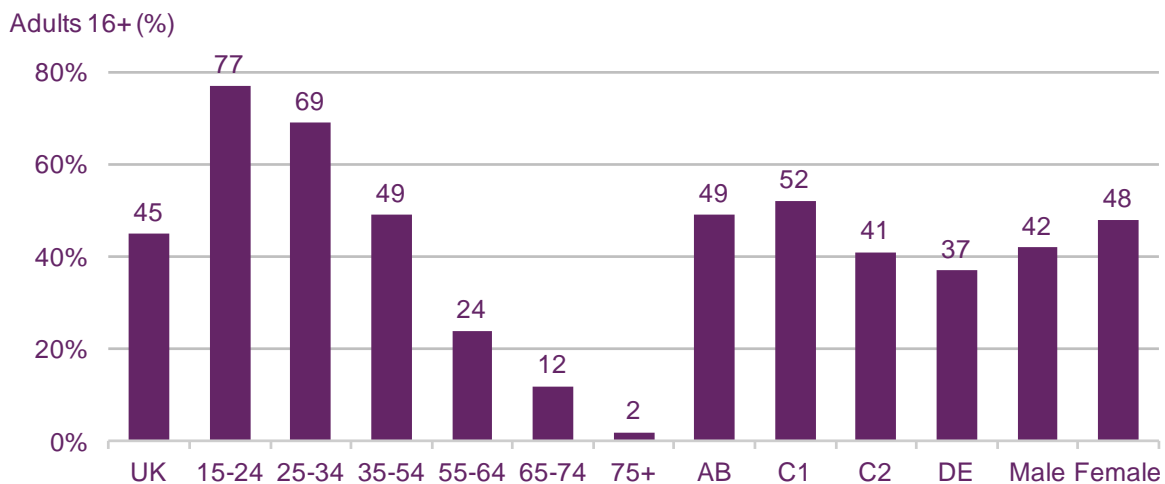
Source: comScore MMX Multi-Platform, UK, April 2013; comScore MobiLens April 2013, UK, mobile internet users 13+

Note: Entities from comScore MMX MP were YOUTUBE.COM* [M], Vimeo [P], DAILYMOTION.COM [P], MSN Video [C] and include laptop/desktop browsing and laptop/desktop video streams.

* Indicates that the entity has assigned traffic to certain pages in the domain to other entities.

2.29 One of the key observable trends in web content consumption has been the rise of social networking, in particular among young people. Three-quarters of 15-24 year olds use social networking sites. Moreover, a clearly identifiable trend has been the prevalence of what we have called “meshing”: that is, interacting or communicating about TV content that a person is currently viewing. A quarter of UK adults say that they “mesh” while watching TV, and half (49%) conduct unrelated media tasks while watching TV – all of which indicates the frequent presence of a second screen as an important part of consumers’ traditional television viewing experience.

Figure 2.8 Proportion of adults who access social networking sites at home



Source: Ofcom Consumer Research Q1 2013

Base: All adults aged 16+ (n = 5812 Q1 2008, 1581 Q3 2008, 6090 Q1 2009, 9013 Q1 2010, 3474 Q1 2011, 3772 Q1 2012, 3750 Q1 2013) QE5. Which, if any, of these do you use the internet for? NB Question wording for QE5 prior to 2013 asked about household use of the internet at home. In 2013 QE5 asked about individual use of the internet anywhere.

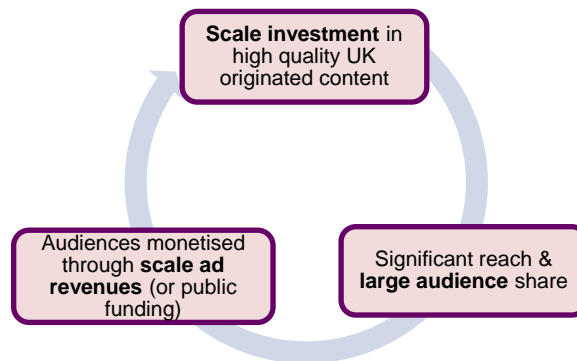
2.30 News consumption is also changing. Almost a fifth of mobile internet users access the news “almost every day” on their handset, up from 16% in the previous year. Fifty three per cent accessed news “ever” in the month, up by five percentage points over

the same period. Despite this, traditional broadcast television is still the most popular way for people to access news with 78% of adults in the UK saying they use the television to access news “nowadays” and a fifth of people saying they accessed news solely via television.¹²

PSB investment is at best flat, with multichannel making a greater contribution than ever before

- 2.31 The UK has a successful content sector, delivering a mixed ecology of public service and commercial output. Convergence presents both challenges and opportunities to the key players in this sector.
- 2.32 Historically investment in content has been based on a “virtuous circle” that was originally rooted in an analogue environment. Significant reach and large audience share drove scale advertising revenue which in turn produced scale investment in high quality UK content.

Figure 2.9 Virtuous circle of content investment



- 2.33 Currently, investment in UK TV programmes is increasing, although its sources are changing. Whereas historically the PSBs were almost entirely responsible for all expenditure on UK originations, the multichannel sector and independent producers now play a much more significant role.
- 2.34 In the UK, the PSBs have had to deal with funding pressures which has been reflected in their content spend. PSB investment in content is broadly flat in nominal terms and falling slightly in real terms. Despite these pressures, the PSB channels spent £2.9bn on content in 2012. Although non-PSB spend has grown significantly over time to almost match the PSBs with £2.7bn spent by commercial multichannels, £1.8bn of this was spent on sports and movie genres.¹³ Overall the PSBs represent 52% of the overall of £5.6bn spend on content by UK TV channels.
- 2.35 The independent production sector is continuing to grow, despite declines in PSB commissioning. It has achieved this by seeking new sources of funding such as gap finance (where the primary commission is less than the direct costs of the programme), co-production (where a foreign broadcaster jointly funds production) and R&D (where investment is received to generate ideas and proposals for programmes).

¹² <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr13/market-context/uk-1.093>

¹³ <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr13/tv-audio-visual/uk-2.52>

- 2.36 The flexibility to secure alternative sources of funding has enabled more investment to flow into the content on UK screens despite the financial constraints experienced by the PSBs.
- 2.37 In addition to traditional content producers, new online entrants have begun to look to differentiate their offerings by investing in original productions. The OTT operator Netflix is looking to spend up to 15% of its approximately \$2bn content budget on original production; although this appears to be largely in the US so far. Nevertheless, YouTube and Google have suggested that their investment in original programming should not be seen as a long term or significant investment, but is rather a way of establishing YouTube as a quality platform.¹⁴
- 2.38 These new sources of content funding are very valuable additions to the UK content ecology, but they are on a much smaller scale than funding from broadcasters, in particular the investments public service broadcasters make. We do not expect these new forms to replace the more traditional sources of UK content funding.

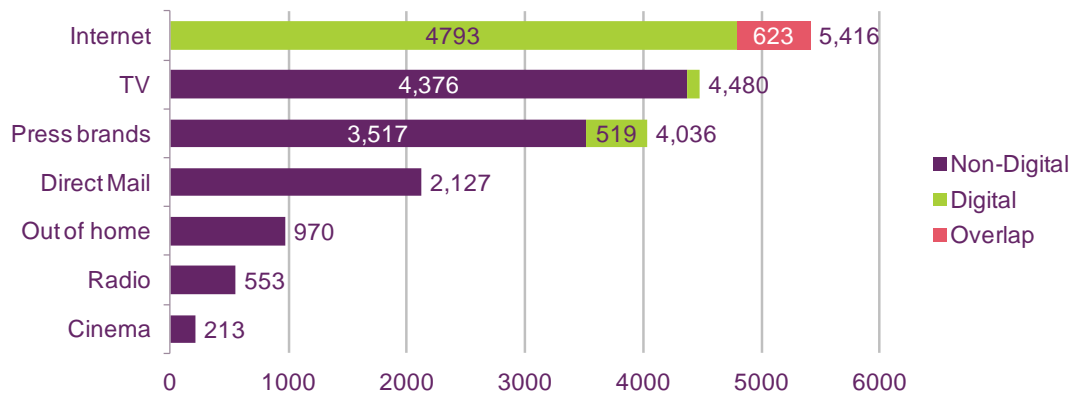
Television advertising remains resilient, but there is the potential for long-term change

- 2.39 The traditional importance of advertising in funding content production means that changes in the market provide a useful indicator of wider developments.
- 2.40 Despite a difficult period of recession, television advertising has also proved to be resilient. Figures from the latest Communications Market Report show that net income from TV advertising in the UK declined in 2012 by 2% to just over £3.5bn, but it remained above its 2009 levels.
- 2.41 UK advertising expenditure for on-demand was just £104m, but it was the fastest-growing digital advertising platform, up 73.3% on 2011. TV advertising is still the only individual medium that delivers the reach and impact that major advertisers demand. We believe it is likely to remain a very significant form of commercial communications until well beyond 2020, and therefore a significant source of funding for content.

¹⁴ <http://www.thedrum.com/news/2013/07/05/youtube-funding-uk-original-content-channels-doubt>

Figure 2.10 UK advertising expenditure 2012

Expenditure (£ millions)

Source: AA/Warc Advertising Expenditure Report 2013, <http://expenditurereport.warc.com/>

Note: Press brands is a consolidation of magazine brands and national and regional newsbrands. Digital TV spend is broadcaster VOD revenue. Overlap is the sum of digital spend across other sectors. To arrive at the total UK adspend of £17,172m, sum the end of bar totals and deduct the overlap.

2.42 Developments in consumer technology could enable a further dramatic change or series of changes in the market. Earlier this year Ofcom commissioned qualitative research on the future of commercial communications on television.¹⁵ This research had four conclusions:

- i) TV remains the only medium that delivers the reach and impact that major advertisers require, and its importance as a commercial medium is underpinned by decades of research on its effectiveness.
- ii) Technology changes will enable dramatic change in the market, enabling UK consumers to access and engage with video content in entirely new ways. The impact of innovation in technology and services is inherently unpredictable and the cumulative disruptive impact of a variety of smaller changes could eventually be significant.
- iii) This disruption could curtail growth in linear TV spot advertising, and its relative importance will diminish. Brands and agencies are already seeking new ways to engage consumers either directly or in partnership with others. In parallel, new distribution platforms and companies will emerge who invest in content, technology and audience acquisition on a global scale.
- iv) Regulators face the same challenges as those faced by brands and media businesses: how to preserve the existing while creating the new, and how to prepare for inevitable but unpredictable disruption.

2.43 New routes and relationships with audiences already include direct investment in TV programmes, complementary advertising via second screens, investment in video content delivered via the internet and investment in alternative forms of engagement marketing.

