**SKY'S RESPONSE TO**

**GOVERNMENT'S CONSULTATION ON DIGITAL COMMUNICATIONS**

**INFRASTRUCTURE STRATEGY DATED 6 AUGUST 2014**

## 1. Introduction

1.1 Sky welcomes the opportunity to comment on the Government's consultation on a digital communications infrastructure strategy ("the Consultation").

1.2 As a multi-faceted home entertainment and communications company, Sky is well placed to comment on how digital infrastructure and the underlying regulatory and policy framework in the UK could develop in future. We provide a diverse set of services to more than 40% of homes in the UK;

1.2.1 as a pay TV retailer, we deliver services to around 11 million subscribers. These services include linear channels delivered over satellite, PVR capabilities and on-demand programming (catch-up, libraries and pay-per-view). Increasing numbers of our customers access content in new connected ways. 5.7 million Sky+HD boxes are broadband-connected providing our customers access to the UK's largest catch-up TV service. 5.5 million subscribers have taken advantage of content delivered on a mobile basis via the Sky Go streaming service. NOW TV, our internet-delivered OTT service, provides linear entertainment, movies and sports channels, as well as on-demand content, on a subscription, pay-per-view and pay-as-you-go basis;

1.2.2 as a communications provider, we provide broadband services to more than 5.2 million customers and telephony services to around 5 million customers. From a standing start since we entered the market in 2006, we have grown to become the second-largest home broadband provider in the UK. During that period we have invested more than £1 billion in rolling out a broadband network and unbundling thousands of telephone exchanges. The competition we have helped bring to the market has led to lower prices and an increase in speeds. We also offer enterprise Wi-Fi services in over 21,000 hotspots across the UK through our investment in The Cloud;

1.2.3 as a content producer, we invest significant amounts on screen. In 2014 we are spending around £600m on British content across all our channels, an increase of more than 50% from 2011. We create content through many different routes, working with a variety of independent producers and co-funding many productions with other European and international broadcasters.

1.3 Sky continuously innovates to better serve our customers, and has a history of bringing cutting edge technology to the mainstream market. We launched the UK's first digital TV service in 1998, put consumers in control of how they watch TV through our ground-breaking PVR Sky+, launched the UK's first nationwide high definition TV service in 2006 and the first 3D TV sports broadcast in 2009. Our content is available via satellite, cable, IPTV, the internet and terrestrial television platforms; on TVs, smartphones, tablets, PCs and laptops; on Xbox and PS3 games consoles, and via the Roku and Apple TV platforms.

**Government should seek to provide certainty and stability, enabling private firms to invest with confidence**

1.4 The Consultation seeks views on what Government's role should be in developing a long term digital communications infrastructure strategy. Given that the key driver of digital communications infrastructure development will be the reaction of private firms to consumer demand, Government's primary role should be to create an environment where such firms can invest with certainty and confidence.

1.5 This role is best fulfilled by establishing clear principles that will govern any public, legislative or regulatory interventions in the sector, ensuring that providers have a high degree of certainty and stability when making investment decisions.

1.6 Government should also strongly support British interests and approaches at the European and wider international level. In particular, it should ensure a leading role for the UK in the run up to the next review of the EU Regulatory Framework for communications, as well as in discussions on any future Digital Single Market package.

1.7 The Consultation (implicitly) adopts a broad definition of digital communications infrastructure, covering the delivery mechanisms for a wide range of services including: fixed telephony; current generation and superfast broadband; mobile communications; other wireless data transfer technologies such as Wi-Fi; and digital radio and television broadcasting. For the purposes of this strategic response, Sky adopts the same approach.

## 2. Market context

2.1 The digital communications sector in the UK is highly competitive, and serves consumers well. Substantial private investment coupled with a supportive regulatory regime delivers low prices, high quality services, significant consumer choice and quality, and cutting-edge technological innovation.

2.2 Companies such as Sky operate on a number of levels across the sector, investing heavily in digital communications services as well as the supporting infrastructure. We observe very different market characteristics across these areas. On the one hand, at a service level, we have witnessed the development of significant competition driven by low barriers to entry, rapid innovation and strong growth. Conversely, the underlying infrastructure for digital communications remains characterised by non-replicable and non-contestable assets, and high barriers to entry. The differences between these two areas will have consequences for the regulatory and policy framework that is applied, both now and in the future.

