



# Review of Sky's Access Control Services Regulation

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## Section 1

# Executive summary

## Overview

- 1.1 Sky has requested that we remove the Access Control ("AC") Continuation Notice by which regulation of access to interactive services is imposed on Sky's satellite platform. The purpose of the regulation is to ensure that Sky offers access to its set-top boxes ("STB") on fair, reasonable and non-discriminatory terms, to enable third parties to provide interactive services to end-users, such as 'red button' services, and voting and gaming services.
- 1.2 The purpose of this consultation is to gather views on whether Ofcom should set replacement access-related conditions on Sky before we remove the AC Continuation Notice or if we should simply remove the Continuation Notice, so that regulation falls away.

## Background

- 1.3 Traditional broadcast TV continues to have enduring appeal, with UK consumers watching on average over four hours per day. However, convergence between communications and media services is changing the way in which we engage with these services and consume content. Interactive TV services that, for example, provide access to additional information and video feeds that complement the broadcast TV programme, can benefit consumers through a richer enhanced TV experience, improved navigation and discovery of content, and greater integration with second screens such as smartphones and tablets.
- 1.4 The popularity of pay TV in the UK has continued to grow with 57% of TV households now subscribing to pay TV services. Sky is the largest provider of pay TV services in the UK, with a total of over 10.3m subscribers and its satellite platform is regulated<sup>1</sup> to ensure other broadcasters can retail their pay TV channels directly on Sky's platform, without being part of Sky's own retail packages. One component of the regulated platform access regime concerns AC services; software services available via Sky's STB which enable the provision of interactive TV services.
- 1.5 There are essentially two types of AC services currently provided by Sky:
- i) Application Signing Services – used for enhanced TV services e.g. 'red button' services and on-screen watermarking<sup>2</sup>, and
  - ii) Authentication Services – services that use the narrowband dial-up modem in Sky's STB to enable two-way interactive services such as voting, gaming, betting, interactive advertising and retail transactions.
- 1.6 When platform regulation was first imposed on Sky in 2000, Sky's STBs were considered to be the main gateway to consumers for interactive services such as

<sup>1</sup> Regulated access to Sky's platform, known as the Technical Platform Services regime, covers Conditional Access ("CA") (encryption) and Electronic Programme guide ("EPG") services in addition to AC services.

<sup>2</sup> For example, the pint glass symbol used by commercial premises to indicate permission to show specific TV channels.

enhanced TV, and potentially online services such as banking, transactional e-commerce, gaming and betting.

- 1.7 There have been significant market developments over recent years, particularly for online services, with an increasing number of diverse internet-connected devices in use, ranging from smartphones and tablets to smart TVs and games consoles. Many interactive services such as information services, social interaction, commerce and betting can be made available independently through other devices which do not rely on interaction with a STB. Conversely, other interactive services, including some enhanced TV services for the main screen, can only be provided by third parties if the interactive services provider has a direct relationship with the STB provider.
- 1.8 Sky observes that there has been a reduction in demand for its AC services over time; there are currently only nine third parties making use of these services, down from 30, four years ago. In its view, the regulation is no longer relevant given market developments and presents an unnecessary financial and administrative burden on Sky which hinders its investment and innovation. Sky has asked Ofcom to remove the Continuation Notice.

## **The regulatory framework**

- 1.9 The existing regulation on Sky comprises conditions in relation to AC services which are given legal effect by a continuation notice (the AC Continuation Notice) given by Ofcom in 2003 under transitional provisions of the Communications Act 2003 ("the Act"). We are required under the Act to take all steps necessary to consider whether to set replacement conditions under the Act prior to removing the Continuation Notice.
- 1.10 Since the existing regulation is intended to enable third parties to access Sky's AC services, we consider that Ofcom's powers to set access-related conditions under sections 73 and 74 of the Act provide the relevant legal framework for our consideration of this issue. Any such conditions must be appropriate to secure the objectives specified in section 73(2) of the Act (including efficiency, sustainable competition, investment and innovation).

## **Ofcom's considerations for consultation**

- 1.11 Understanding the current and likely future demand for Sky's AC services is central to assessing the need for any ongoing regulation. If, as a result of the consultation, there is insufficient evidence of demand to support further consideration of replacement conditions on Sky, we will remove the Continuation Notice on the basis that regulation is unnecessary.
- 1.12 Conversely, if the consultation responses provide evidence of demand which may support further consideration, we will need to examine the case for regulation in more detail before removing the Continuation Notice. Relevant considerations would include: the nature of the interactive services and whether they need access to Sky's STB or could be provided in alternative ways and the ability of Sky and third parties to agree access on appropriate terms, absent regulation. We would also need to consider the benefit for consumers of regulatory intervention, assessed against the relevant policy objectives and duties.
- 1.13 We welcome comments from interested parties on the issues set out in this document.

## Section 2

# Introduction and background

- 2.1 Sky is subject to regulatory obligations which require it to give third party access to certain software services in its STB which enable the provision of interactive services<sup>3</sup>. Following a request from Sky, we are considering whether Ofcom should set replacement access-related conditions on Sky before we remove the Continuation Notice.
- 2.2 The purpose of this consultation is to gather stakeholder views as to whether there is evidence of demand to support further consideration of replacement access-related conditions on Sky<sup>4</sup> before removal of the Continuation Notice<sup>5</sup>. This document sets out the regulatory framework and provides a sector overview before setting out our preliminary analysis of the issues, the matters on which we are seeking views and our anticipated next steps.
- 2.3 In this section we provide some contextual information, explain what services are subject to regulation on Sky's platform and provide a summary of the regulatory obligations in place. This is followed by a brief summary of Sky's request, an overview of the process for removing the Continuation Notice and an outline of the information we are seeking through this consultation.

## Context

- 2.4 The UK media landscape is changing rapidly. Consumers now have access to a greater range of communications and media services than ever before and convergence is changing the way in which we use communications services and consume content. For example, content that was previously only delivered on television, in a cinema, or in a newspaper can now be accessed on devices such as smartphones, tablets and smart TVs. Equally, traditional broadcast TV continues to have enduring popularity, with UK consumers watching on average over four hours per day<sup>6</sup>.
- 2.5 The pay TV sector has delivered substantial benefits to consumers since its emergence in the early 1990s. By 2012, 57% of adults were paying for access to a pay TV service<sup>7</sup>. Pay TV services typically offer a range of content including premium sports and movies channels as well as a wide range of other popular and niche channels. Increasingly on-demand and catch-up services are also available across the various pay TV platforms.

<sup>3</sup> See the description of "interactive services" at paragraph 2.11 and Section 4 below. We use the term "interactive services" to refer to interactive TV services throughout this document.

<sup>4</sup> The obligations imposed under the AC Continuation Notice and the regulation of broader Technical Platform Services applies to Sky Subscriber Services Limited (SSSL), which is a subsidiary of British Sky Broadcasting Group plc. For ease of reference, this consultation document refers to SSSL, its parent and the wider Sky corporate group as "Sky".

<sup>5</sup> Ofcom has a duty to consider whether replacement access-related conditions are required *before* the Continuation Notice can be removed.

<sup>6</sup> Ofcom, 2012 CMR, page 21, Fast facts.

[http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr12/CMR\\_UK\\_2012.pdf](http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr12/CMR_UK_2012.pdf).

<sup>7</sup> Ofcom 2012 Consumer Experience Report, page 6:

[http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-12/Consumer\\_Experience\\_Research1.pdf](http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-12/Consumer_Experience_Research1.pdf).

- 2.6 Sky is currently the largest pay TV provider with over 10.3m subscribers<sup>8</sup>. In comparison Virgin Media has 3.3m<sup>9</sup>, BT has 810k<sup>10</sup> and TalkTalk has 230k<sup>11</sup> subscribers respectively, which means the majority of pay TV consumers acquire their pay TV services from Sky.
- 2.7 Sky's platform is regulated in order to provide access to the software in its STB for third parties to make their content available on its platform (i.e. provide their channels to customers directly without having to be a part of Sky's retail package). For example, BT will self-retail its BT Sport channels through Sky's STB, so Sky subscribers can only buy these channels through BT directly<sup>12</sup> even though they will be available on Sky's platform.
- 2.8 Broadcasters and interactive service providers who wish to make their content available on Sky's STB will require some or all of the following technical platform services ("TPS") which are regulated:
- **CA services** enable broadcasters to restrict access to their content so that it reaches only authorised subscribers (and not non-subscribers), e.g. encryption technologies;
  - **EPG listing** provides the allocation of a slot on the Electronic Programme Guide and the provision of a technical interface to enable the broadcaster to deliver schedule information; and
  - **AC services** are software services which are available via Sky's STB and enable the provision of interactive television services, such as red button services.
- 2.9 Sky's request relates to the regulation of its AC services only and this consultation will not address EPG or CA services. Our consideration of the case for removing the AC Continuation Notice in respect of AC services is based on the assumption that the existing regulations in respect of EPG listings and CA services remain in place.

## Access Control Services

- 2.10 Sky's AC services are a suite of software and security services which are available on the Sky satellite platform that enable third parties to access application programme interfaces ("APIs") in Sky's STB. APIs are the software libraries resident on the STB that allow an interactive application to access the STB functionality. These AC services and APIs are required by third parties for the provision of interactive services to or for the benefit of viewers using Sky's STBs.
- 2.11 Interactive services are described in more detail in Section 4 of this document. They cover a range of TV content and associated services, which entail viewer interaction

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<sup>8</sup> BSkyB results for the nine months ended 31 March 2013 (Sky subscriber figures include Republic of Ireland and NOW TV) total for "Paid for subscription products"

[http://corporate.sky.com/documents/pdf/latest\\_results/q3\\_1213\\_kpi\\_summary.pdf](http://corporate.sky.com/documents/pdf/latest_results/q3_1213_kpi_summary.pdf).

<sup>9</sup> Virgin Media – First Quarter 2013 results, quarter ended March 31, 2013,

<http://investors.virginmedia.com/phoenix.zhtml?c=135485&p=irol-financial-results>.

<sup>10</sup> BT Group plc, Results for the fourth quarter and year to 31 March 2013,

<http://www.btplc.com/news/articles/showarticle.cfm?ArticleID=af4c5ebd-dda1-4001-b22a-1dc5179507ed>.

<sup>11</sup> TalkTalk Group plc, Full Year Preliminary Results for the 12 months to 31 March 2013,

<http://www.talktalkgroup.com/investors/results-centre.aspx>.

<sup>12</sup> <http://www.bt.com/sport/3-ways-to-watch-bt-sport.html>.

such as red button services, which can provide access to different video streams by means of pressing the red button; and services such as betting, voting and shopping which require the subscriber to submit information via the return path<sup>13</sup> to the interactive services provider. They also include certain services which are not interactive but are associated with TV content, such as on-screen watermarking<sup>14</sup>. Sky currently provides two types of AC services which support the interactive services: Application Signing Services and Authentication Services.

### **Application Signing Services**

- 2.12 Application Signing Services (“ASS”) provide broadcasters and interactive service providers with the technical means, such as signing tools, keys and certificates, to ensure their own applications are permitted access to, and are appropriately recognised by, Sky’s STBs.
- 2.13 ASS typically enable the selection of different video feeds, such as different camera angles in a sporting event, the provision of programme information and on-screen watermarking.

### **Authentication Services**

- 2.14 Authentication services are the means by which broadcasters and providers of interactive services are able to utilise the return path, provided via the narrowband dial-up modem in the STB, to access an interactive service provider’s online service and enable two-way interactions. Authentication services are used to provide services which involve the viewer sending information (entered via the remote control handset) back to the service provider e.g. voting services, competition entries and transactional services.
- 2.15 Currently on the Sky platform, any third party wishing to use the return path must have access to an authentication server. This server ensures that only Sky STBs are able to connect to the online platform and also ensures that STBs do not connect to non-approved online platforms. Third parties can either procure a dedicated authentication service from Sky, or negotiate access to an existing server. As of June 2013, the only interactive service provider with an agreement with Sky for authentication services was QVC.
- 2.16 In order to provide two-way TV interactivity such that the viewer does not need to leave the TV viewing environment, certain interactive services will need both ASS and authentication services. For instance, an interactive TV betting service structured around a live sports programme would need both types of AC services.

## **The Access Control Continuation Notice**

### **History of AC Regulation**

- 2.17 Regulation was originally imposed on Sky in 2000 under a licence granted under the Telecommunications Act 1984, following a finding that Sky was in a dominant position in the supply of AC services for digital interactive TV services. The licence governed the way Sky made its AC services accessible to third parties, in order to

<sup>13</sup> The return path enables information to be submitted by the subscriber to the interactive services provider via the narrowband dial-up modem in the STB.

<sup>14</sup> e.g. the pint glass symbol used by commercial premises to indicate they are authorised to show particular pay TV channels.



promote sustainable competition and to ensure the interoperability of third party services for the overall benefit of consumers.

- 2.18 The Telecommunications Act 1984 was repealed in 2003 when the Act came into force. In order to ensure that there was no regulatory gap, Oftel exercised its power to give continued legal effect to the relevant conditions of Sky's licence by giving the AC Continuation Notice to Sky in 2003 (see paragraph 2.22).
- 2.19 Ofcom has a duty to consider, as soon as reasonably practicable after giving the notice, whether to replace the obligations it continued with conditions set under the Act. In 2006 we consulted on TPS guidelines more broadly and indicated we would undertake a market review<sup>15</sup>. However, Ofcom's pay TV investigation started in 2007 and the anticipated market review was put on hold.
- 2.20 Ofcom published its final statement in the Pay TV investigation in March 2010; in August 2012, Ofcom's decision was successfully appealed to the Competition Appeal Tribunal<sup>16</sup>. Litigation in relation to this judgment is on-going.
- 2.21 Sky made a request for the removal of the AC Continuation Notice at the end of January 2013. In March, we met with Sky to discuss the request and in June, Ofcom sent Sky an information request under section 135 of the Act ("the section 135 information request") to which Sky responded on 25<sup>th</sup> June.

### **Requirements of the current Access Control Continuation Notice**

- 2.22 The Continuation Notice imposed by Oftel requires Sky to:
- Supply AC services on fair and reasonable terms;
  - Maintain accounting records dealing separately with its AC services business;
  - Not unduly discriminate or show undue preference in relation to the provision of AC services; and
  - Publish charges and terms and conditions in an agreed manner.

### **Summary of Sky's request**

- 2.23 As discussed in paragraph 2.21, we received a submission from Sky asking us to remove the Continuation Notice and setting out the underlying reasons for its request. The non-confidential version of Sky's request is set out in Annex 6 and we have provided a summary below.

### **Developments in technology and demand for AC services**

- 2.24 The thrust of Sky's main argument is that the AC regulation is burdensome; it affects innovation and is unnecessary in today's market place.
- 2.25 Sky notes that when it launched digital interactive services in 1999, 20% of UK households had access to the internet in the home, and by 2003 that figure had

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<sup>15</sup> <http://stakeholders.ofcom.org.uk/binaries/broadcast/reviews-investigations/review.pdf>.