2.44 Another source of disruption may come from industry stakeholders' increasing use of data collection and analytics. A more advanced data economy may offer the potential for advertising to be targeted at smaller groups of individuals rather than the broad

¹⁵ <http://stakeholders.ofcom.org.uk/market-data-research/other/tv-research/future-of-tv-communications/>

demographic groups (traditional audience groupings such as ABC1s, Housewives) that are currently the lingua franca of TV advertising. As the use of IPTV delivery and the penetration of smart TVs rises, return-path data collection may result in TV display advertising adopting certain characteristics of internet display advertising.

The consumer context

2.45 The following sections set out how consumers expectations of regulation and protection have changed as a result of the technological changes described above.

Consumers continue to have a high expectation for content on their television

2.46 In February 2012, Ofcom published a deliberative research report entitled 'Protecting audiences in a converged world'.¹⁶ The research looked at public attitudes within the context of convergence, in order to understand the public's expectations for protection and how content should be regulated in the future.

2.47 Some of the key findings from the research include:

- Audiences have continuing high expectations for the regulation of linear broadcasting and also may want more assurance for VOD services.
- Knowledge of prevailing content regulation is currently high for broadcast services but lower for other services (such as catch-up and VOD).
- Viewers have high expectations of content regulation on broadcast television, and associated VOD and catch-up services. These expectations are highest for the public service broadcasters (PSBs).¹⁷
- Other online audiovisual content is seen to be different from broadcasting content and people have generally lower expectations about regulation in this area.
- Converged or connected TVs, which incorporate broadcast, VOD and open internet services, are considered to be closer to a TV-like experience. Audiences therefore expect content over these devices to be regulated closer to the level for broadcast TV than internet content accessed through the open internet, such as PCs and laptops.
- Participants wanted more information to help them understand the types of content they are accessing and the level of regulation to which it is subject.
- Participants said that there is a supporting role – although not a full solution – in the provision of content controls and information to facilitate viewing choices.
- Protection of minors and protection from harm were seen as the most important parts of existing regulation. In a converged environment, the vast majority favoured regulation in these areas across more audiovisual services and platforms, at the same or a greater level than they see today on broadcast television. In particular, participants said that VOD and catch-up services were

¹⁶ <http://stakeholders.ofcom.org.uk/binaries/research/tv-research/946687/Protecting-audiences.pdf>

¹⁷ The public service broadcasters are the BBC, ITV1, Channel 4 Corporation and Channel 5 and S4C in Wales.

considered to be similar to broadcast television and they should be regulated carefully to ensure the protection of young children.

- Overall, most participants felt that regulation of content should be maintained or potentially increased in a converged world: particularly for broadcast television and VOD services. They felt that consistent regulatory standards should apply to broadcast television, VOD and catch-up services, and wanted a consistent level of regulation for the same branded services across these ways of accessing content.

- 2.48 Ofcom's research "*UK audience attitudes to the broadcast media*"¹⁸, published in May 2013, also looked at public attitudes towards current levels of regulation for broadcast TV programmes and the internet.¹⁹ In summary, 88% of respondents stated that they thought TV programmes were regulated and 74% felt that the current levels of TV regulation were "about right". By comparison, 40% of respondents stated that they thought the internet was regulated. Almost half (47%) felt that current levels of internet regulation were "too little", (increasing to 54% among parents), and 23% said "about right".
- 2.49 Our research also identified that 73% of respondents were aware that it is possible to watch/download programmes online. Among those respondents, 55% thought that the content was regulated and 10% thought that it was not.

Parents are adapting the way they protect their children from certain kinds of content in light of technological change

- 2.50 Ofcom publishes an annual report "Children and Parents: Media Use" and "Adults Media Use and Attitudes". These provide detailed evidence of media use, attitudes and understanding among adults and among children and young people aged 3-15. Below are some of the key findings from the 2013 research.²⁰
- 2.51 In 2013, 91% of children aged 5-15 live in a household with access to the internet through a PC, laptop or netbook and Ofcom's research shows that children's patterns of media consumption are changing. Children are also increasingly likely to use a wide range of portable and personal devices, particularly smartphones and tablets. In 2013 43% of children aged 5-15 owned a mobile phone, with 62% of 12 -15s owning a smartphone. It is becoming harder for parents to monitor what their children are doing online, when compared to internet access limited to a fixed point in the heart of the family home.
- 2.52 43% of parents of children aged 5-15 said that they use technical parental controls packages for desktop PCs, laptops and netbooks.²¹ Uptake of controls for television is slightly higher at 45%. Use of filters on mobile phones where the phone can be used to go online is at 42% while uptake for controls on mobile/fixed games consoles is 16% and 19% respectively.
- 2.53 Parents generally view controls as an extra tool to supplement, rather than a replacement for, parental mediation (rules, monitoring and talking to children). 79% of

¹⁸ Which summarises the findings from Ofcom's Annual Media Tracker survey

¹⁹ <http://stakeholders.ofcom.org.uk/binaries/research/tv-research/UK-Audience-attitudes.pdf>

²⁰ The Media Literacy research for 2013 is due to be published in October 2013.

²¹ This figure includes all available technical parental controls, for example parental controls provided by the ISP, but also parental controls built into the computer's operating system (windows or Mac), and third party parental controls such as net nanny or family shield.

parents of 5-15 year olds have spoken to their child about staying safe online and 79% of parents have rules in place about internet use at home. Overall, 85% of parents employ some kind of online mediation strategy to help their child stay safe online.

- 2.54 Other findings from the 2013 survey show that in households where 5-15s use a PC/laptop or netbook at home 62% have some kind of technical method of mediation in place. 44% have safe search settings on search engine websites; 43% have parental controls installed; 19% have the Safety Mode set on YouTube; 11% have software to limit the time spent online; 8% have a PIN/password set on broadcasters' websites. The most common reason reported by parents of older children (12-15) for not using access controls was that they trust their child to be sensible and responsible; and parents of younger children (5-7s and 8-11s) are more likely to say it is because their child is supervised, or that the child is too young for a lack of controls to be a problem.

Section 3

Understanding the policy objectives

3.1 Any discussion about potential regulatory reform should start from a clear articulation of the policy objectives being pursued. This section considers the policy objectives that underlie regulatory interventions in audiovisual markets, many of which are already reflected in the Audiovisual Media Services (AVMS) Directive and the wider European regulatory framework, and considers what the core areas for reform might be.

Understanding the range of policy objectives

3.2 Technology continues to evolve rapidly, resulting in new connected devices and changing consumption of audiovisual content services. The first question for policy makers is whether these developments should result in changes to the underlying goals and objectives of audiovisual policy.

3.3 Changes in technology will not necessarily imply changes to these underlying goals. However, the second question for policy makers is whether changing consumer and societal expectations, and changing use of new technologies, might impact on the need for regulatory intervention to meet those goals. For example, the objective of supporting a diverse and plural news media will not change even if news is increasingly gathered, distributed and consumed using connected devices and services. However, the use of online news by consumers, and increasing consumer sophistication in finding and using different online news sources, could in some circumstances reduce the need for regulatory intervention in this area.

3.4 We believe there are two classes of policy objectives which explain existing regulatory interventions in the audiovisual area, and around which any future interventions might be based:

i) **Non-negotiable rights and protections**

There are **fundamental rights and protections** where society believes regulatory intervention is needed regardless of the means by which audiovisual content is created or its source. Often, these are the areas where statutory regulation is needed. Examples include illegal activity and certain areas of consumer protection, such as online protection for minors and limitations on the availability of harmful material. These reflect policy outcomes that must be secured no matter the technological change.

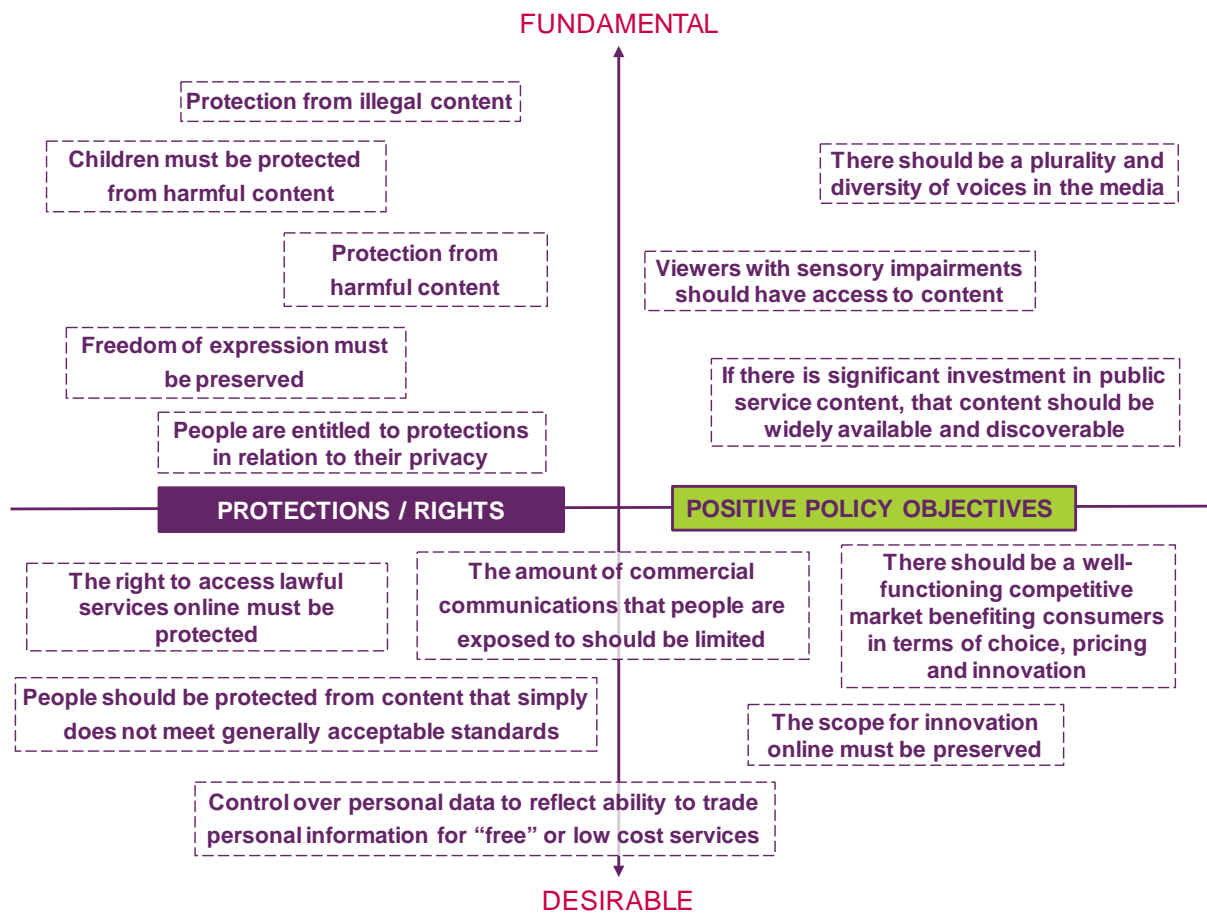
There are also **protections that arise from current consumer and cultural expectations**. In the past, people have expected and demanded a degree of protection and standards on audiovisual content services. Our research has suggested that this continues to be the case, but that the medium of delivery increasingly does have an impact on what protections and assurances are expected. There is the potential for different levels or degrees of protection depending on consumer expectations, and also opportunities for consumers to play a greater role in protecting themselves. Consumer expectations of audience protection could well evolve as consumers become more used to connected services and understand better how they can manage their own access and use of content. Regulation will need to be flexible enough to adapt to changing consumer and cultural expectations.

ii) **Public policy goals to achieve a stronger society**

In the past, audiovisual content and services have been the focus of a number of specific public policy interventions reflecting the cultural and societal importance. Examples include interventions to secure the availability of public service content and interventions to secure a well-functioning competitive communications market. These interventions are generally the result of a market failure, where public goods which have broader societal benefits are under-provided by the market or under-consumed by individuals.

