



Department
for Culture
Media & Sport

**Review of the EU Electronic
Communications
Regulatory Framework**

**The UK government's response to
Commission Consultation: *“Public
consultation on the evaluation and the
review of the regulatory framework for
electronic communications networks and
services”***

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1 EXECUTIVE SUMMARY

1.1 UK objectives

1.1.1) The UK welcomes the Commission's Digital Single Market (DSM) Strategy and its ambitious review of the electronic communications regulatory framework. There have been significant changes to electronic communications since the framework was last reviewed in 2007-9. Users are increasingly seeing connectivity as a right, rather than a privilege; new technologies and non-traditional players delivering converging electronic communication services have emerged; and market structures have changed across Europe. It is essential that the revised framework keeps up with the rate of change, but that such change is based on appropriate evidence and is not driven by knee-jerk reactions.

1.1.2) In particular, we must keep in mind that the framework has its origins in a world of voice, copper, incumbents and scarcity; whereas we now exist in a world of data, fibre, increasing competition and, in some areas at least, relative abundance.

1.1.3) The UK published a non-paper¹ on 1st October 2015 setting out our objectives for a revised regulatory framework. In that paper we encouraged the Commission to take a forward looking approach to the review of the framework and to apply the principles of better regulation, taking into account the Commission's current Regulatory Fitness and Performance (REFIT) exercise as much as possible. It is very important that any new regulation is properly targeted, does not duplicate existing regulation or create inconsistencies with other aspects of the DSM programme (e.g. general consumer law reforms), and is justified by clear evidence that regulation is necessary to address harm or to improve functioning of the market. Deregulation, where it does not harm consumer interests or compromise public security, should be a clear objective to develop a simpler and more proportionate framework. This would be consistent with the principle in Article 8 (5)(f) of the Framework Directive that regulation should be lifted or relaxed once there is effective and sustainable competition.

1.1.4) Our paper identified six broad objectives that underpin our approach to the review in order to achieve a stable, balanced, but flexible, regulatory framework that:

- i) Supports investment and innovation, and accommodates changes in technology and market structure;
- ii) Encourages competition as the most effective way to deliver the desired outcomes, through simple and more proportionate regulation recognising that communication providers need to be able to achieve a return on investment. However the limitations of private investment, requiring a commercial return, in delivering infrastructure capable of providing an acceptable level of service to all users need to be understood;

¹ <https://www.gov.uk/government/publications/uk-non-paper-review-of-the-electronic-communications-regulatory-framework>

iii) Supports deployment of communication networks that meet the needs of users over the next decade enabling competitiveness and economic growth and delivering social benefits. The effectiveness of networks needs to be judged by the quality of experience enjoyed, or suffered, by the user, be they an individual consumer or business and not just by the speed of connection. This is essential to encourage the market to drive up standards. Increasingly users will need not just a particular access speed, but will need to be sure of the reliability of the connection, its resilience, and other factors that can impact the user experience;

iv) Offers every citizen access to an acceptable level of connectivity;

v) Empowers and protects consumers, e.g. through greater transparency and awareness of services and safeguards consumer privacy and use of their data;

vi) Respects the principle of subsidiarity and ensures Member States' competence (e.g. in national security matters) such that their ability to place appropriate obligations on service providers is not eroded.

1.1.5) These objectives have guided this response by the UK government to the Commission's consultation on the framework.

1.2 Overall functioning of the regulatory framework

1.2.1) As required by UK legislation, the government is currently undertaking a post implementation review (PIR) of our implementation of the 2009 changes. We will publish a report on the PIR by May 2016.

1.2.2) The UK government considers that the framework has broadly delivered against its objectives, and that these objectives continue to be relevant. To remain effective, the review will have to take into account the pace of technological and market change in the electronic communications sector.

1.2.3) The current framework has offered communication providers a good degree of regulatory certainty, with, in our view, the exception of the requirement for National Regulatory Authorities (NRAs) to conduct market reviews every three years, which is discussed in section 3.5. At the same time the framework also allows Member States the flexibility to adopt their own solutions by taking into account the variety of conditions relating to competition and consumers that exist within a Member State at a national and regional level. The UK believes that this flexibility afforded by Article 8 (5)(e) of the Framework Directive must be maintained to support investment, competition and innovation.

1.2.4) However, whilst the framework has delivered much in terms of competition and consumer choice and protection, the fact remains that the level of investment does not appear to have kept pace with the desired outcome, such as universality of services and quality of experience. In the UK, as in other Member States, publically funded intervention has been required. We examine this more closely in section 3.

1.2.5) For consumers, the framework has provided a good level of protection and choice. Nonetheless, there are provisions in the framework that now seem outdated as technology and consumer behaviours have changed and will continue to change. Our response comments on these provisions below in sections 5 and 6.