<sup>16</sup> *Sky v Ofcom*, judgment of 8 August 2012 - <http://www.catribunal.org.uk/238-7780/Judgment-Non-confidential-version.html> .

increased to 50% and is continuing to grow<sup>17</sup>. Sky considers that the growth in internet penetration and the increasing range of services available on the internet has rendered the interactive services it currently delivers via its STBs “*virtually obsolete*”<sup>18</sup>. It also claims that there are many substitutes and alternatives for providing the same consumer services. Sky therefore contends that the Continuation Notice is no longer relevant in today’s market.

- 2.26 Furthermore, Sky notes that since it started providing ASS and Authentication Services in 1999, the number of third parties using the services has decreased significantly, demonstrating that there is no significant third party demand for these services.
- 2.27 For Authentication Services, there is now only one third party user of such services. For ASS, nine third party broadcasters take such services from Sky, down from 30 in 2008<sup>19</sup>. The nine third party broadcasters<sup>20</sup> still using ASS services and the interactive services which make use of them are as follows:

Application Signing Service Holder	Type of Interactive Service
Attheraces	Betting service provided by Sky Bet
BBC	Text and multiscreen service
BT	Commercial watermarking (the equivalent of an on-screen ‘Pint Glass’)
Sky	Text, customer service, games, betting, donations, multiscreen service and commercial watermarking
The Community Channel	“Looking Local” information service
ESPN	Commercial watermarking
Nickelodeon	Games service provided by Sky Games
QVC	Shopping service
S4C	English and Welsh subtitles
Turner	Games service provided by Sky Games

### The regulatory burden

- 2.28 Sky argues that the costs of existing regulation are material<sup>21</sup>. For example, it notes that costs arise from the inherent risk that third party applications present in terms of stability issues for its platform, resulting in failures and crashes which prevent STB use until those issues are resolved. In order to address these issues Sky claims it is

<sup>17</sup> It has now reached 80% (Source: Communications Market Report 2012, figure 1.3 [http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr12/CMR\\_UK\\_2012.pdf](http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr12/CMR_UK_2012.pdf)).

<sup>18</sup> See paragraph 26 of Sky’s request, Annex 6.

<sup>19</sup> See paragraph 4 of Sky’s request, Annex 6.

<sup>20</sup> Source: Sky’s response of June 25 2013 to the section 135 information request.

<sup>21</sup> See paragraph 32 of Sky’s request, Annex 6.

required to invest in additional technical and support services. Overall, Sky states that existing regulatory requirements present it with additional administrative and financial burdens which are unnecessary.

## Impact on innovation

2.29 Sky argues that the existing Continuation Notice not only has an unduly burdensome effect on its business, but also has negative consequences for consumers because Sky is inhibited from developing innovative platform functionality<sup>22</sup> such as those that use the Ethernet connection to link to services like internet-based help, shopping or social media services. Sky contends that the stifling of such innovative services by the existing Continuation Notice results in material detriment to consumers<sup>23</sup>.

## Assessing the need for future regulation

2.30 Before we can remove the Continuation Notice, we are required to consider whether or not replacement conditions set under the Act are necessary<sup>24</sup>. Our relevant powers to set access-related conditions are under section 73 and 74 of the Act.

2.31 There is no requirement to establish dominance or market power before access-related conditions can be imposed under these provisions of the Act, which is in contrast to the legislative regime which preceded the Act and under which the existing regulation was originally imposed on Sky. In deciding whether or not to set replacement access-related conditions we must consider the extent to which any such conditions would secure the objectives set out in section 73(2) of the Act, namely efficiency, sustainable competition, efficient investment and innovation and the greatest possible benefit for end-users. In addition to our general duties under section 3 and 4 of the Act, the recitals to the Access Directive (from which sections 73 and 74 derive) suggest that media plurality and cultural diversity objectives may also be relevant factors to consider.

2.32 As discussed above, we note Sky's observation that the number of interactive service providers that make use of Sky's APIs has fallen. Further we note that there has been significant innovation in relation to the delivery methods (e.g. second screen devices) of interactive services to end-users since the regulation was first imposed.

2.33 The purpose of this consultation is therefore to seek respondents' views on whether there is evidence of demand to support further consideration of imposing replacement access-related conditions on Sky before we remove the Continuation Notice. In particular we are seeking views on:

- Demand for interactive services;
- The extent to which stakeholders consider there to be an ongoing need for regulation of services which currently make use of Sky's APIs; and
- whether there are other interactive services which may require access to Sky's APIs in the foreseeable future and whether there may be a need for that access to be regulated.

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<sup>22</sup> See paragraphs 39 and 40 of Sky's request, Annex 6.

<sup>23</sup> See paragraph 41 of Sky's request, Annex 6.

<sup>24</sup> Under Schedule 19, paragraph 9(11) of the Act.

## **The structure of this document**

- 2.34 This consultation document is structured as follows:
- 2.35 Section 3 provides an overview of the regulatory framework in which we must consider Sky's request.
- 2.36 Section 4 sets out our understanding of the types of interactive services that are currently available, the enabling technologies, the services currently on offer and anticipated future developments.
- 2.37 Section 5 covers how we propose to assess the need for any continued regulation and the information we are seeking to inform that assessment.
- 2.38 Annexes 1, 2, 3 and 4 outline the process for responding to this consultation, the principles underpinning how Ofcom consults and the consultation questions we are seeking responses to.
- 2.39 Annex 5 is the existing Continuation Notice in relation to AC services.
- 2.40 Annex 6 is Sky's non-confidential submission to Ofcom requesting removal of the Continuation Notice for AC services.

## Section 3

# Regulatory framework

3.1 In this section, we set out the underlying legal framework in which regulation of Sky's AC services currently operates and explain the requirements for removing the Continuation Notice, our relevant powers for imposing replacement conditions and how we would do so (if we decided that was appropriate).

## Pre-2003 regime

3.2 Prior to July 2003, regulation of the provision of AC services was the subject of licence conditions imposed under the Telecommunications Act 1984. This AC regulation only applied to operators found to be in a dominant position within the meaning of Article 82 of the EC Treaty (now Article 102 of the Treaty on the Functioning of the EU).

3.3 A determination published in June 2000<sup>25</sup> found Sky to be dominant in the relevant economic market for AC services. As a result of that determination, Sky was obliged under the conditions of its licence to, amongst other things, provide AC services for interactive services on fair, reasonable and non-discriminatory terms.

## The existing regulation

3.4 In July 2003 the licensing regime under the Telecommunications Act 1984 came to an end with the introduction of a new European regulatory framework for electronic communications networks and services and its implementation in the Act.

3.5 However, transitional provisions in Schedule 18 to the Act meant that certain licence conditions continued to have legal effect if they were the subject of a continuation notice given by Oftel (the predecessor of Ofcom) to the licence holder. Licence conditions which could be the subject of a continuation notice include those listed at paragraph 9(4) of Schedule 18 as corresponding to one or more of the following:

“(a) provision that OFCOM have power to include in SMP conditions;

(b) provision authorised by section 73(2) or (4) for inclusion in access-related conditions;

(c) provision relating to matters mentioned in Article 16 of the Universal Service Directive or Article 7 of the Access Directive.”

3.6 On 23 July 2003, pursuant to paragraphs 9(4)(b) and 9(4)(c) of Schedule 18 to the Act, the Director General of Telecommunications gave a continuation notice to Sky which had the effect of continuing, subject to necessary modifications, certain licence conditions in relation to the provision of AC services. These oblige Sky to provide AC services for digital television services on fair, reasonable and non-discriminatory terms and to meet certain transparency requirements. As set out in the Oftel statement in relation to the Continuation Notice, the continued provisions correspond to access-related conditions which may be imposed under section 73 of the Act.

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<sup>25</sup> Decision as to the status of Sky Subscribers Services Limited as a regulated supplier in the market for Access Control Services for digital interactive television services.

3.7 Having given the Continuation Notice, paragraph 9(11) of Schedule 18 provides that

3.7.1 “it shall be OFCOM's duty as soon as reasonably practicable after giving the continuation notice—

- (a) to take all steps necessary for enabling them to decide whether or not to set a condition of any other description under Chapter 1 of Part 2 of this Act for the purpose of replacing the continued provision; and
- (b) to decide whether or not to exercise their power to set a condition under that Chapter for that purpose.”

3.8 The Continuation Notice remains in place until Ofcom has made the decisions referred to in paragraph 9(11). Ofcom has a duty to issue a notice discontinuing the Continuation Notice if it decides not to replace the continued provisions with conditions set under the Act or, if it decides to set such conditions, once they come into effect.

### Access-related conditions

3.9 The types of conditions permitted under Chapter 1 Part 2 of the Act are set out at section 45 of the Act. Of relevance to this consultation is the power to set an access-related condition authorised by section 73 of the Act. As set out in section 73(2), these include:

3.9.1 “...conditions relating to the provision of such network access and service interoperability as appears to OFCOM appropriate for the purpose of securing—

- (a) efficiency;
- (b) sustainable competition;
- (ba) efficient investment and innovation; and
- (c) the greatest possible benefit for the end-users of public electronic communications services.”

3.10 Specific provisions which fall within the scope of section 73(2) are set out in section 74(2):

3.10.1 “(2) The conditions that may be set by virtue of section 73(2) also include such conditions imposing obligations on a person providing facilities for the use of application programme interfaces or electronic programme guides as OFCOM consider to be necessary for securing—

- (a) that persons are able to have access to such programme services provided in digital form as OFCOM may determine; and
- (b) that the facility for using those interfaces or guides is provided on terms which—
  - (i) are fair and reasonable; and

- (ii) do not involve, or tend to give rise to, any undue discrimination against any person or description of persons.”

3.11 Of most relevance for the purposes of this consultation is the power to set conditions imposing obligations for the use of application programme interfaces. An API is defined in section 74(3) as “a facility for allowing software to make use, in connection with any of the matters mentioned in subsection (4), of facilities contained in other software”. The matters referred to are

“(a) allowing a person to have access to programme services;

(b) allowing a person, other than a communications provider or a person who makes associated facilities available, to make use of an electronic communications network by means of which a programme service is broadcast or otherwise transmitted;

(c) allowing a person to become the end-user of a description of public electronic communications service.”

### **Specific considerations in setting an access-related condition**

3.12 In deciding whether it is appropriate to set an access-related condition, Ofcom is required, pursuant to section 73(2), to consider whether such a condition is appropriate for the purpose of securing: efficiency; sustainable competition; efficient investment and innovation; and the greatest possible benefit for the end-users of public electronic communications services.

3.13 Further, section 47(2) of the Act requires that in exercising its power to set an access-related condition, Ofcom would have to be satisfied that the condition is: objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates; not such as to discriminate unduly against particular persons or against a particular description of persons; proportionate to what the condition or modification is intended to achieve; and in relation to what it is intended to achieve, transparent.

3.14 In contrast to the pre-July 2003 licensing regime, there is no requirement to establish dominance in order to impose conditions under section 73 of the Act.

### **Ofcom's general duties**

3.15 In exercising our powers in relation to access-related conditions, Ofcom must act in a manner which is consistent with its general duties as set out section 3 and 4 of the Act.

3.16 In carrying out its functions, Ofcom's principal duty under section 3(1) of the Act is to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition.

3.17 Section 3(2) sets out the objectives that Ofcom is required to secure in the carrying out of its functions. These include: the availability throughout the United Kingdom of a wide range of electronic communications services; the availability throughout the United Kingdom of a wide range of television and radio services which (taken as a whole) are both of high quality and calculated to appeal to a variety of tastes and

interests; and the maintenance of a sufficient plurality of providers of different television and radio services.

3.18 In this regard, it is worth noting that Recital 10 of the Access Directive acknowledges that the policy objective of ensuring cultural diversity and media pluralism in the area of digital television may be a relevant consideration in the application of access-related conditions in respect of APIs. We also note the obligations of Member States under Article 17(2) and Article 18 of the Framework Directive, which are relevant in this context. These require Member States to:

- encourage the use of standards and/or specifications for the provision of services, technical interfaces and/or network functions, to the extent strictly necessary to ensure interoperability of services and to improve freedom of choice for users<sup>26</sup>;
- in order to promote the free flow of information, media pluralism and cultural diversity, encourage providers of digital interactive television services for distribution to the public on digital television platforms to use an open API<sup>27</sup>; and
- encourage proprietors of APIs to make available on fair, reasonable and non-discriminatory terms and against appropriate remuneration all such information as is necessary to enable providers of digital interactive television services to provide all services supported by the API in fully functional form<sup>28</sup>.

3.19 In performing our general duties, we are also required under section 3(4) of the Act to have regard to a range of other considerations, which appear to us to be relevant in the circumstances. These include:

- the desirability of promoting the fulfilment of the purposes of public service television broadcasting in the UK;
- the desirability of promoting competition in relevant markets;
- the desirability of encouraging investment and innovation in relevant markets;
- the desirability of encouraging the availability and use of high speed data transfer services throughout the UK; and
- the opinions of consumers in relevant markets and of members of the public generally.

3.20 Pursuant to section 4(1)(a) of the Act, in carrying out our functions in relation to electronic networks and services, Ofcom is also under a duty to act in accordance with the six Community Requirements. The six Community Requirements give effect, amongst other things, to the requirements of Article 8 of the Framework Directive. In summary, those requirements are:

- to promote competition in communications markets;
- to secure that Ofcom contributes to the development of the European internal market;

<sup>26</sup> Article 17(2), Framework Directive.

<sup>27</sup> Article 18(1)(a) Framework Directive.

<sup>28</sup> Article 18(2), Framework Directive.



- to promote the interests of all European Union citizens;
- to act in a manner which, so far as practicable, is technology-neutral;
- to encourage, to the extent Ofcom considers it appropriate, the provision of network access and service interoperability for the purposes of securing efficiency and sustainable competition in communications markets and the maximum benefit for the customers of providers of communications networks and services; and
- to encourage such compliance with certain international standards as is necessary for facilitating service interoperability and securing freedom of choice for the customers of communications providers.

### **Procedural requirements for setting an access-related condition**

- 3.21 The procedures for setting a condition under section 45 of the Act are set out in sections 48 – 48C of the Act. As regards an access-related condition, the consultation requirements are two-fold: the requirement to publish a consultation notice on the terms and effect of the proposed condition in accordance with section 48A; and, if Ofcom decides to proceed with the condition following the domestic consultation and considers the proposed condition would affect trade between Member States, the requirement to consult the European Commission, BEREC and the regulatory authorities in every other Member State.

## Section 4

# Sector context

- 4.1 This section sets out our understanding of the types of interactive services that are currently available, the enabling technologies, the services currently on offer and anticipated future developments.