- 3.5 The move to convergent, IP-based audiovisual services provides an obvious opportunity to consider what policy objectives fall under each of these three categories and how these objectives are being fulfilled.
- 3.6 In addition, there may also be new additions to each category - new policy objectives resulting from a connected society. For example, some have argued that unrestricted access to (lawful services on) the open internet is a fundamental right while others believe regulatory intervention is only warranted to address potential market failures (e.g. anti-competitive blocking of specific internet services). This issue has often been considered in the context of telecoms regulation, but the issue now is much more subtle given the potential impact it can have on the production and consumption of content.
- 3.7 However, whether or not the underlying policy goals have changed, the mechanisms by which they are achieved might have to change, or might have already begun to change, to adapt to an (increasingly global) IP environment. For example, where content is provided over the internet, and often from jurisdictions beyond the regulatory remit of the EU or its Member States, attempts to simply extend today's (nationally-based) interventions might be ineffective. New regulatory approaches might therefore be required (e.g. based on improved coordination amongst regulators on a pan-national basis).
- 3.8 The figure below sets out an illustrative range of relevant policy objectives in a connected society. The list is not exhaustive.

Figure 3.1 Illustration of the range of policy objectives



- 3.9 In entering a debate about policy and regulatory reform for a connected society, it is important that policy makers consider the following important questions:
- i) What are the fundamental regulatory provisions and what provisions derive from current cultural expectations?
 - ii) How might consumer expectations be changing?
 - iii) What mix of powers, tools and responsibilities are best suited to achieving the policy objectives set out above? How should this change in a connected society?
 - iv) Who are the players in the value chain who are involved in delivering the policy objectives? What roles and responsibilities is it appropriate to ask the players in a connected society to deliver, including Government?
 - v) Who is the appropriate regulatory body and could the outcomes be best delivered under a different regulatory framework e.g. self-regulation or co-regulation instead of statutory, or vice versa?
 - vi) Should the policy objectives and subsequent interventions be considered at a European, national or even global level?

Section 4

Modernising the audience protection and assurance regime for AV content

Section summary

- Asymmetries between the regulation of linear and video on-demand (VOD) services mean that UK audiences are currently not receiving the protections they expect on their televisions.
- There is a task for the government, regulators and industry to provide clear information, education and a framework of personal responsibility through which individuals and families can exercise informed choice.
- A review of the appropriate levels of minimum standards across linear and on-demand programme services is necessary to meet the challenges of convergence and audiences' expectations.

Audience protection and the protection of minors

- 4.1 This section considers changing audiences' expectations of regulation in an age of interconnected devices and examines some of the challenges and implications for the current regulatory framework; looking specifically at the current regulation of linear and on-demand programme services.

The challenges of convergence and a connected society

- 4.2 Convergence and a connected society is already creating challenges for the regulation of content standards on the main television as connected devices and smart user interfaces create increasingly new and seamless ways of delivering audiovisual services to the living room, including content both on-demand and outside of regulatory frameworks.
- 4.3 The delivery of content in this way has already blurred the boundaries between linear television and VOD, which are currently regulated in the UK (and in other Member States) to very different standards. VOD services are regulated in accordance with the minimum requirements of the AVMS Directive, set at a European level, and are subject to far fewer standards protections compared to linear broadcast services licensed in the UK.²²
- 4.4 As discussed in section 2 of this response, Ofcom's research into public attitudes towards regulation suggests that UK audiences expect consistent levels of protection and assurance on the main television and that content delivered on connected TVs should be regulated closer to the level for broadcast television. There is a strong case to suggest that current on-demand programme services regulations are

²² VOD regulation in the UK does not include provisions for: accuracy; privacy; fairness; impartiality; and offence. It has limited provisions for: protection of minors (one rule which principally covers hardcore pornography) and harm (one rule which addresses "material likely to incite hatred").

insufficient. The current asymmetries between the regulation of linear and VOD services mean that UK audiences are not receiving the protections they expect on the main television.

- 4.5 We believe there may be an opportunity to establish a core set of principles and aims which are held in common across a diverse media landscape with different regulatory frameworks. This could potentially include minimum standards across content that would provide a basic level of assurance for consumers, whatever media they are using, to make regulation more coherent and clear for both consumers and industry.
- 4.6 Any regulatory response to these challenges should consider tools beyond the traditional application of standards protections. There is a task for the Commission, governments, regulators and industry to ensure the provision of clear information, education and a framework of personal responsibility through which individuals and families can exercise informed choice.
- 4.7 The challenges of media convergence will mean that neither regulated standards nor industry initiative alone can provide the protection and assurances audiences expect from content delivered on television sets. We believe broadcasters, device manufacturers and platform providers will have an integral role to play in creating a safer consumer experience. In particular, providing appropriate content controls and tools for individuals and families to manage their own access to potentially harmful content. Industry should ensure tools and controls are high quality, easy to use, applied across all connected devices, and that audiences have the necessary skills to use them with confidence.
- 4.8 We should avoid changing the established regulation around broadcast TV. Consumers continue to have high expectations for the regulation of linear broadcasting and this is an area that is both respected and trusted by the public. It is also well understood by the broadcasting industry. However, mechanisms may be needed to ensure it can be adapted over time, in line with changing consumer and cultural expectations.
- 4.9 In addition, we should consider whether a more harmonised approach to standards protections across linear and on-demand programme services might be necessary to meet the challenges of convergence and audiences' expectations of all audiovisual content, regardless of its delivery.
- 4.10 One possible approach for a new protection framework for televisions could be to create regulated "protected spaces" or "safe zones", where audiences are either protected from potentially harmful content, or have appropriate assurances and understanding of the levels of regulation that apply to content. EPGs may be an interesting starting point for defining protected spaces given they are a well understood navigation mechanism and entry point for viewers. Such a regulatory regime could focus on mass reach and/or high impact services.
- 4.11 Such protected spaces or safe zones could be regulated to a minimum standard that meets audience expectations. Under such minimum standards, on-demand programme services could be subject to a higher level of protection than the current regulatory standards for on-demand programme services, in order to provide greater consistency for viewers and ensure that audiences are protected from the worst cases of harm.
- 4.12 We elaborate on these views in the next section.

Country of Origin

- 4.13 Ofcom considers the Country of Origin Principle to be a useful instrument in the promotion of the digital single market, lowering the regulatory and administrative burdens on industry and thereby encouraging the availability of pan-European (broadcast and VOD) content.
- 4.14 However, we note that there is an inherent tension in the AVMS Directive which seeks to achieve a compromise between the (industrial policy) aim of ensuring broadcasters do not need 28 licences, and the (social/democratic) aim of respecting cultural diversity among Member States and the ability of their respective regulatory authorities to protect their citizens accordingly.
- 4.15 In practice, this theoretical tension has not generated a large volume of challenges (e.g. disputes between NRAs around cross-border content falling short of national standards). In relation to some of the policy absolutes listed in Section 3 above, such as the area of protection of minors, different Member States generally appear to have similar (even if not identical) rules. At the same time, the cases that have occurred since the AVMS Directive came into force have tended to go to the heart of individual Member States' core public policy concerns. They have revealed certain areas where there may be room for improvement, e.g. around the operation of the cooperation procedure envisaged in Article 4(2) of the Directive.
- 4.16 Additionally, as discussed in the next section, reliance on the Country of Origin Principle and a set of agreed minimum European standards might no longer – in the very near future – be sufficient to help European regulators to deliver the key policy goals identified in this document. This is due to the increasing availability of audiovisual content that comes from outside the EU and can be delivered via IP connections to connected television sets. Ofcom would therefore welcome further debate about the future functioning of the Country of Origin Principle and how the existing mechanisms within the Directive can be made more effective.

Section 5

More effective approaches to protecting people online

Section summary

- People are entitled to protection from harm online as they are offline. Although the internet brings new regulatory challenges this does not mean people simply should not expect a degree of protection or assurance online.
- The existing models of audience protection, which focus on placing editorial obligations on editorially responsible service providers, are unlikely to deliver appropriate or adequate protection in an online context.
- For protection online, we may therefore also need to consider the potential roles and responsibilities of other players in the value chain, in particular digital intermediaries. It may be possible to do this without creating serious tensions between the AVMS and the E-commerce Directive. This will depend on what new responsibilities are placed on digital intermediaries and on how effective parental control based approaches are in addressing legitimate public policy concerns.

5.1 This section considers the role of digital intermediaries and the potential scope of future audiovisual regulation online. We explore the balance between protecting the role of intermediaries in enabling online innovation and openness; and ensuring that intermediaries help secure important policy objectives, with a particular focus on the protection of minors.

5.2 In particular, we consider three aspects of the evolution of audiovisual media regulation:

- i) Consumer expectations and consumer responsibilities;
- ii) The role of platforms and online intermediaries (like search providers or YouTube)²³; and
- iii) The scope of, and alternative approaches to, future audiovisual media regulation.

Background

5.3 The current AVMS Directive intersects with a number of other critical regulatory frameworks, notably the regulations governing electronic commerce. This is largely a result of the expanding role played by the internet and by internet-connected devices in enabling the provision of audiovisual media services (AVMS) to EU consumers.

5.4 There is potentially tension between the broader purpose of the AVMS Directive (to secure consumer protection in relation to audiovisual media), and the E-commerce

²³ YouTube is used as an example in this section, but we refer to any website that allows other content providers to publish audiovisual media.

Directive's protection from liability for intermediary providers of information society services.