2.3 The shape of a future digital communications landscape is difficult to predict in specific detail, particularly over the long-term period contemplated in the Consultation. Given the time frame that Government is considering, it is impossible to know with any degree of certainty which of the three demand scenarios that are presented in the Consultation (or indeed any others) will exist in 2025-30. Sky does not therefore offer specific comment on these scenarios.

2.4 Nevertheless, there are broad observable trends which have had a significant bearing on the current shape of the market and may be reasonably expected to continue to impact future development.

2.5 The pace of change in the sector is swift and has accelerated in recent years. Some consumer sectors have undergone transformational change in a very short space of time.

For instance, the first mainstream consumer tablet, the iPad, only launched in the UK in 2010 – by Q1 of 2014, 44% of households owned a tablet device[1].

2.6 These advances in technology have brought greater choice to consumers. With the average household now owning three different types of internet-enabled devices[2], communications and entertainment providers have a number of different ways in which they can supply their products. The emergence of widespread delivery of entertainment and communications services via IP has reduced barriers to entry significantly for providers of content, applications and services, allowing more competitors to enter the marketplace. As a result, consumers have an ever-increasing choice over the type of services they wish to access, and how.

2.7 The lower barriers to entry enabled by IP delivery means the UK is more exposed to dynamic, fast-moving, well-resourced global competition at the service level (and particularly in the case of audiovisual content). Global companies such as Google, Apple and Microsoft have a strong and growing presence in the UK. A continuation of this trend would see more international companies launching services, utilising the UK's digital communications infrastructure.

2.8 Global use of wireless communication services for voice, video and data applications has risen exponentially, and UK consumers have followed this trend. A range of independent studies suggest that mobile traffic globally will continue to increase significantly in the short to medium term[3]. It is notable that wireless networks (in particular Wi-Fi) utilising licence-exempt spectrum access are expected to support the majority of growth of mobile data usage. These networks already transport more traffic across mobile devices than the mobile networks themselves[4]. Further low barriers to entry – in this instance, the fact that this spectrum is accessed on a licence-exempt basis – have again spurred a competitive environment, with significant innovation and investment delivering consumer benefits.

2.9 Despite these trends, some enduring bottlenecks remain in relation to the physical infrastructure needed to deliver digital communications, particularly in fixed-line communications infrastructure. Whilst urban areas of the UK exhibit some fixed-line infrastructure competition, there are decreasing economies of density in deploying competing infrastructure to more sparsely populated areas. This means that only former state monopolies provide ubiquitous national "last mile" networks. These bottlenecks may well endure throughout the period which the Consultation is considering.

## 3. Developing a digital communications infrastructure strategy for the long term

3.1 In order to establish a digital communications infrastructure strategy, Government needs to define its objectives clearly before developing an approach that will fulfil those objectives.

---

1 Figure 1.3, Communications Market Report 2014, Ofcom, available at http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr14/2014_UK_CMR.pdf

2 Figure 4.25, Communications Market Report 2013, Ofcom, available at http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr13/internet-web/uk-4.25

3 See for example Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2013–2018, available at: http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white_paper_c11-520862.html.

4 Section 1.2, *ibid.*

**The objective of a long-term strategy should be to deliver benefits to end users by supporting private investment**

3.2 Government states that the objectives of its proposed digital communications infrastructure strategy are:

> *"...the UK having communications infrastructure that is comparable with other leading nations, that meets the needs of users, including those who may see the UK as a place in which to do business or invest."*[5]

3.3 This overarching ambition is broadly sound. Ultimately, the best indicator of a successful strategy is whether it serves to deliver consumer benefits – the products and services that customers want, at competitive prices.

3.4 The development of the digital communications sector to date has demonstrated that consumer benefits are most effectively delivered through a free and competitive market, underpinned by an environment that supports further private sector investment. Supporting these market characteristics should be the cornerstone of any digital communications strategy that seeks to serve the long-term interests of end users.

**A principles-based approach is the most appropriate method of developing a digital communications infrastructure strategy**

3.5 As noted, Sky does not consider that it is possible to predict with any degree of certainty how the digital communications sector will look in the long term, either from a supply or demand side.