## Categorising interactive services

- 4.2 There are a range of different interactive services and applications available to consumers from a number of different platforms and devices. We discussed the interactive services currently provided through the Sky platform in paragraph 2.27.
- 4.3 Despite their diversity, the services that are currently available can generally be grouped under one of four broad categories:
- 4.3.1 **Enhanced TV** - The application provides access to additional information and/or video feeds that complement the broadcast TV programme. For example, overlay of statistics on a football match or access to alternative camera angles. In some cases, such as 'play along' services, the content and functionality of the service may be synchronised with what is happening in the programme.
  - 4.3.2 **Navigation and discovery** - The application provides alternative ways to discover and navigate to TV content. Examples include advanced search of programme metadata<sup>29</sup> and recommendations from social networks.
  - 4.3.3 **Contextual commercial services** - Services which have been developed to commercially exploit the TV channels and programmes. For example, interactive adverts or purchasing functionality on home shopping channels.
  - 4.3.4 **Standalone services** - Services which are not directly associated with the TV channels and programmes, but are accessed on the TV. For example, e-mail and banking services.

## Enabling technologies

- 4.4 Interactive services are available on all the main broadcast TV platforms – satellite, terrestrial and cable. Whilst implementations vary significantly between platforms, the architectural building blocks are the same. These include the device on which the service is displayed, the way two-way interactivity is enabled and the software environment in which the applications are run.

## Devices

- 4.5 Traditionally, interactive services have been software applications that run directly on a digital TV set or a STB connected to a TV. More recently, however, with the widespread adoption of smartphones and tablets, interactive services have also been developed for these devices. These second screen services are able to achieve differing levels of synchronisation and interaction with television channels and programmes through a range of different technologies. In this document, for brevity,

<sup>29</sup> Programme information such as the synopsis, cast, genre of programme etc.

we use the term STB to describe the device that runs the interactive application, but it should be noted that interactive services are often run on the TV itself. This is particularly the case for TVs with digital terrestrial TV (“DTT”) tuners and the latest generation of smart TVs.

## Return path

- 4.6 Many of the most popular interactive services to date have not required data to be sent from the viewer back to the provider of the service. The interactive functionality of these ‘off-line’ services is programmed into the application that runs on the viewer’s STB. A number of enhanced TV services operate in this way, for example, the BBC Wimbledon red button application allows viewers to browse information and select different video feeds without having to connect online.
- 4.7 For more personalised services (such as TV banking) or those that require information to be sent from the viewer to the service provider (such as a voting application on a talent show) a return path is required. The return paths can be narrowband (using a dial-up modem) or broadband. The time required to establish the return path connection and the data rates it can support are key determinants of the functionality that can be included in the interactive service. Broadband return paths can offer instantaneous interaction with the service provider (compared to the circa 30 seconds required to establish a dial-up modem connection) and the higher bandwidth also enables the delivery of video and audio content (dial-up modems are typically limited to delivering text and small static images). Interactive services on the Sky platform currently use a dial-up modem, whereas Virgin Media STBs, for example, support a broadband return path.
- 4.8 In addition to the improved functionality that they enable, broadband return paths also reduce the need to broadcast the executable code and media assets<sup>30</sup> associated with an application via the broadcast channel. This is particularly important on transmission platforms, such as DTT, where broadcast capacity is scarce. The broadband return path can change the economics of distributing interactive services, potentially giving viewers access to a far wider choice of services.
- 4.9 For any given TV platform the percentage of STBs that are connected to the return path is important as unconnected STBs create a barrier to consumer use. To maximise the addressable base for interactive services, connecting a new STB to the customer’s telephone line has been part of Sky’s standard install procedure since the launch of Sky Digital in the late 1990s. This high level of connectivity ensured that the platform was attractive to providers of applications and hence attractive to subscribers.
- 4.10 The popularity of catch-up and other VoD<sup>31</sup> services on broadband enabled STBs has given viewers a greater incentive to connect. Out of 4.67m Sky+ HD boxes<sup>32</sup>, 2.28m<sup>33</sup> are now connected to broadband.

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<sup>30</sup> Interactive services on the Sky platform are not usually permanently stored in the STB. They are continuously broadcast via satellite on a carousel and downloaded when required. The application is comprised of the computer code that defines the functionality as well as images and text which are displayed on the screen.

<sup>31</sup> Video-on-Demand.

<sup>32</sup> Sky’s results – nine months to 31<sup>st</sup> March 2013

([http://corporate.sky.com/documents/pdf/latest\\_results/q3\\_1213\\_kpi\\_summary.pdf](http://corporate.sky.com/documents/pdf/latest_results/q3_1213_kpi_summary.pdf)).

## Middleware and APIs

- 4.11 The final building block for the provision of interactive services is the software operating system (often called the middleware). This is the software 'engine' that resides on the TV or STB which runs the application created by the interactive service providers. The middleware determines what programming language is used to create the application (e.g. HTML or C) and the extent to which the application can access features of the device.
- 4.12 The middleware provides a range of APIs which are the software libraries and functions that the individual interactive services access. Typically there will be a set of APIs that allow the application to know what buttons have been pressed on the remote control, and another to allow the application to display information on the TV screen. APIs are also used to allow applications to use the return path.
- 4.13 As STBs have increased in functionality, so have the range of APIs. For example, APIs can be provided to allow access to content stored on a PVR<sup>34</sup> and with the advent of second screen devices, APIs have been developed that allow the STB and second screen to communicate over the viewer's local network.
- 4.14 Different TV platforms have used different technical standards for their middleware, with the TV platforms in the UK currently using at least five different middleware technologies<sup>35</sup>. Developers of interactive services therefore have to re-author their services in multiple programming languages if they want to be present on all platforms. The costs associated with this re-authoring may be one of the reasons broadcasters have reduced their investment in interactive TV.

## Current services

- 4.15 There has been a steady decline in the number of 'traditional' interactive services offered on digital TV platforms over recent years. However, there are a small number of services still available which are popular with viewers.

## Enhanced TV

- 4.16 In terms of enhanced TV content delivered over digital TV platforms, there are only a limited number of broadcasters that are currently active in this area, predominantly Sky and the BBC. For instance, the BBC provides its red button service which utilises the linear broadcast stream across all platforms and its 'Connected Red Button' service, which uses a broadband connection, on Virgin's TiVo STB. The BBC's red button service has been very popular with 10.59m users<sup>36</sup> of red button services during Wimbledon this year and 6.2m<sup>37</sup> during Glastonbury. Red button services were also available during last year's Paralympics Games on Channel 4.
- 4.17 Beyond Sky and the BBC, there are few broadcasters<sup>38</sup> with enhanced TV services on the main TV screen. Other broadcasters, such as ITV and Channel 4 are active in

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<sup>33</sup> Sky's results – nine months to 31<sup>st</sup> March 2013

([http://corporate.sky.com/documents/pdf/latest\\_results/q3\\_1213\\_kpi\\_summary.pdf](http://corporate.sky.com/documents/pdf/latest_results/q3_1213_kpi_summary.pdf)).

<sup>34</sup> Personal video recorder with a hard disk enabling viewers to record programmes.

<sup>35</sup> MHEG, Liberate, OpenTV, Flash, HTML5.

<sup>36</sup> <http://www.bbc.co.uk/ariel/23226009>.

<sup>37</sup> <http://www.bbc.co.uk/mediacentre/latestnews/2013/digital-glastonbury.html>.

<sup>38</sup> 4Music has recently launched a red button service (through Box TV, its joint venture with Bauer Media) which provides access to a set of IP delivered music channels.

terms of providing applications on second screen devices, such as smartphones and tablets e.g. the Britain's Got Talent and Million Pound Drop Live apps.

- 4.18 There are currently no enhanced TV services on the Sky platform that utilise the two-way return path<sup>39</sup>. In previous years the BBC has made limited use of the return path, for example to take credit card donations for Children in Need.

### **Navigation and discovery**

- 4.19 The EPG remains the primary mechanism by which viewers browse and navigate to content on TV platforms. In recent years EPG functionality has been improved with the introduction of search and recommendation functionality.
- 4.20 The latest innovation in the sector is to provide EPG-like functionality on second screens. These second screen applications can operate independently of the TV platform, but provide greater benefits to viewers when integrated – allowing the second screen to access data from the STB and also control it, such as changing the TV channel or setting up a recording on the PVR. As described above, the integration of first and second screens typically requires access to APIs on the STB.

### **Contextual commercial services**

- 4.21 There are relatively few commercial services currently linked to TV programming.
- 4.22 Interactive adverts, which allow the viewer to access more information on the TV or to go online to send information to the advertiser, have historically been offered on Sky channels. Our understanding is that these services are not currently being used by advertisers.
- 4.23 Use of interactive betting services on the main screen appears to be low. In 2012 only 1% of 'remote' betting was carried out via interactive/digital TV compared to 2.5% via a mobile phone and 11% via the Internet<sup>40</sup>. Sky continues to offer access to its own betting services via the red button (which are loosely associated with its sport channels) and 'pay per play' games provide revenues by using the dial-up modem to place calls to premium rate numbers.
- 4.24 QVC allows its viewers to make purchases via the red button whilst viewing products promoted on the TV channel.

### **Standalone services**

- 4.25 In the early 2000s there were a range of standalone services available on the Sky platform. These ranged from e-mail, through to online grocery shopping and personal banking. These services were first introduced when broadband take-up was low and e-commerce on the internet was less mature, but over subsequent years the consumer experience provided via broadband enabled PCs improved significantly, whilst the interactive services available on TV were constrained by the technology.
- 4.26 There are currently no third party standalone services on the Sky platform. However, there has been somewhat of a renaissance of such services on smart TVs.

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<sup>39</sup> We have categorised QVC's home shopping service as a contextual commercial services rather than an enhanced TV service.

<sup>40</sup> Gambling Commission – Industry Statistics 2009-2012. Table 9: Proportion of respondents gambling using different remote methods in the past four weeks (survey data on gambling participation).

Manufacturers are leveraging consumers' familiarity with apps on smartphones to promote their adoption on smart TVs. For example, Samsung's smart TVs carry applications from a wide range of providers, allowing viewers to check train times, make voice calls over the internet, check social media and even help perfect their Yoga poses.

- 4.27 Virgin Media also supports a number of third party apps on its TiVo STB such as YouTube, Spotify and Facebook.

## Looking Ahead

- 4.28 As highlighted above, there is some evidence of a renewed interest in 'second generation' interactive services – driven in part by the growth in connected smart TVs, broadband enabled STBs, smartphones and tablets. Improved functionality and performance has resulted in a more compelling consumer proposition, and a proven consumer demand for apps on smartphones and tablets could indicate that there may be similar demand on connected TVs.
- 4.29 There also seems to be interest in connected red button services. As discussed, the BBC has been developing services on Virgin Media's TiVo STB and we understand that the BBC would like to roll out more connected red button services to other platforms and devices<sup>41</sup>.
- 4.30 Whilst there is still fragmentation in terms of the middleware used on different platforms and devices, we understand from our discussions with developers of interactive services that there is a desire to move towards a common technology, with HTML5 often being cited. Whilst a transition of all platforms and devices could take many years, we understand that within the next one to three years this technology will be sufficiently mature that the majority of new devices could support it.
- 4.31 From a platform operator's perspective, it appears that recent developments in platform features have been focussed on improving discoverability of TV content and providing access to it on multiple devices both inside and outside of the home. There has been less noticeable development of the technologies to support enhanced TV and commercial services. However, the technologies being developed and deployed by platform operators to support more compelling television access also facilitate more advanced interactive services. As such, we anticipate that platforms will be well placed to respond to any resurgence in demand from viewers and application developers.

**Consultation Question 1** – *Do respondents agree with our description of the interactive services currently available and the potential developments over the next two to three years?*

<sup>41</sup>[http://downloads.bbc.co.uk/bbctrust/assets/files/pdf/regulatory\\_framework/service\\_licences/service\\_reviews/online\\_redbutton/repo](http://downloads.bbc.co.uk/bbctrust/assets/files/pdf/regulatory_framework/service_licences/service_reviews/online_redbutton/repo) page 60 "Future Direction".

## Section 5

# Considering the need for regulation

- 5.1 Prior to removing the Continuation Notice, we have a duty to consider if replacement conditions are necessary (as discussed in paragraphs 3.7 and 3.8).
- 5.2 This section sets out how we propose to consider the need for continued regulation. In particular, it sets out the information, in addition to that already provided by Sky in its submission and response to the section 135 information request, which we are seeking to inform our assessment.
- 5.3 We consider the key issues to be: understanding the demand for access to Sky's APIs from current and prospective users; and assessing whether there is a need to regulate such access. Also relevant to our assessment are views on likely technological developments in the next few years which may affect the type of services that can be delivered by third parties. We set out below a preliminary analysis of these issues based on the information available to us and the matters on which we are inviting views.

## Existing interactive services which make use of AC services

- 5.4 As set out in paragraph 2.27, Sky provided us with a list of the services supplied by each of the current users of AC services. This includes red button services, gaming, betting, commercial watermarking and other services, and is provided by nine third parties in addition to Sky itself.

## Usage and importance of AC services

- 5.5 As discussed in paragraph 2.26, while Sky has provided AC services to third parties since 1999, it has informed us that the number of third parties taking these services, and the range of interactive activities carried out by Sky's AC customers, have declined sharply over the last four years. In addition, Sky has told us that the set of consumer services provided today are relatively limited in comparison to the wider range of interactive services previously available via the Sky platform, including betting and gaming, alternative video feeds, information services, charitable donations, competitions, voting, broadcast of interactive advertisements, retail transactions, ticket sales, email, travel services and banking services.
- 5.6 Sky contends that the decline in usage of AC services is largely a result of the development of the internet which it considers to be a significantly more cost-effective means by which interactive service providers can provide their services to consumers, given the rapid increase in penetration of internet access and the rise in the capabilities of the internet for providing services to consumers.
- 5.7 Broadband take-up has grown significantly over recent years, rising from 31% of households in 2005 to 76% in 2012, now representing the vast majority of the 80% of homes with internet access<sup>42</sup>. In that context it is perhaps unsurprising that there has been a decline in third party provision of interactive services using the narrowband connection on Sky's STBs, for which access to Sky's authentication services is necessary.

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<sup>42</sup> Communications Market Report 2012, figure 1.3  
[http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr12/CMR\\_UK\\_2012.pdf](http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr12/CMR_UK_2012.pdf).

- 5.8 However, on-going demand for access to Sky's ASS, which enables the provision of red button services, amongst other interactive services, may be different. While the number of users of Sky's ASS has declined over recent years, there continues to be interest from third party service providers<sup>43</sup> and some of the consumer services which rely on ASS continue to be extremely popular. For example, as noted in paragraph 4.16, the BBC has enjoyed significant demand for its red button services, with 10.59m users accessing Wimbledon content through its red button service across TV platforms this summer, an increase of almost 50% from last year<sup>44</sup>.
- 5.9 Similarly, a reduction in the range of interactive services that are now available via the Sky platform does not necessarily mean the services which remain are no longer important or of value to service providers and end users. For example, on-screen commercial watermarking is an important service for broadcasters such as ESPN and Sky itself, who make their channels available to commercial premises (e.g. sports pubs) and use this service to help ensure that the premises has a commercial subscription which authorises them to show these channels. End-users benefit in turn by being able to watch these channels, not just in their homes but in pubs and clubs.