5.5 The current AVMS Directive is limited in scope and does not apply to all audiovisual media. The main areas of limitation include:

- The AVMS Directive does not cover services with audiovisual content which do not satisfy the criteria for being "TV-like" – and therefore fall outside regulation under that Directive;
- The global reach of the internet means there are audiovisual media services (linear and on-demand) available to consumers within the EU but on which the AVMS Directive does not directly impose EU minimum standards as a result of their non-EU geographic origin²⁴; and
- The AVMS Directive does not seek to impose content regulatory obligations on services which do not exercise editorial control (for example, intermediaries such as YouTube, search providers and ISPs), even though these intermediaries might in practice, represent the sole point of leverage through which access to extra-territorial content might be restricted.

5.6 The volume and diversity of audiovisual services consumers might reasonably expect to be captured by regulation continues to grow, both online and on traditional television platforms. Therefore, it might be necessary to consider whether the different policy objectives currently drawn together under the AVMS Directive are being adequately met, and the extent to which changes might be needed.

Securing the protection of children

5.7 In principle, it is possible to achieve the objective of restricting children's access to unsuitable content on broadcast television through a wide range of mechanisms. These could include: broadcast scheduling (the watershed); technical controls like PIN codes and age-verification tools; on-air warnings; and EPG positioning.

5.8 These approaches fall into two broad groups: 1) technical mechanisms (for example through PIN codes or scheduling); and 2) the provision of information to enable appropriate content choices to be made (for example on-air warnings and age ratings). The effectiveness of both technical and information provision mechanisms relies not only on the nature of the mechanisms in question, but also on a combination of behaviours by both service providers and consumers:

- **AVMS providers** must make judgments about what content should be broadcast or provided on-demand, and under what conditions, considering, for example: scheduling; easy to understand access controls; and warnings or content ratings information;
- **Consumers**, and in particular responsible adults, must understand the standards protections and content tools available in order to protect themselves and their families.

²⁴ There is provision under the AVMS Directive for Member States to apply whatever measures they deem appropriate with regard to audiovisual media services which come from non-EU countries and which do not satisfy the conditions laid down in Article 2, provided they comply with Union law and the international obligations of the Union.

- 5.9 In deciding which services might be subject to which regulatory obligations, consideration must be given to both consumers' expectations and responsibilities, and service-providers' capabilities.

Consumer expectations and consumer responsibilities

- 5.10 As set out in Section 2, our research indicates that UK audiences now expect content delivered through connected TVs (which include broadcast, on-demand or open internet services) to be regulated closer to the level for broadcast television.
- 5.11 Our research on the types of restrictions parents use across media (also set out in Section 2) indicates that parents use a combination of measures or strategies to manage their children's exposure to inappropriate online content. These range from talking to their children about staying safe online; rules on the times and places where internet access is permitted and the sites which can be visited; and the use of technical tools like parental control filters, or "safe search" functions on search engines. Most parents (85%) use at least one of these approaches. Broadly the same proportion of parents (87%) has either rules or controls in place to manage their children's access to (potentially harmful) television programmes.
- 5.12 While this may seem reassuring, the connected environment presents new challenges for individuals and families to protect themselves; and the protection of minors from potentially harmful content on connected devices remains a material concern. Further action by service-providers to improve parents' options – for example the recent commitment by major UK ISPs to offer subscribers network-layer, whole-home content filtering – will continue to be important to address the risks to minors.
- 5.13 Any intervention can be effective only if consumers understand the regulatory environment in which they are operating, and are provided with clear information, education and a framework of personal responsibility through which to manage their own access to content and to protect their families. It is therefore vital that content controls and tools are easy to use, are potentially available across all connected devices, and that audiences know where and how they can be used.
- 5.14 In a connected society there is particular pressure on consumers' understanding of the regulatory environment, of the practices they can expect of service providers and of their awareness of their own responsibilities. In particular, the distinction may be unclear between content subject to EU regulation, and that which is not. In the following section we consider how this source of uncertainty might be addressed.

Platforms, online intermediaries and the E-commerce Directive

- 5.15 The AVMS Directive imposes editorial standards obligations on businesses with editorial control: those which, like broadcasters, actually choose the content which they make available. For example, it is a central premise of content regulation that there is a single "editorially responsible" entity, which takes decisions about the content made available and is held to account in the event of a breach of standards.
- 5.16 However, in the exercise of their obligations AVMS providers might rely upon tools provided by third parties, such as TV platform operators. For example, on TV platforms like cable or satellite, access controls such as an underlying PIN is typically provided by the platform operator (for example, Sky, Virgin Media). The TV platform operators who control which content services are available on their platform do not have editorial responsibility for the content distributed on their platforms, and in

particular, for the content's suitability for children (and so are not subject to editorial standards obligations under the AVMS Directive).

- 5.17 Like TV platforms, online intermediaries do not have editorial responsibility as defined in the AVMS Directive. Indeed, the operation of the internet generally, and in particular the diversity of services available and the low barriers to entry, has depended substantially on the ability of online intermediaries like ISPs, search engines and platforms/hosts to connect consumers and service providers online, without having to exercise any prior control themselves over the characteristics of the services offered or consumed.
- 5.18 Furthermore, the E-commerce Directive protects intermediaries (such as ISPs, hosts and search engines) from having editorial standards obligations imposed upon them. Without knowledge of whether or not the services they carry, index or host are lawful or potentially harmful, they cannot be expected to take ex ante action against them. The E-commerce Directive also prevents the imposition of a "general monitoring" obligation on intermediaries, meaning they cannot be required in law to monitor all the content they are carrying in order to gain knowledge upon which they might then have to act. They can only be required to take action once they become aware of issues in a specific case.
- 5.19 The internet therefore potentially acts as a platform for all purposes, irrespective of whether they are illicit or undesirable, or are considered beneficial. This lack of a distinction between different types of content and services accessible online raises particular challenges for policy makers. The policy debate in relation to intermediaries is that:
- Intermediaries play a critical role in the operation of the internet, and hence present an important point of leverage through which the accessibility of unlawful or potentially harmful services might be controlled, especially those services coming from another jurisdiction;
 - However, if intermediaries are made responsible for the characteristics of the content and services they transmit, they could become liable for any activity online. To manage their own potential liability, they would be strongly incentivised to become internet gatekeepers, determining which services could be accessed and which could not, potentially limiting innovation and freedom of expression, and restricting consumer access to information on the open internet.
- 5.20 The compromise between these two positions enshrined in the E-commerce Directive was therefore based on:
- the economic and cultural benefits which derive from the operation of an open internet;
 - the extent to which an open internet delivering these benefits relies on the protection of intermediaries from liability relating to the actions of their subscribers or the characteristics of the online content and services those subscribers choose to access and distribute; and
 - the economic and cultural costs which might follow from the imposition on intermediaries of responsibility/liability.
- 5.21 This debate takes concrete form when related to individual online content or service providers, particularly those which might appear to blur the boundaries between

unknowing providers (and hence not responsible for the potentially undesirable or illegal content or service) and responsible content publishing businesses. YouTube is perhaps the largest and highest profile example of such a service provider.

- 5.22 At one extreme, it could be argued that YouTube should be responsible for all the content it hosts, and hence should review all content against defined editorial standards before it is made available to viewers. Others (including YouTube) argue that it is not a content publisher, and indeed that it would be a completely different type of business if it was deemed editorially responsible for all the content accessible on its platform (for example, it would turn into the equivalent of an On-demand Programme Service provider, only offering content it had itself licensed and reviewed).²⁵
- 5.23 The operators of television platforms, like Virgin Media or BSkyB, are in a different position. Although they do not have editorial responsibility in relation to the channels and on-demand services which they host, they do act as gatekeepers for their platform in that they are able to select which services are allowed onto the platform. There is generally no similar gateway relationship or function for online intermediaries like ISPs or search providers.
- 5.24 Despite this, both the television platform operators and the intermediaries can and already do play a role in supporting the protection of minors from the risk of exposure to harmful content, on television and online. For example:
- Managed TV platforms, like Virgin Media or BSkyB, exercise some control over which service providers are available on their platforms; signpost potentially harmful content (for example with a separate EPG section for services with sexually explicit content) and provide technical tools (PIN controls) to allow audiovisual service providers themselves to manage how content is accessed.
 - ISPs provide their subscribers with parental control software either for individual devices or for the whole home, via network-layer filtering (third-party providers develop and maintain the lists of content in each potentially filtered category).
 - Search providers offer “safe” versions of their search indices, which aim to exclude sexually explicit images and video.
 - Some hosts, including YouTube, define “community standards”; setting out the types of content users may publish on their platform, and reviewing and removing content on receipt of legitimate complaints about non-compliance with those standards. They might also allow their publishers to classify content and hence enable viewers to control access.
- 5.25 While each of these actions can and should materially improve protections for minors, they alone cannot guarantee that potentially harmful content is subject to comprehensive oversight. As already stated above, the effectiveness and impact of each measure also depends on actions being taken by individuals and parents. It is also important to note that each of these actions or contributions to the protection of minors has been made voluntarily, in some instances under soft pressure from activists and governments, in others as part of commercial strategies to protect audiences and brands.

²⁵ YouTube is considered to be a platform and not an AVMS provider (for example, Channel 4’s catch-up service hosted on YouTube is an AVMS subject to UK regulation but YouTube itself is not).

The scope of and approaches to future audiovisual media regulation

- 5.26 As stated previously, one of the challenges presented by the increasingly converged digital media environment, and connected TVs in particular, is the uncertainty for consumers over what regulatory framework applies to content and what responsibilities for content control rest with the consumer.
- 5.27 As online services become increasingly central to our daily lives, we need to consider what the right regulatory approaches are in the online environment. Online services often have very different editorial characteristics to more traditional TV-like services and provide new and different regulatory challenges. For example, user-generated content can either be found on individuals' own sites or on hosting platforms (where the party with editorial responsibility, on whom the editorial obligations would bite, might be outside jurisdiction or unidentifiable). This is likely to be through a mixed approach of regulation and a framework of personal responsibility which allows people to use technology (e.g. filters) to take greater steps to protect themselves and their families.
- 5.28 Technical mechanisms (such as content control tools) and the provision of information to audiences/users (e.g. through signposting and warnings), are both feasible and potentially effective complementary mechanisms of content regulation in an environment where both unregulated internet-delivered services and regulated content can be accessed. These tools could be provided by platforms and online intermediaries, without subjecting them to editorial responsibility or involving the indiscriminate blocking of unregulated (but not necessarily harmful) content/services. For some intermediaries, such tools would also be consistent with their existing business models and their individual commercial strategies.
- 5.29 We set out below ways in which these industry-led mechanisms might operate in the context of connected TVs, on which consumers can potentially access traditional linear television, on-demand services and internet-based content whose regulatory status is uncertain. Such mechanisms would help to inform and empower consumers, and help enable them to protect themselves.
- 5.30 Firstly, where an operator is actively managing access to a platform (or perhaps an EPG) for AVMS, that operator could be made responsible for ensuring that consumers are aware of the applicable regulatory standards when they are choosing content. For example, connected TV platforms could be required to distinguish clearly between regulated AVMS, and services not subject to the EU regulatory framework. This could ensure that consumers could make a clear and informed choice between a 'protected space' of services regulated to a known minimum standard, and content which is either regulated outside the EU or which might be unregulated. This could be done by signposting or by using the EPG to position potentially unregulated services from outside the EU separately from EU-regulated services.
- 5.31 Secondly, where a hosting intermediary commits to self-regulatory approaches such as community editorial standards or terms of use, it should have transparent and demonstrably effective procedures for handling complaints and removing non-compliant content. Hosts could be held to account for their compliance not only with their obligation to remove unlawful content under existing "notice and action" frameworks, but also for their compliance with their own commitments to their users about the kinds of content those users can expect to find.