3.6 Specific regulatory or policy measures that are developed now are unlikely to remain appropriate (or indeed even relevant) in a future sector that is subject to unforeseen and rapid changes. It is therefore desirable for Government to create a strategy for the long term using a principles-based approach – creating a high-level framework that can be applied consistently to the sector as it develops.

3.7 The UK is starting from a position of relative strength. The existing regulatory and policy framework is broadly sound, and many of the underlying principles remain relevant. Key aspects of effective regulation are already in place, and should be maintained in order to give private companies the certainty they need to make investment decisions.

3.8 The UK has a converged, independent regulator for the sector that is required to carry out its core duties in accordance with the principles of transparency, accountability, proportionality consistency, and to target intervention only where action is necessary. Where there are enduring economic bottlenecks and regulatory intervention is required, that intervention should seek to enable sustainable and effective competition as far upstream as possible. Further, a robust appeals regime will continue to be necessary, playing a vital role in holding regulatory decisions to full account in light of these duties and regulatory principles.

3.9 Similarly, the UK competition regime, which applies in full to the communications sector, is already highly regarded by international standards. Government has previously noted that the UK regime is recognised for its clarity of analysis and decision-making, technical competence and political independence. Sky considers that a free and competitive market underpinned by sound regulation and competition law is the most effective environment for delivering good economic and consumer outcomes in the digital communications sector.

---

5 The Consultation, p.9.

3.10 Well-functioning competitive markets that are characterised by rapid innovation and low barriers to entry should be regulated on a light-touch basis, and not be subject to sector-specific regulation which would constrain investment by operators and diminish effective competition. Competition law should suffice in these areas.

3.11 Government should not seek to be deterministic or prescriptive about market structures and outcomes, and should limit intervention, as currently, to areas where regulation is clearly necessary. Any such public intervention should not distort competition by delivering undue advantages to recipients (or concomitantly, by disadvantaging other market players) or by imposing costs on firms that outweigh the benefits that are delivered.

3.12 Taken together, these principles provide a framework that Government should apply to the digital communications sector as it develops over time. Consistent application of clear principles is the best way to deliver certainty to industry, as well as supporting private investment and effective competition in digital communications infrastructure, to the benefit of UK consumers.

## 4. The medium-term regulatory and policy framework

4.1 Sky considers that the majority of questions posed in section 4 of the Consultation are unlikely to prove relevant to a long-term digital communications infrastructure strategy. Most focus on current issues and policy interventions that exist in today's framework, any or all of which may not be appropriate or relevant for the future digital communications sector.

4.2 Nevertheless, given that the principles set out above provide an overarching framework for regulatory and policy measures, the section below highlights how they could be applied to the more medium-term issues that the Consultation examines.

### Active and passive remedies to support superfast broadband for consumers and businesses

4.3 The UK has benefited significantly from strong competition in the provision of current generation copper based broadband services, derived to a significant extent from competitors' investments in infrastructure upstream in the value chain, as enabled by regulation.

4.4 Currently, the economics of providing next generation superfast broadband services on a widespread geographic basis through infrastructure investment upstream are challenging, and are likely to remain so. This leaves competing providers who want to offer a national superfast broadband service reliant on more limited active wholesale products provided by BT. Alternative operators have little ability to differentiate their products and services in terms of quality, price and service characteristics, compared with the differentiation that can be found in current generation broadband services.

4.5 Greater levels of sustainable and effective competition could be enabled further upstream by strengthening the requirements on BT to offer fit for purpose products (such as SLU, PIA and dark fibre) that allow investment in and control of infrastructure far deeper in the network. This would allow competitors to better innovate and differentiate their products and services (as has occurred successfully in current generation broadband), resulting in better outcomes for consumers.

### Spectrum allocation

4.6 Spectrum is a scarce and finite resource. It is therefore critical that it is both allocated and used efficiently. The introduction and extension of market mechanisms remains the most effective method of delivering optimal spectrum use (effectively introducing

competition at the highest point of the value chain). Commercial operators are best placed to identify and implement changes in spectrum allocation and usage.