### **Alternative means of providing interactive services**

- 5.10 When considering different types of interactive services available to consumers, there is an important distinction to be made between situations where access to Sky's APIs is necessary in order to provide the service, and situations where there may be alternative ways of delivering these services without access to Sky's APIs.
- 5.11 For example, red button services which provide access to additional full-screen video feeds on the main screen TV, through Sky's STB, clearly require access to Sky's APIs. A broadcaster looking to enhance their linear TV channel by using red button services, providing viewers with the opportunity to choose different video feeds to enable viewing of different camera angles, commentary or matches, may not consider that there are viable alternatives – additional video feeds provided on a smaller second screen is unlikely to offer the same consumer experience. The same requirement to access Sky's APIs may be true for other types of enhanced TV services which involve direct interaction with the content of the linear broadcast.
- 5.12 In contrast, a standalone banking service (as previously provided via Sky's platform) will typically now be delivered through a PC, smartphone or tablet device, connected to the Internet; there may be no requirement either from third parties or end users for such services to be provided by means of Sky's TV platform.
- 5.13 However, for some types of interactive service it may more challenging to be definitive about whether access to Sky's APIs is required. In some cases there may be different ways of delivering the same type of interactive service and consumer experience – some of which rely on access to Sky's APIs and others which do not. For example, a shopping channel may provide its customers with a shopping service, integrating the interactive element of the service with its broadcast by making use of Sky's APIs. Alternatively, the interactive element of the shopping service may be provided either by calling a phone number displayed on the TV broadcast, or by

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<sup>43</sup> We understand there has been interest in Sky's ASS from four third parties over the last 12 months; one of these now has an ongoing contractual relationship with Sky for these services (and hence is one of the nine third parties referred to in paragraph 2.27) while another secured these services from Sky on a short term basis only.

<sup>44</sup> See footnote 36 and 37.



using a smartphone / tablet app which accesses information over the internet from the broadcaster's server, which is time synchronised with the TV broadcast.

- 5.14 Our assessment of the need to consider continued regulation will be informed by our understanding of the demand for access to Sky's AC services and whether there are alternative means for delivering interactive services. We are therefore interested in responses to the following questions.

**Consultation question 2** – *Will the services using Sky's APIs continue to be provided for the next two to three years? Do you anticipate volumes increasing, decreasing or remaining stable? Please explain your reasoning.*

**Consultation question 3** – *To what extent are there alternative means for the delivery of these different services? To what extent would alternative delivery represent a substitute for Sky's APIs? If they do not, why is that?*

### Ability to secure access to Sky's AC services

- 5.15 Sky has provided us with information concerning its contractual relationships with existing third party users of its AC services.
- 5.16 The contractual terms cover a number of areas including: service levels, application compliance and testing, security, charges, term duration and termination, liability, confidentiality, publicity and marketing.
- 5.17 Under the existing regulation, Sky is required to supply AC services on fair and reasonable terms and must not unduly discriminate in the provision of these services. In particular, the regulation requires charges for AC services to be reasonable and for Sky to publish these charges. To date, Ofcom has not received any formal disputes regarding Sky's regulatory obligations with respect to AC services.
- 5.18 In the last couple of years Sky has sought to enter into a revised standard agreement with users of ASS but this has not been achieved for the majority of users, resulting in temporarily extending the existing agreements on current terms instead. Consequently, it would appear that the contractual terms have typically remained unchanged for a period of time. Previously extensions have often been provided for a period of six months at a time, but more recently it appears that extensions have been agreed on a month by month basis<sup>45</sup>.
- 5.19 As set out below, we are seeking information from third parties concerning the part played by existing regulation under the Continuation Notice in securing their current contracts with Sky for AC services. Even if there is evidence to suggest that securing access through negotiation may not be straightforward, it is not necessarily the case that regulatory intervention would be appropriate. There may be cases where reaching commercial agreement in this area is challenging for good reasons. For example, there may be technical or functional limitations of the APIs available which may require investing in further software development; or there may be a tension between Sky's desire to maintain a consistent user interface on its platform and a third party's desire to maintain a consistent user experience for its interactive service across all TV platforms. As in all commercial negotiations, the parties are likely to have different interests in relation to a range of issues but nonetheless may still be able to reach a satisfactory resolution via the negotiation process.

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<sup>45</sup> Source: Sky's response of June 25 2013 to the section 135 information request.

- 5.20 On the other hand, Sky is a vertically integrated firm providing interactive services for end-users via its platform; in principle this could influence its willingness to negotiate access with potential competitors in the absence of regulation. Issues that may be relevant to the question of incentives include: the substitutability of the downstream services provided by Sky and third parties, the extent to which third parties have an alternative route to market, and the extent to which consumers would expect to have access to third party services via their STB.

**Consultation question 4** – *To what extent has the existence of current regulation been relevant to negotiations? Please explain your reasoning and provide any evidence you might have to support your position.*

**Consultation question 5** – *What are your views on your ability to secure access to Sky's access control services in the absence of regulation and your reasons for that view?*

## Prospective interactive services on Sky's platform

- 5.21 As discussed in paragraph 4.28 and 4.29, there are a number of developments which highlight the potential for new interactive services to provide benefits to consumers through a richer enhanced TV experience, improved navigation and discovery of content, and greater integration with second screens and other devices. Some providers of these interactive services may be interested in accessing Sky's APIs in order to bring these services and benefits to end-users on Sky's platform.
- 5.22 As set out in paragraph 4.3, it is helpful to categorise broad types of services that are available which may be relevant to the consideration of access to Sky's APIs for prospective services in the future:
- **Enhanced TV.** Interactive services which directly relate to the broadcast content or content displayed on the main TV screen. Examples include traditional red button services or the BBC's Connected Red Button service on Virgin Media's TiVo STB.
  - **Navigation and discovery.** Services which facilitate navigating or discovering content, such as content recommendations. Examples include Zeebox's iPad app.
  - **Contextual commercial services.** Services which provide additional revenue streams, potentially integrated with the linear TV broadcast. Examples include targeted advertising and shopping services, such as Marks & Spencer's app on Samsung smart TVs.
  - **Standalone services.** Content services which are an independent standalone service on the main TV screen. Examples include the BBC iPlayer service.
- 5.23 For some interactive services, such as enhanced TV services, consumer interest may vary depending on the genre of content on the main TV screen. For example, red button services have been used to enhance the broadcast of sports programming, enabling viewers to select different camera angles, commentaries or even matches when there are fixture clashes, or providing access to text services with match statistics. Similarly, red button services for news programming have provided access to text services with related news stories.

- 5.24 Developments in platform technology are also relevant as these may enable the provision of new types of services, or the provision of existing services in new ways. From a consumer perspective, it is the former innovation that is likely to offer more direct benefits and greater potential for a step-change in the way in which consumers interact with TV content. For example, while watching a TV drama show, a viewer might use an interactive application to bring up a list of cast members with biographical information and filmography on their tablet device, which they could then use to discover other shows or movies with the same actors. It might then be possible to use the same tablet application as a remote control from which to select one of those movies to watch on the main TV screen. Such interactive applications have the potential to offer a richer and more informative experience for consumers, as well as making it easier to discover and watch content they find interesting.
- 5.25 However, new ways of provisioning existing services may well lead to greater functionality which in turn enables new types of services to be made available, of the nature described above. For example, Sky has informed us<sup>46</sup> that as a greater number of its STBs are connected to a router within the home, and hence to the internet, Sky is looking at ways in which the broadband Ethernet connection to the STB (rather than the narrowband dial-up connection) can be used to provide services and functionality that are currently provided over the phone line. Specifically, Sky has told us that it will shortly be enabling its STBs to perform callbacks (e.g. for pay-per-view purchases) via broadband rather than over the phone line.
- 5.26 As a result of increased functionality, for example access to Sky's APIs over a broadband connection, we note there may be greater interest in accessing Sky's APIs from a wider group of third parties than the current users of AC services, to the benefit of end-users.

### **Alternative means of providing interactive services**

- 5.27 As for interactive services which currently make use of AC services, it is important to consider situations where prospective interactive services would require access to Sky's APIs or, alternatively, could be delivered in other ways.
- 5.28 For example, an enhanced TV interactive service on a second screen, which relates directly to the broadcast content on the main TV screen, can be delivered in different ways, depending on the nature of the interactive service being offered. For some such interactive services, synchronising the second screen content with the content on the main TV screen may be a key functional requirement. However, there may be different approaches to providing this functionality: for example, through access to Sky's APIs; through audio-content recognition technology such as the Shazam for TV service<sup>47</sup>; or through over-the-top ("OTT") access to the broadcaster's servers in the case of live broadcast TV on the main TV screen.
- 5.29 As another example, standalone content services such as OTT VoD services may be provided through access to a STB's APIs, as is the case with YouView's STB. However, we note that OTT movie service providers have typically focussed on making their services available on smart TVs and games consoles as well as the internet; for example, Netflix, LoveFilm and Blinkbox are all available on Samsung, Sony and LG smart TVs, as well as Microsoft's Xbox and Sony's PS3.

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<sup>46</sup> Source: Sky's response of June 25 2013 to the section 135 information request.

<sup>47</sup> e.g. <http://www.shazam.com/music/web/pressrelease.html?nid=NEWS20120917035849>.

- 5.30 Where there are alternative means of providing the interactive service, the approach adopted may well be influenced by factors such as implementation costs, the implications for the consumer experience and broader benefits for the service provider. For example, in some situations a service provider may see benefits in delivering its interactive service using a smartphone / tablet app given the increasing reach of devices using iOS and Android and resulting economies of scale in application development (rather than developing applications for each TV platform, potentially across different countries<sup>48</sup>). In addition, the service provider may consider there to be resulting benefits from the consistency of user interface achieved across TV platforms, and a more direct relationship with the end-user and associated access to usage data.
- 5.31 Given industry developments, we recognise that there may be interest in providing interactive services to consumers on Sky's platform from a wider group of third parties than the current users of AC services. We are therefore interested in respondents' views on the following questions.

**Consultation question 6** – *What are your views on the type of interactive services that consumers may expect to access in the next two to three years? Are you planning or are you aware of new services in the pipeline which may require access to Sky's APIs? If so, describe the nature of the services in question, when provision of those services could begin and why access is required. What constraints are relevant in the development of new interactive services?*

**Consultation question 7** – *What platform software developments, relevant to the delivery of interactive services, do you anticipate in the next two to three years? What influence will that have on the type of interactive services that can be provided and how they are provided, including alternatives to requiring access to Sky's APIs?*

## Next steps

- 5.32 In the light of responses to our consultation, we will assess whether we should consider setting replacement access-related conditions on Sky, or whether we should simply remove the Continuation Notice so that the existing regulation falls away.

## Removal of the AC Continuation Notice

- 5.33 Understanding the current and likely future demand for AC services is central to assessing the need for any ongoing regulation. If, as a result of the consultation, there is insufficient evidence of demand to support further consideration of replacement conditions on Sky, we will remove the Continuation Notice on the basis that regulation is unnecessary, as Sky has put forward.

## Outline of further analysis that may be appropriate

- 5.34 However, if the consultation responses provide evidence of demand for access to AC services which supports further consideration of replacement conditions, we will need to examine the case for regulation further before removing the Continuation Notice. Relevant considerations would include:

<sup>48</sup> In many cases service providers and application developers seek to make their services available in multiple countries rather than in the UK alone.

- the nature of the interactive services and whether they need access to Sky's APIs or could be provided in alternative ways;
  - the ability of Sky and third parties to agree access to Sky's APIs on appropriate terms, absent regulation; and
  - the benefit for consumers of regulatory intervention assessed against the relevant policy objectives and duties, taking into account the potential regulatory burden and implications for investment and innovation.
- 5.35 The first point would draw on responses to the consultation, focussing on interactive services which can be provided to end-users only if they have access to Sky's APIs, or where delivery of the interactive service by an alternative means would be a poor substitute, for example, resulting in a significantly inferior consumer service. The nature of the interactive service is therefore important.
- 5.36 The second point would also draw on respondents' views on their ability to secure access to Sky's APIs through commercial negotiation. Sky's incentives would also be relevant to our assessment. For example, Sky has informed us that it has strong incentives to maximise the attractiveness of its platform to end-users given that it considers it competes against a range of platforms that offer consumers access to audiovisual and other services. We also note that Sky is a vertically integrated company which provides not only platform access services, but also broadcasts channels and retails pay TV services; this would also be a relevant consideration.
- 5.37 Finally, we would need to consider whether it is appropriate to impose access-related conditions with reference to our duties set out in sections 73 and 74 of the Act. In addition to our general duties, we would need to assess whether imposing regulation would be to the benefit of end-users and would assist in the purpose of securing: efficiency, sustainable competition, investment and innovation. In doing so there is no requirement to establish dominance. In addition, as noted in paragraph 3.17, the recitals to the Access Directive (from which sections 73 and 74 derive) indicate that media plurality and cultural diversity objectives may also be relevant. The nature of the interactive service and the type of content involved may therefore be a consideration. Any resulting conditions would need to be objectively justifiable, not unduly discriminatory, proportionate and transparent (see paragraphs 3.9 to 3.11).
- 5.38 We would also look to assess the impact of any proposed replacement conditions. Sky has submitted<sup>49</sup> that the application of AC conditions to Sky is burdensome, inhibits innovation on the Sky platform, and therefore delays or prevents new products and services being made available to consumers. Sky has not provided any estimates of the associated costs, with the exception of the direct costs of testing new third party applications which totalled £144,000 in 2012<sup>50</sup>, though it does state that when it is considering new services, it also needs (for example) to factor in whether third party access would be required. We would expect to investigate these issues further, taking account of responses to this consultation, in assessing the likely impact of new regulation on Sky, other stakeholders and consumers.
- 5.39 We must consult on any conditions that we propose to set following these considerations. Further, we are also required under section 48 of the Act, to consult the European Commission, BEREC and the regulatory authorities in every other Member State before setting access-related conditions.

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<sup>49</sup> Source: Sky's response of June 25 2013 to the section 135 information request.

<sup>50</sup> Source: Sky's response of June 25 2013 to the section 135 information request.

5.40 The consultation questions set out in this section and Section 4 are listed together in Annex 4.

## Annex 1

# Responding to this consultation

## How to respond

- A1.1 Ofcom invites written views and comments on the issues raised in this document, to be made **by 5pm on 19<sup>th</sup> September 2013**.
- A1.2 Ofcom strongly prefers to receive responses using the online web form at <http://stakeolders.ofcom.org.uk/consultations/review-access-control/>, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 3), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.
- A1.3 For larger consultation responses - particularly those with supporting charts, tables or other data - please email [Accesscontrol@ofcom.org.uk](mailto:Accesscontrol@ofcom.org.uk) attaching your response in Microsoft Word format, together with a consultation response coversheet.
- A1.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.
- Elizabeth Gannon  
Floor 4  
Competition Group  
Riverside House  
2A Southwark Bridge Road  
London SE1 9HA
- Fax: 020 7783 4109
- A1.5 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.
- A1.6 It would be helpful if your response could include direct answers to the questions asked in this document, which are listed together at Annex 4. It would also help if you can explain why you hold your views and how Ofcom's proposals would impact on you.