- 5.32 It should be clear to consumers how to complain or what action to take were they to see or hear content that is harmful or unsuitable for children. One model that seeks to provide such clarity is ParentPort in the UK, a website with the single aim of protecting children by helping parents make their views heard about inappropriate programmes, adverts, products and services.²⁶ The website makes it easier for parents to complain about material they have seen or heard across the media, communications and retail industries.
- 5.33 Thirdly, as referred to in Section 4, AVMS platforms and hosts could be required to provide the service providers they support, and the audiences they serve, with technical tools to allow those audiences to control the kinds of content which can be accessed. This could be done by requiring those platforms and hosts to enable AVMS providers to classify their content (for example: as regulated/unregulated; sport or news; suitable or unsuitable for children). Consumers could then take decisions about whether or not to restrict or limit access to that content, on the basis of those classifications.

Online protection more generally

- 5.34 The issue of child safety online has been subject to significant recent public debate in the UK. This has been prompted by concerns about access to illegal child abuse material online; children's access to legal but unsuitable adult content online and conduct risks such as cyber bullying. There are two particular initiatives in the UK which address those concerns, which are worth highlighting:
- a) In the UK there is a self-regulatory regime funded by ISPs and internet companies for removing child abuse material online. The Internet Watch Foundation (IWF) either requests take-down of an offending site by the host if it is hosted in the UK, or it adds the site to a blacklist that the UK ISPs agree to block. The IWF works with the police to restrict access to such content and prosecute criminals. This well-respected framework is widely seen as a very successful way to prevent access to this material.
 - b) Ofcom is a board member of the UK Council for Child Internet Safety (UKCCIS) a group of over 200 organisations from civil society, the communications industry, regulators and the Government with an interest in keeping children safe online. This has provided a forum for multi-stakeholder discussions around issues of online child safety.
- 5.35 The IWF self-regulatory scheme, in particular, works well because the incentives for the internet industry are aligned with society's broader goals to protect children. As long as they produce tangible and timely improvements in child online safety, voluntary and self-regulatory approaches can be a good way of achieving the policy objective of protecting children online.
- 5.36 One example of success through UKCCIS has been the four largest ISPs committing to provide network-layer filters for all of their customers by the end of 2014. Customers will be presented with an unavoidable decision about whether to apply those filters. Ofcom will also review the operation of those filters. In addition, UKCCIS

²⁶ www.parentport.org.uk. ParentPort has been jointly developed by the Advertising Standards Authority (ASA), the Authority for Television On-demand (ATVOD), the BBC Trust, the British Board of Film Classification (BBFC), Ofcom, the Press Complaints Commission (PCC) and the Video Standards Council (VSC)/Pan-European Game Information (PEGI).

has recently succeeded in ensuring that major public WiFi connections have content filtering by default wherever children are likely to be present.

- 5.37 If, in the long term, these approaches prove to be insufficiently effective, further consideration may be needed as to the roles and responsibilities of online intermediaries, which could in turn require a re-examination of the limitation on their liability under the E-commerce Directive.

Conclusion

- 5.38 Content regulation should continue to evolve through a combination of mechanisms, including:
- the exercise of editorial judgements by editorially responsible providers; and
 - the provision of tools and information by intermediaries; and
 - ensuring that action is taken by informed consumers, who understand: whether editorial controls are in place and what they are; and how to use the tools and information resources provided by the relevant platforms and intermediaries.
- 5.39 This approach could help protect people accessing content through connected devices.

Section 6

Supporting viewing and investment in public service content

Section summary

- There is an emerging question about how to define a “platform” for the purposes of regulation, which is linked to the European definition of Electronic Communications Network (ECN) and the scope of the telecoms framework.
- New platforms and models of delivery could call into question the efficacy of “must carry” and “must offer” rules.
- Support for public service content must include continuing to ensure discoverability through prominence on user interfaces of the key platforms of the future, not just on the linear platforms of the past and today.

Supporting investment in European content

- 6.1 The AVMS Framework currently requires Member States to ensure, where practicable, that broadcasters reserve the majority of their air time for European works – and it allows Member States to pursue this objective by giving certain media service providers a public interest mission. One of the key ways in which we meet our obligations in the UK has been through the Government’s designation of a number of public service broadcasters (PSBs) which all have substantial requirements to deliver European works, ranging between 50% and 90% of qualifying output by channel.
- 6.2 Beyond these output quotas our legislation also requires that PSBs provide relevant television services that ensure programmes that: cover a wide range of subject-matters in a way that meets the needs and satisfies the interests of as many different audiences as practicable; are properly balanced and maintain high general standards of programme quality; and are made using professional skills and editorial integrity.
- 6.3 The operation of the current EU and UK frameworks has resulted in a successful and competitive market in the UK, ensuring both a high level of originations and the delivery of programming with purposes and characteristics valued by audiences:
- The UK television industry generated £12.3bn in revenue during 2012, an increase of £103m (or 0.8%) on 2011 in nominal terms.
 - In 2012, spending on first-run originated programmes across the five main PSB channels and the BBC digital channels increased marginally by 0.3% year-on-year to £2.5bn. In addition, commercial multichannel broadcasters in the eight mainstream genres spent £2.7bn on programmes in 2012, a 3% increase year on year in nominal terms.
 - Our latest audience research shows that audiences continue to want programmes with certain purposes – such as trustworthy news, programmes that

help them to understand what's going on in the world today, and programmes about science, art or history – and certain characteristics – such as being high-quality, challenging and different. PSBs continue to play an important role in delivering these purposes and characteristics.

- 6.4 This means that today we have a successful mixed ecology of public and private investment in content serving EU and UK audiences.
- 6.5 However, convergence has resulted in a number of market developments, including an increasing number of platforms, changes in user interfaces presenting content for navigation, the use of complementary methods to access content (e.g. second screen devices), and ever-wider functionality, availability and choice of content. These developments promise a number of benefits, including (as noted in Section 2) new potential sources of content funding. However, they also potentially pose a greater challenge to our ability to continue to support the delivery of investment in content and the PSB purposes through ensuring the availability and discoverability of Public Service Content (PSC), which in turn plays a critical role in delivering the high levels of investment in European works we have seen to date.
- 6.6 This section considers what changes might be required to ensure the continuing economic and cultural success of European and UK content markets in a connected society.

The importance of sustaining PSC availability and discoverability

- 6.7 Ofcom stated in its second review of public service broadcasting that, in a digital market with a wide range of content choices, the key aim for PSC is providing the programming that, as citizens, we want to be widely available for as many people to watch as possible. PSC must be capable of reaching audiences and specifically be high quality, original, innovative, challenging and widely available. It should also be delivered on channels that have a high reach among and impact on their target audiences.
- 6.8 Ensuring the availability and discoverability of PSC is critical in helping to achieve this aim and our interventions in this area need to keep pace with technological change.
- 6.9 In the UK, “must carry” and “must offer” rules can currently be imposed in order to guarantee PSB availability, while discoverability is facilitated using EPG prominence rules as part of EPG licence conditions. These interventions contribute to a virtuous circle of “consumption of-investment in-consumption of” PSB content and European works. While it is very difficult to precisely value the specific contribution these interventions do or might make, it is our belief that these outcomes will continue to be desirable and important going forward.
- 6.10 In the UK, we have already begun to consider what might be the most appropriate way to meet these objectives in the face of the technological changes identified above.

How to ensure PSB availability in the future

- 6.11 Currently all major PSB services are present on all the major platforms. To date, no dispute has arisen that has led to a legal test of the effectiveness of either of the two relevant sets of UK rules. However, convergence may put pressure on the present framework.

- 6.12 The key regulatory pillar that ensures PSB “availability” is the “must carry” obligation as set out in the 2003 Communications Act and based on the EU Access Directive which permits Member States to:
- “impose reasonable ‘must carry’ obligations, for the transmission of specified radio and television broadcast channels” on any electronic communications network²⁷(ECN), that functions as the principal means of receiving radio and television channels.”
- 6.13 Separately, the UK also supports PSB availability by “must offer” requirements in the Communications Act 2003, which state that public service channels must make themselves available (subject to the need to agree terms) to be broadcast or distributed by means of every appropriate network. In the UK, we have chosen to define such networks to mirror the definition of an ECN. “Must offer” requirements are included in the licences of all PSBs.
- 6.14 There is a pressing need to consider whether the regulatory framework based around the concepts of Electronic Communications Networks (ECNs) and Electronic Communications Services (ECSs) should develop in light of technology changes. This is particularly relevant to the effective long term functioning of the “must carry” regime. It is not clear that the definition is well suited to other types of platform, some of which may not necessarily involve the provision of transmission services. Operators of these other types of platform could still act as gatekeepers sitting between a distribution network and a consumer. For example, it may be the case that “must carry” rules would not capture new online content aggregators/websites (such as Facebook, Google or Netflix), should these ever become a significant means of receiving TV programmes for a significant number of users. This area merits further consideration.
- 6.15 And, for our own domestic “must offer” rules, the most important challenge will be to consider whether PSB on-demand players should be added to the list of programme services subject to the availability requirement.
- 6.16 We therefore believe there is a significant question emerging about the platforms, networks and services to which EU “must carry” (and, in practical terms for us, “must offer” rules in the UK) are applicable.
- 6.17 It will also be important to consider the effect of any regulatory change on “carriage terms”, in relation to both “platform access charges” (paid by channels to platforms) and any “retransmission” fees (paid by platforms to channels) and the ways these could alter the balance of payments between channels and platforms.
- 6.18 Finally, it will be important to consider net neutrality issues alongside any consideration of PSC availability, given the potentially significant impact of PSB on-demand services on overall levels of online traffic, and the importance of ensuring that PSBs can continue to deliver a high-quality on-demand experience for consumers and citizens.