4.7 Sky strongly supports any move that ensures more efficient use of spectrum, through enabling the use of newer more advanced and efficient technologies, the application of market forces wherever practical and innovative approaches to allocation and access such as spectrum sharing.

4.8 International harmonisation of spectrum has the potential to deliver significant benefits, through (for example) maximising the scale use of technology and equipment. The UK Government has an important role in working with fellow European Member States and internationally to agree common spectrum allocation approaches in a timely fashion.

**Broadcasting regulation**

4.9 Certain infrastructure used to support broadcast services exhibits similar characteristics to the fixed telecoms infrastructure market. Economies of density mean that more rural areas of the country are difficult to serve commercially via terrestrial television broadcasting, reflected in the fact that the commercial multiplexes broadcast from less than 100 of the 1,000+ DTT transmitters.

4.10 Given the characteristics and take-up of other platforms such as satellite and IP-based platforms, as well as the potential value of scarce, high quality UHF spectrum in alternative uses, the quantity of spectrum devoted to digital terrestrial television broadcasting becomes increasingly difficult to justify.

4.11 Sky notes that although the Consultation is focused on digital communications infrastructure, 'broadcasting regulation' is considered on a more general basis (i.e. not restricted simply to infrastructure issues). In particular, the Consultation includes consideration of Ofcom's duties in relation to licensing and the Public Service Broadcasting system, and asks for views on whether any aspects of broadcast regulation may have served their purposes by 2025. In this context, Sky considers that, at the service level, there is a case for examining deregulatory moves given the market trends that are observable.

4.12 Public policy imperatives around taste, impartiality and standards are likely to endure. But outside of these considerations, the market conditions of low barriers to entry, rapid innovation and increased consumer choice means the broadcasting sector should be recognised as an industry where normal market incentives predominate and which does not require additional regulatory intervention in addition to the application of existing competition rules. Given the significant panoply of additional sector-specific economic regulation, there is a case for fundamentally deregulating the broadcasting sector in this respect.

**Convergence and bundling across the digital communications industry**

4.13 The Consultation notes that convergence in consumer products, consumption habits and business practices is increasing. It goes on to state that "*the regulatory framework may need to adapt to reflect these changes, including in relation to the regulation of bundled services and how competitive pressures between related markets can be recognised*"[6]. Sky sees no basis for this assertion.

4.14 There is no reason that convergence at the service level, or in terms of firms' commercial strategies, should have any bearing on the regulatory framework applied at the infrastructure level. The underlying infrastructure in the telecoms, mobile and broadcast industries remain distinct, and should continue to be regulated as such.

[6] The Consultation, section 4.25

4.15 At the service level, convergence is inherently competition enhancing. The ability to provide services via a variety of delivery mechanisms has enabled a plethora of new operators to launch successful digital entertainment and communications products. Technological convergence, and in particular the increased prevalence of IP delivery, has led to lower barriers of entry, allowing significant innovation and the emergence of new business models. In such a fast moving environment, with no suggestion of significant bottlenecks emerging, the correct regulatory approach is a light-touch one that relies solely on competition law.

4.16 The fact that convergence has resulted in the take-up of bundles of products does not suggest any particular implications for the regulatory regime that should be applied. There is no sound basis for the suggestion that the existing telecommunications regime – which addresses very specific economic and historical characteristics of last mile parts of telecoms networks as long-term monopolies – should be applied to other sectors. General competition law is able to deal effectively with any competition issues should they arise.

4.17 The Consultation's proposals on switching, which stem from a concern over the increasing prevalence of bundles, are also ill-founded. There is no suggestion of consumer harm or adverse effects on competition in this regard, and indeed the highly competitive nature of the industry should (and does) lead to effective switching processes. Moreover, the bundling of services should not obfuscate the fact that the characteristics of these services are very different. In particular, pay TV services share no common infrastructure and operate alongside competing free-to-air television and OTT platforms. Such services bear no resemblance to telecoms services, and there is no reason why the broadband and telephony switching processes should be replicated.

**The EU regulatory framework**

4.18 The Consultation asks for views on whether Government should seek changes to the European regulatory framework. Sky considers that the same regulatory and policy principles that underpin the UK regulatory framework should be supported and advocated by Government in the European debate. Measures which deliver certainty, promote a free and competitive market, and create an environment that supports further private sector investment should be championed.