## Further information

- A1.7 If you want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please contact Elizabeth Gannon on 020 7981 3501.

## Confidentiality

- A1.8 We believe it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all responses on our website, [www.ofcom.org.uk](http://www.ofcom.org.uk), ideally on receipt. If you think your response should be kept confidential, can you please specify what part or whether

all of your response should be kept confidential, and specify why. Please also place such parts in a separate annex.

- A1.9 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and will try to respect this. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.10 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's approach on intellectual property rights is explained further on its website at <http://www.ofcom.org.uk/about/accoun/disclaimer/>

## Next steps

- A1.11 Following the end of the consultation period, Ofcom intends to publish a further consultation or a statement, depending on responses, early next year.
- A1.12 Please note that you can register to receive free mail Updates alerting you to the publications of relevant Ofcom documents. For more details please see: [http://www.ofcom.org.uk/static/subscribe/select\\_list.htm](http://www.ofcom.org.uk/static/subscribe/select_list.htm)

## Ofcom's consultation processes

- A1.13 Ofcom seeks to ensure that responding to a consultation is easy as possible. For more information please see our consultation principles in Annex 2.
- A1.14 If you have any comments or suggestions on how Ofcom conducts its consultations, please call our consultation helpdesk on 020 7981 3003 or e-mail us at [consult@ofcom.org.uk](mailto:consult@ofcom.org.uk) . We would particularly welcome thoughts on how Ofcom could more effectively seek the views of those groups or individuals, such as small businesses or particular types of residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.15 If you would like to discuss these issues or Ofcom's consultation processes more generally you can alternatively contact Graham Howell, Secretary to the Corporation, who is Ofcom's consultation champion:

Graham Howell  
Ofcom  
Riverside House  
2a Southwark Bridge Road  
London SE1 9HA

Tel: 020 7981 3601

Email [Graham.Howell@ofcom.org.uk](mailto:Graham.Howell@ofcom.org.uk)



## Annex 2

# Ofcom's consultation principles

A2.1 Ofcom has published the following seven principles that it will follow for each public written consultation:

### Before the consultation

A2.2 Where possible, we will hold informal talks with people and organisations before announcing a big consultation to find out whether we are thinking in the right direction. If we do not have enough time to do this, we will hold an open meeting to explain our proposals shortly after announcing the consultation.

### During the consultation

A2.3 We will be clear about who we are consulting, why, on what questions and for how long.

A2.4 We will make the consultation document as short and simple as possible with a summary of no more than two pages. We will try to make it as easy as possible to give us a written response. If the consultation is complicated, we may provide a shortened Plain English Guide for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.

A2.5 We will consult for up to 10 weeks depending on the potential impact of our proposals.

A2.6 A person within Ofcom will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organisations interested in the outcome of our decisions. Ofcom's 'Consultation Champion' will also be the main person to contact with views on the way we run our consultations.

A2.7 If we are not able to follow one of these principles, we will explain why.

### After the consultation

A2.8 We think it is important for everyone interested in an issue to see the views of others during a consultation. We would usually publish all the responses we have received on our website. In our statement, we will give reasons for our decisions and will give an account of how the views of those concerned helped shape those decisions.

## Annex 3

# Consultation response cover sheet

- A3.1 In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website, [www.ofcom.org.uk](http://www.ofcom.org.uk).
- A3.2 We have produced a coversheet for responses (see below) and would be very grateful if you could send one with your response (this is incorporated into the online web form if you respond in this way). This will speed up our processing of responses, and help to maintain confidentiality where appropriate.
- A3.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to complete their coversheet in a way that allows Ofcom to publish their responses upon receipt, rather than waiting until the consultation period has ended.
- A3.4 We strongly prefer to receive responses via the online web form which incorporates the coversheet. If you are responding via email, post or fax you can download an electronic copy of this coversheet in Word or RTF format from the 'Consultations' section of our website at [www.ofcom.org.uk/consult/](http://www.ofcom.org.uk/consult/).
- A3.5 Please put any parts of your response you consider should be kept confidential in a separate annex to your response and include your reasons why this part of your response should not be published. This can include information such as your personal background and experience. If you want your name, address, other contact details, or job title to remain confidential, please provide them in your cover sheet only, so that we don't have to edit your response.

## Cover sheet for response to an Ofcom consultation

### BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

### CONFIDENTIALITY

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing  Name/contact details/job title

Whole response  Organisation

Part of the response  If there is no separate annex, which parts?

If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

### DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.

Name

Signed (if hard copy)

**Annex 4**

## Consultation questions

**Consultation Question 1** – Do respondents agree with our description of the interactive services currently available and the potential developments over the next two to three years?

**Consultation question 2** – Will the services using Sky's APIs continue to be provided for the next two to three years? Do you anticipate volumes increasing, decreasing or remaining stable? Please explain your reasoning.

**Consultation question 3** – To what extent are there alternative means for the delivery of these different services? To what extent would alternative delivery represent a substitute for Sky's APIs? If they do not, why is that?

**Consultation question 4** – To what extent has the existence of current regulation been relevant to negotiations? Please explain your reasoning and provide any evidence you might have to support your position.

**Consultation question 5** – What are your views on your ability to secure access to Sky's access control services in the absence of regulation and your reasons for that view?

**Consultation question 6** – What are your views on the type of interactive services that consumers may expect to access in the next two to three years? Are you planning or are you aware of new services in the pipeline which may require access to Sky's APIs? If so, describe the nature of the services in question, when provision of those services could begin and why access is required. What constraints are relevant in the development of new interactive services?

**Consultation question 7** – What platform software developments, relevant to the delivery of interactive services, do you anticipate in the next two to three years? What influence will that have on the type of interactive services that can be provided and how they are provided, including alternatives to requiring access to Sky's APIs?

## Annex 5

# The Access Control Continuation Notice

### **CONTINUATION NOTICE TO A CLASS OF PERSONS DEFINED AS THE LICENSEE FOR THE PURPOSES OF THE PROVISION OF ACCESS CONTROL SERVICES UNDER PARAGRAPH 9 OF SCHEDULE 18 TO THE COMMUNICATIONS ACT 2003**

#### **Notice that the conditions set out in Schedule 1 to this notice will have effect from 25th July 2003**

1. The Director General of Telecommunications ('the Director'), in accordance with Paragraph 9 of Schedule 18 to the Communications Act 2003 ('the Act') hereby gives notice to a class of persons defined as the Licensee for the purposes of the provision of Access Control Services ('the Licensee') that the conditions set out in the licence granted by the Secretary of State for Trade and Industry on 31 August 1999 to the Licensee under section 7 of the Telecommunications Act ('the Original Licence') and set out in Schedule 1 to this notice, will continue to have effect from 25th July 2003 as modified and to the extent set out in Schedule 1 ('the Continued Provisions').

2. The Director considers, for the reasons set out in the statement which the Director will publish, that each of the Continued Provisions listed in Schedule 2 to this notice, corresponds to one or more of the provisions contained in Paragraph 9(4) of Schedule 18 to the Act.

3. The modifications set out in the Continued Provisions are made:

- a) to secure that the Continued Provisions continue to have effect whilst this notice is in force; and, as appropriate,
- b) to ensure that a requirement of the Original Licence must continue to be met for so long as this notice remains in force.

4. Any directions, determinations, consents and other provisions made by or under the Original Licence which have been given or made for the purposes of the Continued Provisions and, in accordance with Paragraphs 9(8)(b) and (c) of Schedule 18 to the Act are to remain in force for so long as this notice is in force.

5. This notice shall continue to have effect until the Director has given a further notice to the Licensee in accordance with Paragraph 9 of Schedule 18 to the Act that this notice shall cease to have effect.

6. The Director issued a consultation as to his proposals to continue the conditions on 3 July 2003 and requested comments by 14 July 2003. The Director has taken into account the comments he received during that consultation.

7. In this notice, except as otherwise provided or unless the context otherwise requires, words or expressions shall have the meaning assigned to them and otherwise any word or expression shall have the same meaning as it has in the Act. For the purposes of interpreting this notice, headings and titles shall be disregarded.

**DAVID ALBERT EDMONDS**  
DIRECTOR GENERAL OF TELECOMMUNICATIONS  
23 July 2003

## Schedule 1

In accordance with the continuation notice, the conditions of the Licence set out in this Schedule will continue to have effect as modified and to the extent set out below (“the Continued Provisions”).

### Interpretation

1. In this Schedule, except as otherwise provided or unless the context otherwise requires, words or expressions shall have the meaning assigned to them. Expressions cognate with those referred to in this Schedule shall also be construed accordingly. For the purposes of interpreting this Schedule, headings and titles shall be disregarded.

2. The Interpretation Act 1978 shall apply for the purposes of interpreting this Schedule as if it were an Act of Parliament.

3. For the purpose of interpreting the Continued Provisions in this Schedule the following definitions shall apply:

“Access Control Services” means telecommunication services, other than Network Services, Electronic Programme Guide Services or Conditional Access Services, by means of which the supply to end-users of a Relevant Other Telecommunication Service is controlled and which are provided to any person, including the Licensee, providing telecommunication services and without prejudice to the generality of the foregoing includes:

- i. Message Processing Services, that is to say any encryption, scrambling or other processing of Messages associated with or incorporated in a Relevant Other Telecommunication Service of any description prior to a transmission to an Access Device;
- ii. Authentication Services, that is to say either or both of:
  - A. services which identify an end-user or an Access Device in order to permit or deny access of that end-user or access device to a Relevant Other Telecommunication Service; or
  - B. services which identify a Relevant Other Telecommunication Service in order to permit it to operate with an Access Device;
- iii. Access Device Management Services, that is to say the actuation, control or operation, or the remote actuation, control or operation of Access Devices;
- iv. Selection Services, that is to say the processing by an Access Device or the preparation and transmission to an Access Device of Messages which allow an end-user to initiate access to a Relevant Other Telecommunication Service or to select from a number of Relevant Other Telecommunication Services;
- v. Subscriber Management Services, that is to say either or both of:
  - A. the preparation of and the preparation and supply, adaptation of, or adaptation and supply to end-users of Essential Components; or
  - B. the preparation and transmission to Access Devices of Messages giving effect to end-users’ decisions to subscribe to a Relevant Other Telecommunication Service;

“Access Control Services Business” means the business of providing Access Control Services and includes the running of such parts of the Applicable Systems as are used for the provision of those services, and the installation, maintenance, adjustment, repair, alteration, moving, removal or replacement of such parts and any apparatus comprised therein;

“Access Control System” means a telecommunication system by means of which Access Control Services may be provided and to the extent that the telecommunication system concerned is so used and does not include a Transmission System run by the person providing the Access Control Services;

“Access Device” means any device in electronic or tangible form which processes Messages so as to permit or deny an end-user access to a Relevant Other Telecommunication Service or to permit or deny a Relevant Other Telecommunication Service access to an end-user;

“Applicable Systems” means telecommunications systems of any description by means of which there may be provided but only in so far as there is actually provided Access Control Services except that such a telecommunication system run by a person other than the person providing particular Access Control Services shall not be treated as an Applicable System by reason only of the fact that there are conveyed by it without distinction Messages comprising such Access Control Services together with Messages comprising other services;

“Associated Person” means any member of the Licensee's Group or a person with a Participating Interest in a member of the Licensee's Group or in whom a member of the Licensee's Group has a Participating Interest;

“Condition” means a Continued Provision in this Schedule;

“Conditional Access Services” means telecommunication services (including services which are treated as telecommunication services pursuant to Regulation 8(2) and paragraph 1(b) of Schedule 1 to the Advanced Television Services Regulations 1996 (SI 1996/3151) by means of which access to Digital Television Services may be controlled so that only those viewers who are authorised to receive such services do so and includes –

- i. Encryption Services that is to say –
  - A. any encryption or scrambling of signals for digital television services; and
  - B. the conveyance by the Applicable System of encryption or scrambling information;
- ii. Subscriber Authorisation Services that is to say –
  - A. the actuation or control or the remote actuation or control of decoders; or
  - B. the initial transmission of messages connected with (i) above;
- iii. Subscriber Management Services, that is to say
  - A. the preparation or preparation and supply to viewers of Essential Components; or
  - B. the preparation from viewers orders of instructions for authorisation signals for transmission to decoders. or both;



(c) "Technical Services" includes

- A. Encryption Services;
- B. Subscriber Authorisation Services;
- C. Subscriber Management Services; and
- D. Any other Conditional Access Services; or a part of any of the above which is of a technical nature where failure to provide such a part means that the broadcaster's digitally transmitted services could not be displayed to viewers.;

"Conditional Access System" means a telecommunication system by means of which access to Digital Television Services may be controlled so that only those viewers who are authorised to receive such services do so;

"Digital Television Services" has the same meaning as in Directive 95/47/EC of the European Parliament and the Council of 24 October 1995 on the use of standards for the transmission of television signals which was in force prior to its repeal by the Framework Directive;

"Director" means the Director General of Telecommunications or Ofcom as appropriate;

"Electronic Programme Guide Service" means a service which consists of—

- a) the listing or promotion, or both the listing and the promotion, of some or all of the programmes included in any one or more programme services the providers of which are or include persons other than the provider of the guide; and
- b) a facility for obtaining access, in whole or in part, to the programme service or services listed or promoted in the guide;

"Essential Component" means a component in electronic or tangible form supplied to end-users which is necessary in conjunction with other telecommunication apparatus run by the end-user for the reception of authorisation signals and thus to enable the end-user to access and use any Relevant Other Telecommunication Service;

"Framework Directive" means Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services;

"Group" means a Parent Undertaking and its subsidiary undertaking or undertakings within the meaning of section 258 of the Companies Act 1985 as substituted by section 21 of the Companies Act 1989; and "Licensee's Group" means a Group in respect of which the Licensee is either a Parent Undertaking or a subsidiary undertaking;

"Industrial or Intellectual Property" includes, without prejudice to its generality, patents, designs, know-how, and copyright;

"Interested Parties" means those persons (if any), other than the Licensee, with whom, in any particular case, the Director is required or considers it appropriate to consult;

"Licence" means the Continued Provisions in this Schedule;

"Licensee" means a class of persons defined as the Licensee for the purposes of the provision of Access Control Services;

“Major Office” means the Licensee's registered office (if the Licensee is a company with a registered office in the United Kingdom) and such other offices as the Director, having consulted the Licensee, may direct;

“Message” means anything falling within the following:

- a) speech, music and other sounds;
- b) visual images;
- c) signals serving for the impartation (whether as between persons and persons, things and things or persons and things) of any matter otherwise in the form of sounds or visual images; or
- d) signals serving for the actuation or control of machinery or apparatus;

“Network Service” means any of the following:

- i. a service consisting only of functions which enable end-users to send, receive or both Messages to or from one or more end-users, including functions which enable the establishment of a prior connection between such end-users;
- ii. a service which consists only of functions which could not practically be provided to any end-user in identical form by anybody other than the Licensee, because those functions are dependent upon the functions referred to in sub-paragraph (i) above;
- iii. any service which has been agreed by the Licensee and the Director;

“Parent Undertaking” has the same meaning as in section 258 of the Companies Act 1985, as substituted by section 21 of the Companies Act 1989;

“Participating Interest” has the same meaning as in section 260 of the Companies Act 1985 as amended by section 22 of the Companies Act 1989;

“Product” includes any item which is used for the provision of an Access Control Service;

“Regulated Supplier” means a person who the Director has determined to be a regulated supplier as set out in the determination published by the Director in June 2000 entitled “Decision As To The Status Of Sky Subscribers Services Limited As A Regulated Supplier in the Market for Access Control Services for Digital Interactive TV Services”;

“Relevant Intellectual Property Right” means any right, which is wholly or partly controlled by a member of the Licensee's Group, in Industrial or Intellectual Property or is subject to an agreement, an arrangement or concerted practice to which a member of the Licensee's Group is a party;

“Relevant Other Telecommunication Services” means telecommunication services, whether supplied by the Licensee or any other party, but not including:

- i. any of the services specified in Section 72(2)(a) to (f), of the Broadcasting Act 1990 other than licensable programme services specified in Section 46(1) of that Act which are conveyed for reception at different times in response to requests made by different users of the service;
- ii. Digital Television Services; or

iii. Network Services;

“Third Party” means a person who provides Relevant Other Telecommunication Services;

“Transmission System” means a telecommunication system by means of which Messages comprising Relevant Other Telecommunication Services are transmitted to consumers and any point to point telecommunication system connected thereto (including, without prejudice to the generality of the foregoing, a studio or outside broadcast link) which conveys such Messages to the point of reception by end-users and includes a multiplex and a cable system or a satellite transponder but does not include any telecommunication system or telecommunication apparatus which for the time being is or forms part of an Access Control System.