How to ensure PSB discoverability in the future

- 6.19 As noted earlier, currently PSB discoverability is facilitated using EPG prominence rules as part of EPG licence conditions. Because of the important role that discoverability plays in the virtuous circle of content funding and investment (as

²⁷ Electronic Communications Networks, as set out in the EU Authorisation and Access Directives

described above), it will be important to ensure the continued prominence and discoverability of PSC (including, as appropriate, linear, on-demand and HD content) on whatever platform(s) and device(s) might become the primary means of consuming television for a significant number of people.

- 6.20 Our overarching policy goal will remain the granting of appropriate prominence to specific PSB content or services on navigation interfaces that people primarily use for the discovery of content and services with a minimum scale, and that exert control over the way that TV and TV-like services are displayed and discovered.
- 6.21 In deciding how best to achieve this policy goal in an increasingly converged media landscape, we will need to consider:
- what should be PSC – i.e. to which services this prominence should be applied;
 - how prominence applies to new user interfaces (e.g. where numerical lists become less significant and genre-based recommendations take on a greater role);
 - what constitutes an EPG – i.e. which platforms and services will be captured by the requirements (and whether any thresholds should apply); and
 - how any prominence regime could practically be enforced (including considerations of jurisdiction).

Considering changes to the EU framework

- 6.22 The answers to many of the questions we have outlined above are likely to be determined by Member States at domestic level, reflecting the cultural value and role of PSBs and other content providers and the characteristics of national markets, rather than being addressed at the EU level. However, it will be important to ensure that the applicable European regulatory framework also supports these cultural and economic aims.
- 6.23 Any revisions to the applicable European regulatory framework should ensure that Member States are able to adapt to changes in their national markets and to meet the expectations of their citizens, (which are likely to vary across Europe, given the different social and cultural role played by audiovisual content in each country).

Section 7

Competition in broadcasting

Section summary

- A connected society requires effective competition in both broadcasting and telecoms services. Recognising the specific national characteristics of the broadcasting sector, we should explore whether provisions for content markets at this level are fit for purpose given technological change and market developments, to avoid the risk of competitive distortions due to regulatory asymmetry. For example, effective competition powers should apply to on-demand services as well as linear television broadcasting.
- Globalisation is a challenge for competition regulators in this area. This suggests the need for greater coordination amongst authorities in different jurisdictions.

7.1 The following section addresses some of the points made in the Green Paper about the packaging of services, the availability of premium content and institutional and regulatory structures as they currently stand. It describes some of the challenges facing competition regulators in the audiovisual and communications sectors, and possible areas for considering changes to the competition regime.

New players and bundles

- 7.2 As noted in Section 2 technological innovation and convergence is changing consumer behaviour, with evidence to suggest that take-up of new technology services may be accelerating. New services and innovation offer clear benefits to consumers; for example, with the development of on-demand services and more data-capable mobile networks, consumers increasingly want the ability to watch content services not just in the living room determined by a broadcast schedule, but at anytime, anywhere, and on any device.
- 7.3 As communications networks are increasingly capable of delivering high quality audiovisual content services, it is unsurprising that content and communications services are increasingly sold in retail bundles. For example, in Q1 2013, 21% of UK homes purchased 'triple-play' bundles of fixed voice, broadband and TV services, up from 3% in 2005.²⁸ Communications providers are also moving into adjacent communications markets to improve their consumer bundle propositions. For example, in the UK Sky has a rapidly growing broadband network and in 2012 BT bought rights to broadcast Premier League games over the next three years. BT and Sky make these additional services a key part of their marketing strategies.
- 7.4 Many of these services and devices are still relatively new, and at this stage it is unclear whether their proliferation will lead to a sustainable, dynamic and competitive ecology or, alternatively, whether there will be critical inputs that act as competitive bottlenecks, coupled with increasing network effects, which could lead to entrenched incumbent positions or the creation of new ones.

²⁸ <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr13/market-context/uk-1.010>

- 7.5 Exclusivity in premium content, and the vertical (or horizontal) integration of suppliers, and device-specific operating and rights management systems, all raise a number of potential competition concerns. While there is still much uncertainty around demand characteristics, the deployment of new technology, the profitability of business models, and sources of competitive products, it is nonetheless important that there are effective competition powers to address any emerging competition concerns, in terms of both telecommunications (telephony/broadband) and content (Pay TV) services.

The nature of competition powers

- 7.6 In the UK, general ex-post competition law is complemented by sector specific ex ante competition provisions in both telecoms and broadcasting markets. While both are ex ante regimes encouraging greater choice and investment, there are some differences. The telecoms regime is more prescriptive; it follows the well-established EU Framework which aims to harmonise telecoms regulation across EU Member States. For example, it imposes an obligation on regulators to review the progress of competition in specified telecoms markets every three years, requiring the imposition of remedies in markets where significant market power is found.
- 7.7 The broadcasting regime is designed to address concerns of fair and effective competition in the context of the particular characteristics of the sector and the licence regime within which it sits, working hand-in-hand with broader ex ante regulatory interventions such as public service broadcasting, plurality, content standards and protection. In terms of outcomes, the telecoms regime has proved itself to be effective: UK consumers have benefitted from significant reductions in broadband prices.²⁹ Given notable differences between telecoms and broadcasting, it is not appropriate for the regimes to be identical; however, it is important that competition powers are as effective in the broadcasting regime as the telecoms regime to avoid the risk of competitive distortion arising simply as a result of regulatory asymmetries.
- 7.8 As noted in the Green Paper, competition concerns can arise in relation to the availability of premium content. Such premium content rights are typically awarded on an exclusive basis. In circumstances where these rights are the key drivers of pay TV subscriptions, are non-replicable (e.g. top-flight football), and have enduring appeal, this can lead to an enduring competition problem where sought-after content is not distributed widely, limiting consumer choice, distorting downstream competition (e.g. in platform choice) and inhibiting innovation.
- 7.9 Ex ante competition powers can be an important component of the toolkit to address these types of concerns. In that context, these ex ante provisions should reflect technological progress and how markets have developed. For example, in order to be effective, these provisions should apply not just to licensed linear broadcast channels, but also on-demand services (e.g. Netflix), which are increasingly competing with traditional linear broadcast services, in a similar way in which the AVMS Directive addresses on-demand programme services for content standards.

Interoperability and standardisation

- 7.10 A further area where regulatory intervention may have a role to play is with respect to interoperability and standardisation. At present, Ofcom sets certain broadcast

²⁹ <http://media.ofcom.org.uk/2013/04/25/uk-broadband-competition-reaches-new-milestone>

standards in the UK, for example in relation to DTT.³⁰ To ensure that consumers benefit from innovation and new services relating to audiovisual content, it may be necessary for the industry to coalesce around key standards, enabling a high degree of interoperability. For example, connected delivery of content enables much richer metadata (e.g. information about the content such as the programme genre and actors involved) to then provide recommendations and other services; usage data enables platforms and content providers a much greater understanding of viewer preferences and facilitates the potential evolution of advertising models, including more targeted advertising. Interoperability and a degree of standardisation, whether secured through industry initiatives or regulatory intervention, are likely to facilitate the emergence of these new services, as well as consumers' ability to switch effectively between service providers.

- 7.11 Any regulatory action in this sphere should, however, take full account of the implications of full interoperability and the potential benefits, in terms of innovation and experimentation that have characterised proprietary and bespoke systems to date.

Cross-border coordination

- 7.12 Finally, we observe that technology changes, and the internet in particular, have brought new ways to deliver services across borders. The emergence of IP networks have led to the possibility and creation of globally focused companies and business models which transcend national boundaries. Companies such as Google and Facebook have brought huge economic and social benefits, but their models of operation are very different to more traditional nationally-based media companies.
- 7.13 Simultaneously, consumer behaviours and expectations are evolving as consumers seek to take advantage of the opportunity to access international content and services. This means that communications services can increasingly be delivered from beyond the EU/EEA, beyond the reach of the EU regulatory framework and national frameworks.
- 7.14 While the digital single market and the increasingly globalised ecosystem provide opportunities for wider economic growth, they also potentially limit the ability of national frameworks, including national competition regimes, to continue to deliver their respective public policy goals effectively.
- 7.15 These potential challenges suggest the need for greater coordination amongst authorities in different jurisdictions. Although national action will play a role, some of these challenges described above are likely to require multinational or global collaboration.

³⁰ http://stakeholders.ofcom.org.uk/broadcasting/guidance/tech-guidance/codes_guidance/

Section 8

Other significant issues

Section summary

- In the UK, self-regulation of advertising has proved very effective. Consumer protection remains paramount, but the models of delivering that may develop over the coming years and flexibility is needed to allow this.
- There is a need to consider the regulatory approach to access and inclusion on VOD services as they become more mainstream.
- Media Literacy will play a central role in ensuring inclusion as well as protection in a connected society.
- We recognise the future potential of IPTV delivery, but believe IPTV services are likely to constitute a full substitute for Digital Terrestrial Television (DTT) only over the long term. Discussions about spectrum use must recognise the particular requirements of individual Member States as well as long term demands.

Issues covered in this section

- 8.1 In addition to the priority areas set out above, this section covers the following other significant issues raised in the Commission's Green Paper:
- The future regulation of commercial communications;
 - Future regulation of accessibility and inclusion; and
 - Changes in spectrum use, spectrum sharing and dynamic access.

1) The future regulation of commercial communications³¹

- 8.2 Convergence will also have an impact on the future of commercial communications and consequently on the way that regulators enforce rules to protect consumers from excessive or misleading advertising.
- 8.3 Limits placed on advertising volumes and techniques in the AVMS Directive have a firm grounding in consumer expectations, but advertising rules also impact significantly on advertising revenues and in turn on the way that content is funded – particularly specialist programming such as children's programming or programming covering the arts.
- 8.4 In our response in September 2012 to the Commission's issues for discussion paper on the update of the interpretative communication on certain aspects of the

³¹ The AVMS Directive defines commercial communications in Article 1(1)(h) as "images ... designed to promote, directly or indirectly, the goods services or image of a natural legal entity pursuing an economic activity ...included in a programme in return for payment or for similar consideration or for self-promotional purposes" Examples would include "inter alia, television advertising, sponsorship and product placement."

“Television Without Frontiers” Directive³² we proposed that the future regulation of commercial communications should be based on a set of high-level principles derived from EU legislation. These should ideally be developed in dialogue with Member States, regulatory authorities and other interested stakeholders.