4.19 Sky is concerned by a number of the proposals that the European Commission has set out in its proposed Digital Single Market regulation. In particular, the proposals which are nominally encouraged to deliver 'consumer protection' represent intrusive interventions in markets that are already functioning effectively. As with the switching debate in the UK, there is no evidence of market failure or consumer harm which needs addressing. Regulatory action would be disproportionate, and act to constrain the effective market. Government should therefore resist these proposals.

4.20 Government should also reject the Commission's proposals to harmonise virtual fixed access products as the standard regulatory remedy. This is in direct contrast to the principle of enabling sustainable and effective competition as far upstream as possible. Sky welcomes the reports that this aspect of the proposed regulation has been opposed by many member states.

4.21 The Consultation notes that some concerns have been voiced at a European level as to whether there is a trade-off between (i) competition and (ii) consolidation that supports investment. Sky fundamentally rejects the idea that strong competition is incompatible with sound incentives for investment. On the contrary, Sky considers that strong competition encourages private firms to invest as a method of differentiating themselves from competitors. Government is right to favour competition as a means of delivering technological development and economic value, and should strongly support this in European debates.

**Universal service obligations or commitments**

4.22 The Consultation asks whether there should be a role for a revised USO or USC to ensure that minimum consumer demand requirements are met, and to reduce the potential for a new digital divide. Sky considers that it is for Government to determine what the appropriate public policy objective should be in relation to universal coverage, and to do so in an informed manner.

4.23 Clearly there will always be geographical areas that are more difficult to serve than others, and some will not be commercially viable. Where Government has clear and identifiable reasons for addressing this gap in provision of a certain service (e.g. because that service is classed as a necessity for interaction in civic society) then public intervention may be appropriate. Such intervention should be carefully considered, however, and not distort competition by delivering undue advantages to recipients.

4.24 Where Government determines there is a substantial societal benefit only achievable through a USO-like intervention and requiring significant public funding, the most distortion-free approach to that funding is recognised to be general taxation. The imposition of sector-specific, or worse still operator-specific, funding obligations both distorts competition and risks gaming with the resultant necessary heavy regulatory oversight.

**Copper network switch-off**

4.25 The Consultation states that Government "*will need to consider with operators and the regulator whether switching off copper networks is desirable from a commercial and a policy objective*"[7].

4.26 At present, the copper network clearly remains a fundamental part of the UK's digital communications infrastructure. If and when this changes in the future, there may indeed be a case for assessing the benefits that could be delivered through a coordinated switch-off.

4.27 In the event of any such assessment, Government should ensure that it takes full account of the short-term costs that would be incurred by private firms and consumers, as well as the impact on additional investment and on competition in the market.

**Ancillary measures which may further support private investment**

4.28 The Consultation acknowledges that there may be measures, outside those immediately relating to the existing communications regulatory framework, which could have a bearing on levels of private investment into digital communications infrastructure. Sky considers that a number of steps may further encourage such investment, including:

- ensuring that the Electronic Communications Code (and related planning legislation) is fit for purpose and allows operators to deploy new infrastructure quickly and affordably. Whilst some changes were implemented through the Growth and Infrastructure Act 2013 and associated secondary legislation, it may be that further deregulatory measures could be taken. Sky notes that the Law Commission in 2011 proposed significant reform to the Code, with the aim of cutting the cost and boosting the speed of deploying digital communications networks.

- examining the business ratings system which, by its nature, has a significant impact on investment choices and affects decision making within the industry. We would encourage government to look seriously at whether it can improve the transparency, resourcing and efficiency of the rating system. The system as currently stands is not

[7] The Consultation, section 5.21

helpful in terms of encouraging efficient investment in what is a fast moving yet capital intensive sector. Moreover, the system is asymmetric in its application, favouring BT over new entrants. Any reform should carefully consider the likely impact on the pricing of wholesale services that many operators rely on, and the knock on effect on industry and consumers of any sudden price changes.

- ensuring that the wider domestic tax regime is competitive and stable, and that the UK remains a good place to invest in and do business from.

**Sky** **Oct 2014**