“Telecommunication Apparatus” means apparatus construed or adapted for use

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- a) in transmitting or receiving:
  - i. speech, music and other sounds;
  - ii. visual images;
  - iii. signals serving for the impartation (whether as between persons and persons, things and things or persons and things) of any matter otherwise than in the form of sounds or visual images; or
  - iv. signals serving for the actuation or control of machinery or apparatus which is to be or has been conveyed by means of a telecommunications system; or
- b) in conveying for the purposes of such a system, anything falling within paragraphs (i) to (iv) above. and for the purposes of this definition:

(1) apparatus is connected to a telecommunication system if it is being used, or is installed or connected for use –

- a) in transmitting or receiving anything falling within paragraphs (i) to (iv) above which is to be or has been conveyed by means of that system; or
- b) in conveying, for the purposes of that system, anything falling within those paragraphs; and reference in this sub-section (1) to anything, falling within paragraphs (i) to (iv) shall include references to electric, magnetic, electro-magnetic, electro-chemical or electro-mechanical energy;

(2) the connection to a telecommunication system of any other telecommunication system or any apparatus shall not be regarded as a connection if that other telecommunication system or that apparatus would not be so connected but for its connection to another telecommunication system.

(3) “convey” includes transmit, switch and receive and cognate expressions shall be construed accordingly.

(4) References to the supply of telecommunication apparatus do not include the making available of apparatus comprised or to be comprised in any of the Applicable Systems.

“Telecommunication Service” means any of the following, that is to say –

- a) a service consisting in the conveyance by means of a telecommunication system of;
  - i. speech, music and other sounds;
  - ii. visual images

- iii. signals serving for the impartation (whether as between persons and persons, things and things or persons and things) of any matter otherwise than in the form of sounds or visual images; or
  - iv. signals serving for the actuation or control of machinery or apparatus;
- b) a directory information service, that is to say, a service consisting in the provision by means of a telecommunication service of directory information for the purpose of facilitating the use of a service falling within paragraph (a) above and provided by means of that system; and
  - c) a service consisting in the installation, maintenance, adjustment, repair, alteration, moving, removal or replacement of apparatus which is or is to be connected to a telecommunication service

and for the purposes of this definition "convey" includes transmit, switch and receive and cognate expressions shall be construed accordingly.

"Telecommunication System" means a system for the conveyance, through the agency of electric, magnetic, electro-magnetic, electro-chemical or electromechanical energy, of-

- a) speech, music and other sounds;
- b) visual images;
- c) signals serving for the impartation (whether as between persons and persons, things and things or persons and things) of any matter otherwise than in the form of sounds or visual images; or
- d) signals serving for the actuation or control of machinery or apparatus.

and for the purposes of this definition:

(1) telecommunication apparatus which is situated in the United Kingdom and

- a)** is connected to but not comprised in a telecommunication system; or
- b)** is connected to and comprised in a telecommunication system which extends beyond the United Kingdom shall be regarded as a telecommunication system and any person who controls the apparatus shall be regarded as running the system.

(2) a telecommunication system is connected to another telecommunication system if it is being used, or is installed or connected for use, in conveying anything falling within paragraphs (a) to (d) above which is to be or has been conveyed by means of that other system; and

(3) the connection to a telecommunication system of any other telecommunication system or any apparatus shall not be regarded as a connection if that other telecommunication system or that apparatus would not be so connected but for its connection to another telecommunication system.

4. Any reference in any Condition in this Schedule, however expressed, to the Director notifying the Licensee about any matter, affording the Licensee an opportunity to make representations, taking representations made by the Licensee into account or explaining, or giving reasons for any matter to the Licensee, shall be without prejudice to any obligation of due process or similar obligation which the Director is or may be under by virtue of any rule or principle of law or otherwise.

5. Subject to paragraph 6 below, if the Director is considering whether a determination, direction or consent under any Condition in this Licence is appropriate, he shall notify the Licensee and any Interested Parties of his proposed decision or the options which he is

considering, and his reasons, and give them a reasonable opportunity to make representations. On making or refusing a determination or direction or giving or refusing consent, he shall notify the Licensee and Interested Parties of the determination, direction or consent or refusal, as the case may be, and his reasons.

6. Paragraph 5 does not apply in relation to any determination, direction or consent the procedure for which is otherwise set out in this Licence or any other enactment.

#### Exceptions and Limitations on Obligations in the Continued Provisions

7. Unless the context otherwise requires the Licensee's obligations have effect subject to the following exceptions and limitations.

8. The Licensee is not obliged to do anything which is not practicable.

9. The Licensee shall not be held to have failed to comply with an obligation imposed upon it by or under this Licence if and to the extent that the Licensee is prevented from complying with that obligation by any physical, topographical or other natural obstacle, by the malfunction or failure of any apparatus or equipment owing to circumstances beyond the control of the Licensee, by the act of any national authority, local authority or international organisation or as the result of fire, flood, explosion, accident, emergency, riot or war.

10. Nothing in this Licence shall require the Licensee to do anything which the Director has agreed would prejudice the security of the Licensee's Access Control Services Business or any apparatus comprised in it so that its ability to combat piracy is materially compromised.

11. Paragraphs 7 to 10 shall apply without prejudice to any limitation or qualification of the requirements imposed by or under any Continued Provision.

#### The Continued Provisions

##### **Condition 10**

##### **OBLIGATION TO SUPPLY ACCESS CONTROL SERVICES**

10.X This Condition shall apply to the Licensee only where the Director has determined the Licensee to be a Regulated Supplier in the market for Access Control Services for digital interactive TV services ("Regulated Supplier Determination") and to the extent specified in that Determination.

**10.1** Subject to such limitations as the Director may have determined in the Regulated Supplier Determination, where the Licensee is a Regulated Supplier, at the request of any Third Party who requires Access Control Services in order to supply a Relevant Other Telecommunication Service of any description, the Licensee shall supply such Access Control Services to that Third Party on fair and reasonable terms.

**10.2** Where the Licensee provides, or intends to provide, any Access Control Service in accordance with the offer referred to in paragraph 10.1 above, the Licensee shall co-operate with the Third Party and do whatever is necessary and reasonable to ensure interoperability of the Applicable Systems and associated apparatus to enable the Access Control Services to be provided and maintained.

**Condition 11**  
**INTELLECTUAL PROPERTY**

11.X This Condition shall apply to the Licensee only where the Director has determined the Licensee to be a Regulated Supplier in the market for Access Control Services for digital interactive TV services ("Regulated Supplier Determination") and to the extent specified in that Determination.

**11.1** Where it appears to the Director that any Relevant Intellectual Property Right has been, is being or is likely to be exercised (whether by the Licensee or by any other person in pursuance of an agreement, arrangement or concerted practice to which the Licensee is a party) so as to prevent:

- a) any Access Control System, Access Device, Conditional Access System, Transmission System, Essential Component or other telecommunication system or telecommunication apparatus which may lawfully be connected to any of the Applicable Systems, from being so connected either at all or on reasonable charges, terms and conditions; or
- b) any Access Control Service which may lawfully be provided by means of the Applicable Systems, from being so provided or obtained either at all or on reasonable charges, terms and conditions; he may direct the Licensee in writing in accordance with paragraph 11.2 or 11.3.

**11.2** Where the exercise of the Relevant Intellectual Property Right prevents a Product from being made available either at all or on reasonable charges, terms and conditions to the person wishing to make such a connection or to provide or obtain an Access Control Service, the Director may direct the Licensee to take such steps as are within the power of the Licensee and are, in the opinion of the Director, reasonable and necessary in all the circumstances to secure that the Product is made available to that person on charges, terms and conditions acceptable to that person or which (in default of agreement) are, in the opinion of the Director, reasonable to enable such connection to be made or such service to be provided or obtained.

**11.3** Where paragraph 11.1 applies in circumstances other than those described in paragraph 11.2, the Director may direct the Licensee to take such steps as are within the power of the Licensee and are, in the opinion of the Director, reasonable and necessary in all the circumstances to secure that the person wishing to make such a connection or to provide or obtain such an Access Control Service is enabled to make use of the Relevant Intellectual Property Right for the purpose of making the connection or of providing or obtaining the service, upon charges, terms and conditions acceptable to that person or which (in default of agreement) are, in the opinion of the Director, reasonable for such purpose.

**Condition 12**

**REQUIREMENT TO KEEP SEPARATE FINANCIAL ACCOUNTS**

12.X This Condition shall apply to the Licensee only where the Director has determined the Licensee to be a Regulated Supplier in the market for Access Control Services for digital interactive TV services ("Regulated Supplier Determination") and to the extent specified in that Determination.

**12.1** Except in so far as the Director agrees otherwise, the Licensee shall keep separate financial accounts regarding its operation of Access Control Services save that where the

Licensee also runs a Conditional Access System it shall not be obliged by this Condition to keep accounts in respect of Access Control Services separate from those in respect of Conditional Access Services provided by means of a Conditional Access System.

**12.2** The Licensee shall maintain such accounting records dealing separately with its Access Control Services Business as will enable it to show separately and explain, in response to any request from the Director under paragraph 12.5, all the transactions to which paragraph 12.3 refers.

**12.3** This paragraph refers to all transactions between the Licensee's Access Control Services Business and:

- a) any other business carried on by the Licensee whether in the United Kingdom or elsewhere;
- b) the business of any Associated Person whether in the United Kingdom or elsewhere;
- c) the business of any Third Party; and
- d) any other person or class of persons notified to the Licensee by the Director.

**12.4** The Licensee shall update the accounting records referred to in paragraph 12.1 no less frequently than six monthly and those records shall include in particular the costs (including capital costs), revenue and a reasonable assessment of assets employed in and liabilities attributable to the Access Control Services Business, and separately, the amount of any material item of revenue, cost, asset or liability which has been either:

- a) charged from or to any other business of the Licensee or the business of an Associated Person or Third Party together with a description of the basis of the value on which the charge was made; or
- b) determined by apportionment or attribution from an activity common to the business and any other business of the Licensee or any Associated Person and, if not otherwise disclosed, the basis of the apportionment or attribution.

**12.5** The Director may at any time request from the Licensee copies of any of the accounting records and detailed attribution policies and procedures which the Licensee is obliged to maintain by this Condition, covering any period between:

- a) the date on which the Licensee first carried on any Access Control Services Business in the United Kingdom; and
- b) the date on which such records were, or should have been, last updated in accordance with paragraph 12.4.

The Licensee shall provide any such records, in the form of a profit and loss account and statement of mean capital employed, requested by the Director within 28 days of receiving such a request in writing.

## **Condition 14**

### **PROHIBITION ON UNDUE PREFERENCE AND UNDUE DISCRIMINATION**

14.X This Condition shall apply to the Licensee only where the Director has determined the Licensee to be a Regulated Supplier in the market for Access

Control Services for digital interactive TV services ("Regulated Supplier Determination") and to the extent specified in that Determination.

**14.1** The Licensee shall not unduly discriminate or show undue preference in the manner set out below:

- a)** the Licensee shall not (whether in respect of the charges or other terms or conditions applied or otherwise) show undue preference to, or exercise undue discrimination against, particular persons or persons of any class or description (in any market) as respects:
  - i.** the provision by means of the Applicable Systems of any Access Control Service provided by the Licensee (including offers of terms on which such services are to be provided) in the market determined by the Director for the purposes of the Regulated Supplier Determination;
  - ii.** the maintenance, adjustment, repair or replacement of any apparatus comprised in the Applicable Systems which is used for the provision of any Access Control Service in the market determined by the Director for the purposes of Regulated Supplier Determination ;
- b)** the Licensee may be deemed to have shown such undue preference or to have exercised such undue discrimination if it unfairly favours to a material extent a business carried on by it in relation to the provision of any Access Control Service referred to in paragraph 14.1(a) above so as to place at a significant competitive disadvantage persons competing with that business; and
- c)** any question relating to whether any act done or course of conduct pursued by the Licensee amounts to such undue preference or such undue discrimination shall be determined by the Director, but nothing done in any manner by the Licensee shall be regarded as undue preference or undue discrimination if and to the extent that the Licensee is required or permitted to do such thing in that manner by or under any provision of this Licence.

## **Condition 15**

### **PUBLICATION OF CHARGES, TERMS AND CONDITIONS**

15.X This Condition shall apply to the Licensee only where the Director has determined the Licensee to be a Regulated Supplier in the market for Access Control Services for digital interactive TV services ("Regulated Supplier Determination") and to the extent specified in that Determination.

**15.1** The Licensee shall, except in so far as the Director may otherwise consent in writing, publish prices and act in the manner set out below.

**15.2** Within 28 days after the date the Director has made the Regulated Supplier Determination above, the Licensee shall send to the Director a notice specifying, or specifying the method that is to be adopted, for determining the charges, terms and conditions on which it offers to:

- a)** provide each description of Access Control Service in the market determined by the Director for the purposes of the Regulated Supplier Determination above;
- b)** maintain, adjust, repair or replace any apparatus comprised in the Applicable Systems which is used in the provision of any telecommunication service comprised in such a specified Access Control Service.



**15.3** The Licensee shall provide the services referred to in paragraph 15.2 above at the charges, terms and conditions so published, and shall not depart therefrom except in the circumstances set out in paragraph 15.4 below.