Changes in the advertising market

- 8.5 As noted in Section 2, linear television viewing is strong and likely to remain so, and television advertising is likely to remain a leading means of commercial communication until beyond 2020.
- 8.6 Nevertheless, the regulatory framework could come under increasing pressure as content producers and broadcasters continue to look for new advertising opportunities, particularly those provided by changes in technology. Inevitably, questions about the appropriate scope of regulation (what services are subject to which rules) and how to balance consumer protection, innovation, investment in content and economic growth will multiply in such an environment.
- 8.7 One of these questions will be about a perceived asymmetry in the quantitative advertising rules (between linear and non-linear services), which the Commission has already observed in the Green Paper. Another might be the increasingly direct involvement of advertisers in content production, which might especially strain the rules that are currently in place requiring separation of advertising and editorial content and transparency for viewers.

The UK’s approach to date

- 8.8 The UK has traditionally adopted stricter quantitative rules than permitted by the AVMS Directive. Our assessments have been that loosening these rules would not be in the interests of viewers since it would be likely to increase viewers’ exposure to advertising while reducing the range and quality of content. On the other hand, increasing the level of advertising minutage would potentially have the detrimental effect of removing investment from TV content (as the cost per thousand would fall, reducing the overall revenue from advertising).³³
- 8.9 We have developed a set of extensive and detailed national rules that stem from the broader requirements in the AVMS Directive. These cover:
- references in television programmes to products, services and trade marks (as set out in Section Nine of Ofcom’s Broadcasting Code);
 - content in television programmes that could result in harm to children or the audience (as set out in Sections One and Two of Ofcom’s Broadcasting Code);
 - television advertising and teleshopping (as set out in The BCAP Code: The UK Code of Broadcast Advertising);
 - the scheduling of television advertising (as set out in the Code on the scheduling of television advertising “COSTA”); and

³² Submitted jointly with the Department for Culture, Media and Sport: http://stakeholders.ofcom.org.uk/binaries/international/responses/DCMS-Ofcom_response_to_CIC.pdf

³³ A measurement of how much money it costs you to reach 1,000 readers, viewers, visitors or listeners.

- content on on-demand programme services (as set out in ATVOD Statutory Rules and Non-Binding Guidance for Providers of On-Demand Programme Services and The UK Code of Non-broadcast Advertising, Sales Promotion and Direct Marketing).³⁴

8.10 These rules and Codes stem, as do the Directive's requirements (which apply to particular forms of audiovisual commercial communications) from the following fundamental principles:

- **Protection from harm** – to ensure that commercial communications do not cause harm, especially to children and the vulnerable.
- **Editorial independence** – to ensure that broadcasters are not unduly influenced by advertisers and maintain control over programming.
- **Distinction** – to ensure that there is a clear distinction between editorial content and advertising.
- **Transparency** – to ensure audiences understand when they are being sold to, and to protect them from surreptitious advertising.

8.11 In terms of practical enforcement, the UK regulatory system is already a mixture of self-regulation for non-broadcast advertising, and co-regulation (by the Advertising Standards Authority with Ofcom) for broadcast advertising and advertising included in on-demand programme services. For instance, the UK Code of Non-broadcast Advertising, Sales Promotion and Direct Marketing (the CAP Code) applies in full to marketing messages online, including the rules relating to misleading advertising, social responsibility and the protection of children.

8.12 We consider that the already well developed ASA co- and self-regulatory model, and a new self-regulatory initiative to help online users protect their data in the context of Online Behavioural Advertising (OBA), are working well and have a great deal to offer in terms of their ability to deal swiftly with problems and their ability to be more flexible in terms of their scope and remit and the challenges that ex-EU jurisdiction brings.

The European Framework in the future

8.13 If Europe is to maintain a competitive and thriving broadcasting industry, innovation in advertising techniques should be supported and further encouraged. Regulators must try to avoid inadvertently pre-empting future market developments through inflexible rules, and national regulatory authorities should also be equipped with the necessary tools to respond swiftly to such changes to ensure continued high levels of consumer protection in accordance with their national circumstances. Self-regulatory

³⁴ The Codes/Guidance that contain all rules relevant to commercial communications are: Ofcom Broadcasting Code, which includes the Cross-Promotion Code: <http://stakeholders.ofcom.org.uk/broadcasting/broadcast-codes/broadcast-code/>; Guidance on the Ofcom Broadcasting Code: <http://stakeholders.ofcom.org.uk/broadcasting/guidance/programme-guidance/bguidance/>; The Ofcom Code on the Scheduling of Television Advertising: <http://stakeholders.ofcom.org.uk/broadcasting/broadcast-codes/advert-code/>; The UK Code of Broadcast Advertising: <http://www.cap.org.uk/The-Codes/BCAP-Code.aspx>; ATVOD Statutory Rules and Non-Binding Guidance for Providers of On-Demand Programme Services (ODPS): http://www.atVOD.co.uk/uploads/files/ATVOD_Rules_and_Guidance_Ed_2.0_May_2012.pdf; The UK Code of Non-broadcast Advertising, Sales Promotion and Direct Marketing (CAP Code): <http://www.cap.org.uk/The-Codes/CAP-Code.aspx>

codes and bodies can help in this endeavour, where their incentives are aligned with the interests of wider public policy.

- 8.14 **Qualitative rules:** A detailed approach or attempt within the regulatory framework in the future to closely define or proscribe very specific advertising techniques could unduly restrict the flexibility of operators and the potential for market innovation, which in any event is likely to manifest itself differently in different Member States. Rather, we would prefer that future regulation should stem – at European level – from a high-level principles-based foundation.
- 8.15 **Quantitative rules:** Given the uncertainty about disruption and the continuing resilience of television advertising, as well as the strong evidence of consumer expectation, the current minutage rules are likely to remain appropriate as a minimum standard at EU level and we would not support a relaxation or removal of those rules for linear service providers. Ideally, steps should be taken to address any perceived asymmetry only when there is clear evidence that linear service providers are suffering – or will suffer in the near future – from a disadvantage (i.e. of distortion in competition) due to the imposition of quantitative rules. It will be important to monitor the development of these markets carefully in the coming years to ensure that conditions of fair competition are still present.
- 8.16 Moreover, any consideration of changes to these rules must take into account the direct role that advertising revenues play in helping broadcasters to fund high quality content on the one hand and the role quantitative restrictions play in promoting competition in the TV advertising market on the other.

2) Accessibility and inclusion

- 8.17 The important cultural and political roles that audiovisual media play in our society mean that access to that media – particularly in relation to public service content and to news and current affairs – is crucial for the social participation of consumers and citizens. Convergence offers challenges and opportunities in this sphere, and we note that web accessibility is a key tenet of the Digital Agenda for Europe and welcome the ongoing initiatives from the Commission aimed at ensuring the widest possible access to online and interactive services.
- 8.18 In this section we look at possible future developments in the provision of access services to those with hearing and visual impairments. We also consider the equally important and complementary role that is performed by media literacy, which not only helps audiovisual media consumers to take personal responsibility for their own and their family's protection against certain kinds of harmful and offensive content, but also ensures that members of the public understand the potential benefits of the connected society.

Accessibility: harnessing standardisation to reduce barriers to accessibility

- 8.19 In the audiovisual market, systems for delivering subtitling and audio description vary significantly between EU Member States, and within Member States across different platforms (analogue and digital; cable, satellite; broadcast and on-demand). The lack of standardisation may be a barrier both to the production of standardised consumer equipment (which can support subtitling and audio description) and to the roll-out of access services by broadcasters (because of the significant cost of supporting multiple systems).

- 8.20 In Ofcom's view, more rapid progress towards this objective could be achieved by encouraging industry-led initiatives to standardise accessibility features at both the national and European levels. Common approaches to accessibility, developed as a part of broader industry-led standardisation efforts, are more likely to attract buy-in from manufacturers and broadcasters, as they have a deeper understanding of the technical challenges and the commercial benefits of common solutions. This approach would also facilitate the sharing of ideas and solutions developed in different Member States.

Voluntary standards in broadcast audiovisual services

- 8.21 In the UK, work on promoting voluntary standards has been led by the Digital TV Group (DTG), an independent not-for-profit industry association, representing over 140 members (including manufacturers, retailers, technology and service providers, government departments, regulators, and consumer groups such as Action on Hearing Loss). The aim has been to facilitate interoperability between different parts of the digital television system (particularly DTT), including consumer equipment.³⁵
- 8.22 The results have been incorporated in the DTG's D-book, which contains the technical specification for UK digital terrestrial television (both standard and high definition), which includes accessibility requirements such as subtitles, audio description and text to speech for both standard definition and high definition programming and provides technical requirements for receivers incorporating subtitle functionality. The results of DTG's work also feed in to the work of bodies such as the Digital Living Network Alliance, and Digital Europe³⁶ (which represents a large number of companies in the information, communications and consumer electronics sectors). Digital Europe publishes the E-Book, which drew heavily on the D-Book when it was first produced.
- 8.23 There are close links between the work of the DTG and other European and international bodies working on standards. For example, the latest edition of the D-Book (version 7.3) incorporates elements of European and international standardisation bodies such as ETSI, HbbTV, and the Open IPTV Forum (OIPF).
- 8.24 It therefore looks possible that an industry-led approach would help to promote a high level of standardisation across the EU, as most manufacturers and some broadcasters operate across a range of markets. We would encourage the Commission to support such an approach, for example by hosting seminars to illustrate the approaches taken in different Member States, as a way of sharing experiences and raising expectations.

Accessibility for on-demand audiovisual services

- 8.25 As previously noted, VOD services are still at a formative stage, though developing at a rapid rate, and there are not yet uniform approaches on how to prepare and deliver access services to users. Some of the UK's larger providers (e.g. broadcaster catch-up services such as the BBC iPlayer) are providing access services, but ensuring wider provision remains a challenge.

³⁵ The DTG maintains a receiver collection comprised of over 200 models (over 95% coverage of the UK receiver population) on its premises for testing of new transmission modes and software downloads.

³⁶ <http://www.digitaleurope.org/AboutUs.aspx>

- 8.26 Work has begun on how best to repurpose access service files prepared for broadcast programmes for use when delivering them as part of VOD services, and this should help to bring down costs. ATVOD's³⁷ access services reports for 2011 and 2012³⁸ identified both technical and non-technical barriers to the transfer of access services to VOD. In some cases, service providers needed to supply two versions of the same programme; in others to purchase or develop new software in order to provide access services on existing platforms.
- 8.27 ATVOD is coordinating pan-industry efforts to identify and resolve technical barriers. In addition, there are non-technical barriers to the provision of access services, such as rights issues. Given that the technologies employed are not yet mature, it may be counter-productive to pursue standardisation at this point.
- 8.28 As VOD players and content becomes more widespread consumers would benefit from a more consistent provision of access services across media. For example, consumers have complained to us that a piece of content may have subtitles and/or audio description on its linear broadcast, but when that same piece of content is accessed via a VOD service, access services may not be available. At a European level it will be important to consider how consistent provision of access services between linear broadcasting and scale VOD services can be achieved.