**15.4** The Licensee shall send to the Director:

- a) a notice of any amendment to any charge, term or condition, or method of determining the same, referred to in the notice described in paragraph 15.2 above; and
- b) a notice specifying, or specifying the method that is to be adopted, for determining the charges, terms and conditions on which it offers to provide each description of Access Control Service specified in the Regulated Supplier Determination above which is materially different from any Access Control Service to which the notice under paragraph 15.2 refers not less than one day before the amendment referred to in sub-paragraph 15.4(a) above is to come into effect, or the Licensee first provides the telecommunication service referred to in sub-paragraph 15.4(b) above.

**15.5** The Licensee shall, as soon as practicable after sending to the Director each notice referred to in paragraphs 15.2 and 15.4 above, place a copy of such notice in a publicly accessible part of every Major Office of the Licensee in such manner and in such place that it is readily available for inspection free of charge by members of the general public during normal office hours.

**15.6** The Licensee shall send a copy of any notice referred to in paragraphs 15.2 and 15.4 above to any person at that person's request (or such parts which have been requested).

## Schedule 2

The Director considers, that each of the Continued Provisions listed in the table below corresponds to one or more of the following provisions of Schedule 18, paragraph 9(4):

- a) a provision contained in the Act that the Director has the power to include in SMP Conditions ("Paragraph 9(4)(a)");
- b) a provision authorised by section 73(2) or (4) of the Act for inclusion in Access-Related Conditions ("Paragraph 9(4)(b)"); or
- c) a provision relating to matters mentioned in Article 16 of the Universal Service Directive or Article 7 of the Access Directive ("Paragraph 9(4)(c)").

<b>Continued Provision</b>	<b>Corresponding provision of Paragraph 9(4)</b>
Condition 10	Paragraph 9(4)(b)
Condition 11	Paragraph 9(4)(b)
Condition 12	Paragraph 9(4)(b)
Condition 14	Paragraph 9(4)(b)
Condition 15	Paragraph 9(4)(b)

## Annex 6

# Sky's submission – non-confidential version

## Request for Ofcom to withdraw the Continuation Notice in relation to the provision of access control services by Sky

### Introduction

1. This submission sets out Sky's request for Ofcom to withdraw the Continuation Notice in relation to the provision of access control services by Sky<sup>51</sup>, issued by Oftel in July 2003. The Continuation Notice requires Sky to comply with a number of conditions in relation to the provision of "access control services", including a requirement to supply these services on a fair, reasonable and non-discriminatory basis to any third party who requests such services. This submission is divided into the following parts:
    - **Part A** describes the access control services currently provided by Sky and explains how use of these services by broadcasters and interactive service providers has declined significantly over recent years;
    - **Part B** sets out a brief history of regulation of Sky's access control services;
    - **Part C** discusses Ofcom's relevant legal duties and policies with regard to access control regulation. These include a specific duty to decide "*as soon as reasonably practicable*" after issuing the Continuation Notice whether to replace the access control conditions, and then to withdraw the Continuation Notice. It is plain that Ofcom has not met this duty, as the Continuation Notice has now been in place for nearly ten years;
    - **Part D** explains why the continued application of the access control conditions imposes an unnecessary burden on Sky, and results in costs to consumers;
    - **Part E** explains why the Continuation Notice should be withdrawn without any further delay; and
    - **Part F** confirms that Sky is willing to commit to the continued provision of access control services to existing customers until 2016.
  2. For the avoidance of doubt, this submission only relates to access control regulation. Sky is not seeking (and does not currently intend to seek) a withdrawal of regulation of Sky's provision of either EPG listings or conditional access services.
- A. Access control services currently provided by Sky**

<sup>51</sup> 'Continuation Notice to a Class of Persons defined as the Licensee for the Purposes of the Provision of Access Control Services under Paragraph 9 of Schedule 18 to the Communications Act 2003'. Available at:

[http://www.ofcom.org.uk/static/archive/oftel/publications/eu\\_directives/cont\\_notices/acs\\_class.pdf](http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/cont_notices/acs_class.pdf).

3. Sky currently provides two types of access control services:
- Application Signing Services: these are services by which broadcasters and digital interactive television service (“DITS”) providers are provided with the signing tools, keys and certificates that enable them to sign their own applications in order that those applications are recognised by set top boxes and permitted access to set top boxes. These services provide a means for broadcasters and DITS providers to offer interactive services that run on Sky’s set top boxes, either via an on-screen trigger (typically, a “red button”) or via a specific listing in Sky’s Interactive Main Menu (“IMM”). Such interactive services may include: selection of different video feeds (for example between different tennis matches); betting and gaming; video games; and information services; and
  - Authentication Services: these are services which allow broadcasters and DITS providers to broadcast interactive applications which utilise the return path (i.e., which enable ‘two-way’ interactions). Access to the return path is required when running interactive services which involve the viewer inputting information using their remote control which is then transmitted to service providers – for example, voting services, entries in competitions, charitable donations, and retail transactions.
4. Sky has provided these services to third parties since 1999. However, the number of third parties taking these services, and the range of interactive activities carried out by Sky’s access control customers, have declined sharply over the last four years:
- in April 2008, 30 third parties took Application Signing Services from Sky, including the BBC, ITV, Channel 4 and Channel 5. Today, only 9 broadcasters take Application Signing Services from Sky, of which the BBC is the only remaining public service broadcaster. [X] has indicated to Sky that it intends to reduce significantly its use of interactive applications on Sky’s platform, and that it is currently considering whether to continue to use Application Signing Services at all;
  - in April 2008 there were 11 interactive services listed in Sky’s IMM, of which 4 were Sky services; today, only 4 such services are so listed, all of which are Sky services;
  - until 2011, Sky Interactive Limited, Digital Impact Limited and QVC received Authentication Services from Sky. Digital Impact Limited ceased taking Authentication Services in 2011 (associated with its exit from providing return path services, discussed below), leaving QVC as the sole remaining third party customer of Authentication Services;
  - previously, broadcasters and DITS providers supplied a wide range of interactive services via the Sky platform, including betting and gaming, alternative video feeds, games, information services, charitable donations, competitions, voting, broadcast of interactive advertisements, retail transactions, ticket sales, email, travel services, and banking services. Today, the range of services provided has reduced significantly, with broadcasters and DITS providers currently providing only the following interactive services via the Sky platform:
    - Attheraces: link to the Sky Bet interactive application;
    - BBC: text news and information; additional video feeds;

- Sky: customer service; product information; Sky Bet; Sky Games; digital subscription upgrade applications;
  - ESPN: broadcast of the 'pint glass' trigger (for commercial premises);
  - Nickelodeon: link to Sky Games;
  - QVC: shopping; additional video feeds;
  - S4C: dual-language sub-titling;
  - The Community Channel: general public information; charitable donations;
  - Turner: link to Sky Games.
5. In addition, in the past a number of firms (in addition to Sky) have provided infrastructure used to supply return path services between Sky set top boxes and service providers. By 2011 only Sky and Digital Impact Limited provided such infrastructure. In 2011 Digital Impact Limited exited from the provision of return path services. At the end of 2011 Sky also reduced significantly its provision of return path services to third parties, as the continued provision of such services had ceased to be profitable. Sky now only provides return path services to one third party - The Community Channel - so that it can continue to provide its "Looking Local" information service and receive charitable donations.
6. Sky's current charges for access control services are as follows:
- Application Signing Services: a fixed charge of £100k per annum, plus variable charges if broadcasters use interactive services to provide transactional services<sup>52</sup>; and
  - Authentication Services: a fixed charge of £195k per annum, plus variable charges.

Variable charges are typically based on a combination of the number of uses and/or value arising from the use of the interactive functionality, e.g. a "per authentication" charge and/or a percentage of the value of transactions.

## B. Regulation of Sky's access control services

### *Introduction of regulation*

7. Access control services first became regulated in the UK in December 1997 when, following a joint Oftel/DTI consultation<sup>53</sup>, the existing conditional access regime was extended to cover access control services. This was originally implemented as part of a Telecommunications Services Licence, issued in December 1997, though the access control conditions were subsequently set out in a *Class Licence for the Running of Telecommunications Systems for the Provision of Access Control Services* issued in August 1999. Despite being described as a class licence, the specific access control conditions were applied only to those suppliers of access control services that were determined by Oftel to be "Regulated Suppliers". Such a determination was 'triggered' by a finding that a supplier of access control services

<sup>52</sup> As can be seen from the list in paragraph 4, few broadcasters use interactive applications for such purposes, so in practice most broadcasters pay only the fixed annual fee.

<sup>53</sup> 'Extending the regulatory regime for conditional access services; a joint Oftel/ DTI consultative document', July 1997. Available at: [http://www.ofcom.org.uk/static/archive/oftel/ind\\_info/broadcasting/caccdti.htm](http://www.ofcom.org.uk/static/archive/oftel/ind_info/broadcasting/caccdti.htm).

held either a position of “market influence” or “dominance” in relation to the provision of access control services.

8. Oftel consulted on applying the access control conditions to Sky in 1999<sup>54</sup>. The access control conditions were subsequently imposed on Sky in 2000 pursuant to a determination in which Sky was found to be dominant in a market for access control services for digital interactive TV services<sup>55</sup>. In summary, these access control conditions require Sky to:
- supply access control services to any third party who requires such services in order to supply a "Relevant Other Telecommunications Service" to end users on fair, reasonable and non-discriminatory (“FRND”) terms;
  - keep separate accounts regarding its operation of access control services;
  - comply with certain conditions relating to intellectual property; and
  - publish a notice specifying, or specifying the method that is to be adopted for determining, the charges, terms and conditions on which it offers access control services.
9. The existing access control conditions were applied to Sky at a time when the provision of interactive services were in their infancy, with the interactive services provided over the Sky digital satellite platform having a wider reach than the other providers at that time (ONdigital, CWC and Kingston Communications). The finding of dominance was therefore reached principally on the basis that Sky “currently provides the vast majority of Access Control Services in the UK”<sup>56</sup>.

#### *The 2003 Continuation Notice and subsequent consultations*

10. In 2002, the European Commission introduced a new Access Directive (Directive 2002/19/EC), which was implemented in the UK via the Communications Act 2003. The transition to the new regime required Oftel and/or Ofcom to review regulation previously administered by Oftel and directed specifically at individual communications providers<sup>57</sup> to determine whether it conformed with the bases for regulation set out in the new Communications Act. In some cases this required the issuing of “Continuation Notices” which maintained existing regulation during the period in which such a review could take place, i.e., as a temporary measure. This procedure was applied to the regulation of Sky’s access control services. Following a short consultation<sup>58</sup>, in July 2003 Oftel issued the Continuation Notice continuing

<sup>54</sup> ‘SSSL as a regulated supplier’, Oftel Notice dated 12 November 1999. Available at: <http://www.ofcom.org.uk/static/archive/oftel/publications/1999/consumer/sssl1199.htm>.

<sup>55</sup> ‘Decision as to the status of Sky Subscribers Services Limited as a Regulated Supplier in the Market for Access control services for Digital Interactive TV Services’, Oftel Determination dated 20 June 2000.

<sup>56</sup> Paragraph 2.29 of the Oftel Notice dated 12 November 1999.

<sup>57</sup> From 25 July 2003, under the new regulatory regime, a set of general conditions was applied to all persons providing certain types of electronic communications services and electronic communications networks. However, conditions directed specifically at individual communications providers (such as access-related conditions, or those imposed as a result of a finding of SMP or as a result of being designated to be a universal services provider) could only be introduced, in most cases, following a review of the markets concerned.

<sup>58</sup> ‘Consultation on continuing licence conditions after 25 July 2003’, Oftel, 3 July 2003.

the old access control conditions until it had a chance to review them under the new regime.

11. In accordance with the requirements of the Communications Act (discussed further below), Oftel consulted on the introduction of new access control conditions in November 2003<sup>59</sup>. However, no regulatory statement was ever published following this consultation. Three years later, in 2006, Ofcom commenced a review<sup>60</sup> which was intended to include a review of access control regulation<sup>61</sup> (among other matters), but this review has not been progressed. Accordingly, the Continuation Notice issued by Oftel in July 2003 remains in place.
12. The Continuation Notice was one of a number of continuation notices issued by Oftel in 2003. Such continuation notices applied to a wide range of telecommunications services including services provided by BT, Orange, O2 and Cable & Wireless. As far as Sky is aware, of the many continuation notices issued in 2003, only the continuation notices issued in respect of Sky remain in force today.

### C. Ofcom's relevant duties

13. The process whereby regulation administered by Oftel was 'continued' as a temporary measure while it could be reviewed, discussed above, is set out in the Communications Act. In order to reflect the temporary nature of Continuation Notices, Ofcom was given a duty under the Transitional Provisions of the Communications Act:

*"as soon as reasonably practicable after giving the continuation notice—*

- (a) to take all steps necessary for enabling them to decide whether or not to set a condition [...] under Chapter 1 of Part 2 of this Act for the purpose of replacing the continued provision; and*
- (b) to decide whether or not to exercise their power to set a condition under that Chapter for that purpose"*<sup>62</sup>.

14. Upon reaching the decision required in relation to (b), above, Ofcom is required to withdraw the Continuation Notice (also "*as soon as reasonably practicable*")<sup>63</sup>.
15. In addition, Ofcom has a general duty under section 6 of the Communications Act not to maintain regulatory burdens that have become unnecessary. Reflecting this duty, Ofcom has stated on many occasions that it is committed to removing unnecessary regulatory burdens, and has consistently operated a "regulatory simplification plan". For example, Ofcom's 2011/12 Annual Plan states:

<sup>59</sup> 'The future of regulation of access control services', Oftel, 14 November 2003.

<sup>60</sup> 'Review of wholesale digital television broadcasting platforms, Update of Review', Ofcom, 10 October 2006.

<sup>61</sup> Ofcom stated: "*This review, which commenced in July 2006, will involve, where appropriate, an analysis of relevant market(s) and assessment(s) of market power. Ofcom expects that this market analysis will inform its review of regulation in two distinct areas: a review of appropriate conditional access (CA), access control (AC) and electronic programming guide (EPG) listing regulation....*" Paragraph 1.3, *ibid*.

<sup>62</sup> Schedule 18 Paragraph 9(11) of the Communications Act.

<sup>63</sup> Schedule 18 Paragraph 9(12)(a) of the Communications Act.

*"Ofcom remains committed to reducing and simplifying complex or unnecessary regulation"*<sup>64</sup>.

16. And Ofcom's 2012/13 Annual Plan (as well as Ofcom's draft 2013/14 Annual Plan) states:

*"We regularly review regulation to examine whether it is still fit for purpose and to remove burdens that are no longer justified...."*

*Reviews and evaluations are very important to determine whether current regulations and their associated burdens are still necessary and justified"*<sup>65</sup>.

17. Ofcom has failed to comply with these duties:

- Ofcom has failed to complete a review of the access control conditions and withdraw the Continuation Notice *"as soon as reasonably practicable"*. There is no indication that Ofcom has any plans (in its draft Annual Plan for 2013/14 or elsewhere) as to when it intends to complete such a review, nor has it provided any justification as to why such a review has been delayed for so long; and
- the continued application of the access control conditions maintains a regulatory burden that is unnecessary for the reasons set out in Part D below.

18. We would expect Ofcom to embrace the opportunity to address this failure, via the removal of outdated, unnecessary and burdensome regulation.

**D. Continued application of the access control conditions imposes an unnecessary burden on Sky and results in costs to consumers**

**D(i) The access control conditions were conceived in a different era and are now unnecessary**

19. The proposition that Sky should be compelled to provide access control services to third parties on regulated terms is based on a view that, absent such regulation: (a) Sky would have anti-competitive motives for withholding those services from third parties, or distorting competition via the terms on which it supplies those services to third parties, and (b) this would have a material adverse effect on competition in one or more relevant markets.
20. The argument that this type of regulation was required was developed at a time, during the late 1990s, when it was anticipated that TV set top boxes would become a significant method for enabling consumers to do the types of things that they now do via the internet, such as e-mail, betting, shopping, banking, and gaming. Although it is only a relatively short time ago, at the time that access control regulation was developed and introduced use of the internet in the UK was in its infancy. In 1998, the year prior to the launch of interactive services by Sky, less than 10% of UK

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<sup>64</sup> Paragraph 2.30 of Ofcom's 2011/12 Annual Plan:  
<http://www.ofcom.org.uk/files/2010/06/annplan1011.pdf>.

<sup>65</sup> Paragraph 6.14 of Ofcom's 2012/13 Annual Plan:  
[http://www.ofcom.org.uk/files/2012/03/Annual\\_Plan\\_2012-13.pdf](http://www.ofcom.org.uk/files/2012/03/Annual_Plan_2012-13.pdf); paragraph 9.21 of Ofcom's draft 2013/14 Annual Plan:  
<http://stakeholders.ofcom.org.uk/binaries/consultations/annualplan1314/summary/condoc.pdf>

households had access to the internet at home<sup>66</sup>. It was thought that the inclusion of modems, together with relevant “middleware”, in set top boxes which were also used by consumers to receive television services would give rise to significant “gateway control” of access to end-users in relation to firms who wished to provide interactive services, due to the likely high take-up of such set top boxes, with significant risks of distortions to competition<sup>67</sup>.

21. These views can be seen, for example, in the European Commission’s decision in relation to the British Interactive Broadcasting (“BiB”) joint venture, which was formed to promote the development of interactive services on Sky’s prospective digital satellite platform. The Commission stated:

*“While television sets are ubiquitous, in the United Kingdom only some 25% of households have a personal computer and fewer than half of these are equipped with a modem. Moreover, the relatively high cost of personal computers means that the switching cost for end-users [i.e., the cost of switching to PCs to use interactive services] would be high”<sup>68</sup>.*

22. The Commission also stated:

*“Until recently, services comparable to those of BiB have been available only via the Internet and using personal computers as a display screen. However, the still limited penetration of personal computers in the United Kingdom has prevented such services from reaching the mass market. Almost all households in the United Kingdom possess a television set. Purchase of a BiB/BSkyB digital set-top box would give them access to interactive services via television screens”<sup>69</sup>.*

23. In theory, there are a number of ways in which such “gateway control” might manifest itself (or have manifested itself) in terms of distortions to competition, including:
- by distorting competition among rival service providers – for example, by refusing to supply access control services to particular service providers, thereby denying them access to Sky’s platform and disadvantaging them against rivals with access to the platform; and/or
  - by favouring interactive services provided by Sky over those provided by other interactive service providers, or broadcasters, using Sky’s platform.
24. These concerns should no longer exist for the straightforward reason that interactive services delivered via Sky set top boxes are, today, of negligible relevance to any of these forms of competition.

<sup>66</sup> See, ‘Percentage of households in the UK that have home access to the internet’, Office of National Statistics. Available at: <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-48688>.

<sup>67</sup> See, for example, Chapter 4 in ‘Extending the Regulatory Regime for Conditional Access Services; A joint Ofcom/DTI Consultative Document’, July 1997. Available at: [http://www.ofcom.org.uk/static/archive/oftel/ind\\_info/broadcasting/caccdti.htm](http://www.ofcom.org.uk/static/archive/oftel/ind_info/broadcasting/caccdti.htm).

<sup>68</sup> Paragraph 21 of ‘Commission Decision of 15 September 1999 relating to a proceeding under Article 81 of the EC Treaty (Case IV/36.539), British Interactive Broadcasting/Open’, 1999/781/EC. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1999:312:0001:0037:EN:PDF>.

<sup>69</sup> Paragraph 163, *ibid*.



25. It is now plain that expectations of the importance of TV set top boxes in enabling consumer access to 'interactive services', which underpinned the introduction of regulation of Sky's access control services, were not borne out. Above all, this is due to the rapid development of the internet as a significantly more cost-effective means by which service providers can provide 'interactive services' to consumers, the rapid increase in penetration of internet access, and the exponential rise in the capabilities of the internet for providing services to consumers over the past thirteen years, associated with huge growth in delivery speeds and computing power.<sup>70</sup> For example, by the time that Sky launched digital interactive services in 1999, 20% of UK households had access to the internet at home, and within four years that figure had increased to around 50% of UK homes (and continued to increase)<sup>71</sup>. In the more recent past, use of the internet has become less reliant on PCs (which tend to be located away from households' main television sets), and is increasingly used by consumers via a range of portable devices, such as laptops, mobile phones and tablet devices, which are able easily to be used while consumers are watching television<sup>72</sup>.
26. These changes have rendered the types of interactive services that are able to be delivered via Sky set top boxes virtually obsolete.
27. As a result, contrary to the concerns that existed in the 1990s, today:
- Sky does not exert "gateway control" in relation to firms wishing to provide 'interactive services' to consumers. The internet, in particular, offers a far better alternative to them for doing so (as well as a richer experience for consumers);
  - rather than wishing to deny access to its platform for anti-competitive reasons, Sky has strong incentives to maximise the attractiveness of its platform to end-users. Sky's platform competes against a range of platforms that offer consumers access to audiovisual and other services – including Virgin Media's cable platform, BT Vision, the YouView platform, games consoles such as the Xbox 360, Wii and PS3 platforms, connected TVs, and against the increasing plethora of audiovisual and interactive services delivered via the internet. If third party interactive services are likely to be of value to consumers, Sky has strong incentives to facilitate their access to the platform; and
  - in general, interactive services delivered via Sky set top boxes, of the type facilitated by access control services, are of minimal importance to competition

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<sup>70</sup> In relation to certain potential uses of interactivity linked to television services, such as voting, donations, or commenting on TV programmes, standard telephony services (with telephone numbers promoted on-screen) have always provided broadcasters with an equally or more cost-effective alternative to developing a series of platform-specific interactive applications. These alternatives have expanded over time with the growth in use of the internet via mobile devices, and interactive 'apps'.

<sup>71</sup> See: 'Percentage of households in the UK that have home access to the internet', *op.cit.*

<sup>72</sup> For example, at one point it was considered that betting via the set top box would be a particularly attractive type of interactive service, because it could be linked directly to broadcasts of, for example, horse racing or sports events. Consumers are now, however, easily able to access standard online betting services via laptops, mobile phones and tablet devices while watching broadcasts of such events, and it makes little economic sense for bookmakers to bear the cost of developing and maintaining bespoke interactive applications which enable punters to place bets via Sky set top boxes.

among service providers. Even if Sky were to choose not to supply access to particular service providers (for example, due to considerations such as the cost to Sky of providing such access), such a denial would be incapable of having a material impact on competition in any relevant market.

28. In these circumstances, regulation of Sky's access control services is now an anachronism; interactive services delivered via TV set top boxes have been marginalised by the superior capabilities of the internet (in particular), and continued regulation of Sky's provision of the technical services needed to provide those services is unnecessary.
29. The most likely remaining source of concern, today, is likely to lie with 'interactivity' linked to television broadcasting – such as provision of access via interactive applications to additional video streams. These services continue to be used by a number of broadcasters, including the BBC. It may be argued that, absent access control regulation Sky would refuse to supply access control services to these broadcasters (for example, in order to favour its own TV services) or set unreasonable charges for those services. This is not the case. These types of services are well established, and enhance Sky's platform. Sky would not wish to take actions which deter these broadcasters from continuing to offer such services via its DTH satellite platform. In any case, as set out in Part F, below, in the event that the Continuation Notice is removed, Sky is prepared to commit to continue to provide the access control services currently used by broadcasters over Sky's current generations of STBs to broadcasters until 2016.
30. A clear indication of the lack of necessity of continuing to regulate Sky's provision of access control services is that, even in 2003, when there were more users of such services, it appears that only the BBC considered it necessary to respond to Ofcom's consultation on whether such regulation should be continued – and even the BBC did not offer any substantive comments<sup>73</sup>.

**D(ii) Application of the access control conditions to Sky is burdensome, inhibits innovation on the Sky platform, and therefore delays or prevents new products and services being made available to consumers**

31. Sky constantly seeks to improve the functionality of its digital satellite platform - for example, via the introduction of new types of set top boxes, or the enhancement of the functionality of existing deployed set top boxes via changes to their software. Sky is, however, reluctant to develop and roll out new set top box functionality where it would be faced with the likelihood that Sky would be required by regulation to make that functionality available to third parties. This reluctance does not stem from any anti-competitive motive; it stems from the costs that Sky would bear if Sky were required to make the contemplated functionality available to third parties.
32. These costs are material. Above all, they stem from the risk that third party applications pose to the stability of Sky set top boxes. Interactive applications have the capability to cause large numbers of Sky set top boxes to malfunction or 'crash', which would impose substantial costs on Sky – for example, as a result of its

<sup>73</sup> The respondent writing on behalf of the BBC stated: "*I have been unable to allocate sufficient time to do the consultation justice. So, topline comments are...*". The entire response consisted of a single page. (See: [http://stakeholders.ofcom.org.uk/binaries/consultations/access\\_control\\_services/bbc\\_response.pdf](http://stakeholders.ofcom.org.uk/binaries/consultations/access_control_services/bbc_response.pdf).) This strongly suggests that these matters were not regarded by the BBC as being significant in 2003.

subscribers not being able to access pay TV services, or all platform users not being able to receive free to air television services via Sky set top boxes, until the problem had been resolved. In order to avoid such a scenario, Sky must set in place appropriate measures to ensure that third party applications are developed appropriately and thoroughly tested. The provision of relevant technical support and testing requires Sky to invest in these services.

33. Other relevant costs include:

- the costs of developing, negotiating and administering contracts which govern the provision of access control services to third parties. Although such contracts already exist in relation to access control services currently provided, the introduction of new types of functionality is likely to require the amendment of existing contracts, or development of new contracts related to the new functionality; and
- the potential for limitations on services that Sky would be able to provide if it were required to enable third parties to offer similar services – for example, where such services make use of limited hard disk capacity.

34. Sky's desire to avoid incurring such costs gives rise to two key types of cost:

- (a) administrative burdens; and
- (b) inhibition of development of new services.

#### *Administrative burdens*

35. The administrative burden arises from the need for Sky's legal teams to subject proposals for new platform functionality to a significant amount of analysis to determine whether or not, if it were developed, Sky would be required to make that functionality available to third parties. Sky's legal teams must remain closely involved in the development, implementation and any post-launch changes to such new services, continually assessing whether any proposed changes would result in the services falling within the scope of the access control conditions.

36. This task is made all the more burdensome by the fact that the current access control conditions, in particular the definition of "access control services", are not clearly drafted and it is therefore difficult to ascertain what types of functionality the conditions were intended to capture and whether or not such conditions would apply to new functionality introduced by Sky. For example, the Continuation Notice states that "access control services" include the following services:

- Message Processing Services
- Authentication Services
- Access Device Management Services
- Selection Services
- Subscriber Management Services

37. These services are not ones that Sky recognises as being provided by Sky in connection with enabling digital interactive television services to operate on the Sky platform. Furthermore, it is not clear, from the definitions set out in the Continuation Notice, which types of functionality these services could capture. For example, "Selection Services" are defined, obscurely, as "*processing by an Access Device or the preparation and transmission to an Access Device of Messages which allow an end user to initiate access to a Relevant Other Telecommunications Service or to*

*select from a number of Relevant Other Telecommunications Services.” It is entirely unclear what this means.*

38. Plainly, this task is also made difficult by the fact that the types of new functionality being considered by Sky were not, and could not have been, contemplated when regulation of Sky's access control services was originally developed. Recent examples of such potential functionality include targeted substitutional advertising<sup>74</sup>, interactivity via the Ethernet port, and the ability for an application (such as an iPad application<sup>75</sup>) to interface with the Sky set top box.

#### *Inhibition of the development of new services*

39. [X] Such concerns have inhibited Sky from seeking to develop interactive services that use the Ethernet connection to link, for example, to internet-based help, shopping and social media services.
40. In some cases it prevents new services being made available at all. For example, Sky has not, to date, made use of the Ethernet connection included in recent set top boxes other than for the purposes of providing its Sky Anytime+ service, [X]
41. These delays in, and, in some cases prevention of, the development of new platform functionality result in detriments to consumers.

#### **E. A substantial review is not required**

42. The Continuation Notice should be withdrawn without delay. Sky considers that the lack of necessity of continuing to regulate Sky's provision of access control services is wholly self-evident. Sky has explained in Part D, above, why this regulation imposes a burden on Sky, and results in costs to consumers.
43. Sky recognises that Ofcom will wish to consult with stakeholders on any proposal to withdraw the Continuation Notice: Ofcom should commit to undertake such a review in its Annual Plan for 2013/14.
44. A detailed investigation will not, however, be required to establish that this regulation is not justified. A detailed review would add further unnecessary delay to the withdrawal of the Continuation Notice, which should have been withdrawn many years ago. Sky would have profound concerns if Ofcom took the view that a detailed and lengthy inquiry was required in order to reach a decision as to whether or not to withdraw the Continuation Notice.

#### **F. Continued provision of services to existing users**

42. In light of (a) the large number of broadcasters to have terminated their Application Signing Agreements and Authentication Services Agreements with Sky over the past few years, including ITV, Channel 4 and Channel 5, (b) the fact that a number of existing customers, including [X] are currently reviewing whether to cease their interactive activities, and (c) the dramatic decrease in the variety of interactive

<sup>74</sup> "Sky Adsmart" is a service which Sky plans to introduce in 2013, which will enable targeted substitutional advertising (i.e., where different households receive different advertisements) on the Sky DTH satellite platform.

<sup>75</sup> Sky's 'Superplanner' service allows the existing Sky+ application on certain mobile devices, such as the iPad, to communicate directly with the electronic programme guide.

services provided by broadcasters on the Sky platform, Sky considers it to be highly likely that the number of broadcasters taking Application Signing Services or Authentication Services will continue to decrease sharply over the next five years.

43. However, in order to provide comfort to Sky's existing customers of Application Signing Services and Authentication Services in the medium term, Sky would be willing to undertake to continue to provide those access control services currently used by broadcasters via Sky's current generations of STBs to broadcasters until the end of 2016, via the inclusion of relevant provisions in their contracts.

**Sky**

**January 2013**