Factors affecting investment in access services in the UK

- 8.29 In the UK, the requirements placed upon many broadcasters to provide subtitling, audio description and signing have led to significant investment in new technologies designed to bring down costs and improve reliability, particularly in subtitling. As a result, the costs of subtitling have fallen gradually. Signing and audio description are more labour-intensive than subtitling, but costs for audio description have also fallen, due in part to operational efficiencies.
- 8.30 Ofcom has also responded to consumer concerns about the quality of live subtitling by consulting on measures that might drive improvements.³⁹ These might include requiring broadcasters to measure and report every six months on the average speed of live subtitling and error rates in a variety of programmes. The proposition is that greater transparency would encourage broadcasters to make operational changes that would improve the quality of live subtitling, and hence the efficiency of investment.
- 8.31 Measures taken by Ofcom to require UK-based channels serving markets elsewhere in the European Union will help to drive investment in access services, and may encourage platform providers in relevant Member States to upgrade their platforms so as to support access services. However, this is likely to be a gradual and uneven process, and will depend in part upon how Member States encourage or require audiovisual providers within their jurisdictions to make access services available.⁴⁰
- 8.32 Clearly, this is a particularly challenging financial environment in which to promote investment in services for people with disabilities, and these challenges vary widely across Europe. There may be opportunities to harness the commercial imperative to

³⁷ ATVOD is also the co-regulator tasked by Ofcom with the duty of encouraging service providers to increase the accessibility of their content.

³⁸ <http://www.atvod.co.uk/regulated-services>

³⁹ <http://stakeholders.ofcom.org.uk/consultations/subtitling/>

⁴⁰ For full details see Ofcom, Access Services on Non-Domestic Channels

<http://stakeholders.ofcom.org.uk/consultations/access-services-non-domestic/?a=0>

standardise certain features in AV equipment, in ways that lower the costs of supporting accessibility features. A sensible approach might be to encourage Member States to share experiences, so that policy makers in one Member State can learn from others, so helping spread the innovation that has already taken place, and building a consensus in support of action. Such information sharing has already taken place amongst members of the European Platform for Regulatory Authorities (EPRA). The Commission may wish to consider providing a forum for Member States to share experiences amongst public policy makers, consumer equipment manufacturers and AVMS providers.

Media literacy⁴¹

- 8.33 To be media literate in a connected society, people must develop the basic digital skills to not only use a wide range of devices to access content, but also the knowledge and confidence to recognise both the risks and opportunities provided by new technology. This includes recognising the different regulatory frameworks and understanding the consequences of online behaviours and media use.
- 8.34 Reliance on these digital skills will become increasingly important as the number of ways in which audiences can access content increases and becomes more complex. The application of these skills cannot but form a key building block of any future regulatory approach that provides appropriate assurances to audiences of audiovisual content.
- 8.35 We believe that research and information are at the heart of improving media literacy levels, because by looking at the ways in which individuals engage with media and determining the diverse levels of knowledge and engagement among citizens we will be able to identify to policy makers the support and education that they might need. There will then be a task for governments, regulators and industry to provide clear information, education and tools for personal responsibility through which individuals and families can exercise informed choices and participate in the fullest and most beneficial way in the connected society.

3) Spectrum reallocation, spectrum sharing and dynamic spectrum access

The potential reallocation of spectrum currently used for broadcasting

- 8.36 Ofcom considers it is essential that citizens are provided with a sustainable and universally available free-to-view television platform. However, we acknowledge that demand for spectrum for mobile broadband continues to increase, and that IPTV becomes a more sustainable television proposition with the introduction of multicasting technology and the continued roll-out of superfast broadband networks.
- 8.37 Our approach to these realities – and in particular to the future release of the 700 MHz band for mobile broadband – is set out in detail in a number of recently published documents.⁴² In these documents, we have emphasised the need to take

⁴¹ The promotion of media literacy is a responsibility placed on Ofcom by Section 11 of the Communications Act 2003. Under Section 14(6)(a) of the Act we have a duty to make arrangements for the carrying out of research into the matters mentioned in Section 11(1).

⁴² http://stakeholders.ofcom.org.uk/binaries/consultations/uhf-strategy/statement/UHF_statement.pdf; (November 2012); our proposals for our UHF Strategy Implementation programme are discussed in this document: http://stakeholders.ofcom.org.uk/binaries/consultations/700mhz-cfi/summary/UHF_SI_call_for_inputs.pdf

an internationally coordinated approach to decisions relating to future spectrum use in order to promote economies of scale and interoperability, as well as to ensure efficient use of spectrum. Ofcom strongly supports work on spectrum management issues at both the European and global levels, and is committed to taking an active role in international debates relating to the 700 MHz band. It would be difficult here to provide a full discussion of this complex and nuanced topic, which is currently being considered in a number of international fora including in the EU spectrum committees and the European Conference of Postal and Telecommunications Administrations (CEPT).

- 8.38 However, there are some aspects to the use of spectrum that will have a direct impact on audiovisual content distribution that merit mention in this document. In brief, our UHF strategy statement set out two objectives for scarce spectrum resources in UHF bands IV and V (470 – 862 MHz) over the next ten years: enabling the internationally harmonised release of additional low frequency spectrum for mobile broadband use, to help meet the rapidly increasing demand for mobile data capacity; and securing the ongoing delivery of the benefits provided by DTT.
- 8.39 Growing capacity requirements for mobile broadband are likely to be the key catalyst of change in spectrum use over the next 10 years. Our 2012 Infrastructure Report highlighted how total data traffic carried over UK networks more than doubled between June 2011 and June 2012.⁴³ Work we commissioned in 2012⁴⁴ suggested that, under mid-range assumptions, mobile data consumption could be as much as 80 times higher in 2030 than in was in 2012.
- 8.40 We also note that consumers are growing used to watching content using their internet connections, whether on-demand or live-streamed, through both “managed” and OTT services. With the widespread implementation of more efficient IP distribution technologies (including multicasting) and improvements in broadband connection speeds, IPTV is likely to become an increasingly important distribution platform in the UK, increasing choice for TV viewers and providing enhanced services and functionalities. In particular, IPTV offers some inherent advantages over traditional broadcast technologies, including the potential for greater viewer interactivity and more seamless integration of linear and on-demand content. The ongoing roll-out in the UK of “hybrid” DTT - IPTV platforms, such as YouView, is likely to further test viewer appetite for such features.
- 8.41 At present, DTT is still a very important distribution platform in the UK. It is the sole means of TV reception for over 40% of UK TV households⁴⁵ and used in many more households as a secondary TV feed. It fulfils a unique role in providing universal free-to-air access to Public Service Broadcasting channels to UK citizens, as well as sustaining choice in the number of channels and in digital TV platforms for UK consumers.
- 8.42 For the time being superfast broadband penetration remains relatively low - superfast services account for only 17.5% of all fixed broadband connections in the UK in Q1 2013⁴⁶, and 20% of households have chosen not to subscribe to any broadband service. In addition, there is significant variation and fragmentation in IPTV devices

⁴³ <http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/broadband-speeds/infrastructure-report-2012/>

⁴⁴ <http://www.ofcom.org.uk/static/uhf/real-wireless-report.pdf>

⁴⁵ <http://stakeholders.ofcom.org.uk/binaries/research/tv-research/tv-data/dig-tv-updates/2012Q4.pdf>

⁴⁶ <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr13/telecoms-networks/UK-5.13>

and platforms. But it is clear that IPTV will increasingly be able to complement other broadcast technologies until the 2020s when EU targets under the Digital Agenda should ensure near-universal availability and widespread penetration of superfast broadband and substitution becomes a viable option.

- 8.43 For IPTV to become a viable platform for universal free-to-view distribution, public policy intervention might also be required to ensure that any remaining digitally excluded citizens are not also denied access to TV services.
- 8.44 Overall, while we consider that IPTV developments may allow for a scenario in which DTT is switched off and the spectrum it currently uses re-purposed, there is significant complexity involved with securing all the necessary conditions that are required to ensure that the key benefits that DTT provides today are not lost. For these reasons, our November 2012 UHF Strategy Statement concluded that IPTV services could potentially constitute a substitute for DTT, but this is unlikely to be viable before 2030.
- 8.45 One way in which the dual objectives of the long-term sustainability of DTT and greater availability of mobile broadband might both be secured is through the increased use of more efficient transmission technologies (such as DVB-T2) and compression standards (such as MPEG-4 or HEVC). Potentially, such efficiencies open the door for a greater range of services on the DTT platform – in particular more HD, or possibly even Ultra HD, services – alongside the prospect of release of further spectrum for mobile broadband. However, there are significant issues around the redundancy of legacy equipment and a full switch to different transmission or compression modes could only be made after a full analysis of the implied replacement costs for consumers and transition costs for DTT broadcasters, relative to the potential consumer benefits. It would also require, amongst other things, a carefully managed consumer information campaign.

Spectrum sharing and dynamic spectrum access

- 8.46 As competing demands for key spectrum resources in UHF bands IV and V continue to increase, spectrum sharing and developments enabling greater use of dynamic spectrum access are likely to become increasingly relevant to securing the delivery of incumbent and innovative service applications.
- 8.47 Frequencies used for National DTT transmissions are already shared with lower power applications that re-use locally unutilised spectrum. These include PMSE services like wireless microphones and in-ear monitors.
- 8.48 In the UK, we have also been progressing work to enable the use of “TV white spaces” through databases that enable location aware devices to access frequencies that are not used for DTT or PMSE services in a way that ensures a low probability of harmful interference with these services. White-space devices offer the promise of opportunistic access to deliver innovative low power wireless data services, which might include machine-to-machine communications, metering and localised data applications.
- 8.49 In future, the shift towards more dynamic use of spectrum resources could be highly significant. To deliver the best outcomes for consumers, more work must to be done to ensure wireless devices and receivers are as robust as possible to interference.
- 8.50 Our experience of clearing the 800MHz band for mobile broadband illustrates the complexity associated with enabling new spectrum uses in already heavily utilised

spectrum ranges. In particular, it has also highlighted challenges related to managing the potential for interference with DTT reception, due to relatively poor out-of-band performance of mobile terminals and DTT receivers.

- 8.51 As consumer electronics continue to be developed in a globalised market, an international approach aimed at encouraging the development of improved radio equipment standards is more likely to succeed. For this reason the UK is supporting the inclusion of receivers within the scope of the R&TTE Directive, whose revision is currently being debated in the European Parliament and Council.