1.2.6) The UK's NRA, Ofcom, is also carrying out a Digital Communications Review (DCR), its first major strategic review of the communications sector for 10 years. The purpose of this strategic review is to ensure that communications providers and services continue to meet the needs of consumers, citizens and businesses in an evolving communications market. Consequently, Ofcom's DCR will consider the functioning of the regulatory framework. Ofcom published a discussion document² earlier this year in order to gather evidence. Ofcom will publish their emerging views in early 2016, including any recommendations for legislative change to the framework, which may further inform the government's thinking on the Commission's review. Ofcom will be submitting their own response to the Commission's consultation.

1.3 Priority areas for review

1.3.1) Our October 2015 non-paper identified a number of priority areas, which we feel merit a thorough review in order to achieve our high level objectives. Our consultation response considers each of these in further detail in addition to further priorities raised in the consultation and by our stakeholders.

1.3.2) Section 3 considers investment and competition issues. A framework that incentivises private sector investment in electronic communications networks, offers users a high quality of experience and improves geographic coverage is essential. As identified in our non-paper, the provisions in the framework governing market reviews should be reviewed in order to improve the regulatory certainty needed by industry to invest. In addition, we recommend that the Commission looks closely at whether the framework provides NRAs with the right tools to respond to oligopolies and duopolies and whether the balance between ex-ante regulation specific to the electronic communications sector and ex-post regulation under general competition law is appropriate. We also consider the importance of the framework to encouraging private investment in infrastructure and set out our developing thinking on the continuing role of competition and the issues raised in the Commission's consultation.

1.3.3) In Section 4 we reiterate our position in the non-paper that international coordination of spectrum beyond the EU, through existing mechanisms like the International Telecommunications Union (ITU), can be more valuable than EU coordination alone. We share the Commission's desire to achieve more effective spectrum management, but believe this can be achieved through non-legislative coordination rather than legislative harmonisation. We also suggest that a review of the spectrum management framework should look to reduce the number, scope and duration of harmonisation measures to the minimum required to achieve coordination at a global level for the benefit of Europe.

² <http://stakeholders.ofcom.org.uk/consultations/dcr-discussion/>

1.3.4) Sections 5 and 6 highlight a number of issues relevant to end-user rights and consumer protection. In section 5 we focus on the importance of ensuring that the framework enables providers to meet growing consumer expectations for all round quality of service. We suggest that the Commission considers clarifying in the framework the status of bundles with respect to switching and ensures that the framework recognises the importance of transparency to consumers, how it makes them aware of their options, empowers them with access to information they can assess, compare and, where appropriate, act upon it in order to drive up standards of quality of service.

1.3.5) In Section 5 we also consider the role of over the top (OTT) services and the Commission's desire to create a transparent and competitive market. We reiterate the position in our non-paper that we must avoid knee-jerk reactions to change. The Commission needs to be clear on what it wants to achieve in this area. Any new regulation needs to be proportionate and the benefits understood in order not to stifle innovation and the provision of services that consumers demand. We recommend that the Commission considers a principled approach, as opposed to a prescriptive, fixed set of rules, in order to achieve the desired outcomes. Section 5 goes on to look at definitions, and considers whether the current definition of Electronic Communications Service (ECS) is still appropriate, and the validity of different definitions across different directives in a converging market.

1.3.6) The Universal Service Obligation (USO) is looked at in Section 6, in particular the future role of the USO in providing users across Europe with an acceptable level of connectivity at an affordable price. We also consider the need for continuing flexibility of NRAs to respond to demand for phone boxes and directory enquiries within Member States.

2 INTRODUCTION

2.1 Consultation approach

2.1.1) We welcome the Commission's comprehensive consultation and the opportunity to formally submit the view of the UK government. This response does not endeavour to respond to every consultation question in detail, but rather provides the government's response to what we believe are the most significant issues to be addressed in order to achieve our objectives. Many of these issues were identified as priorities in our non-paper.

2.1.2) We hope that the review can be concluded as soon as possible. To that end, we would encourage the Commission to reach early agreement on the issues that received close scrutiny during consideration of the Telecoms Single Market (TSM) package, such as spectrum management, or the less contentious issues under review.

2.1.3) This response represents the views of the UK government, although in putting this response together, the government has considered the responses from stakeholders to our own post implementation review and held a series of informal

stakeholder discussions. The government has also considered the published responses³ from stakeholders to Ofcom's DCR discussion document. The government may submit further views to the Commission in early 2016 following publication of Ofcom's emerging findings on the DCR.

2.2 Need for consistency across the Digital Single Market Strategy

2.2.1) Electronic communications are no longer centred predominantly on fixed copper landlines, phone calls and SMS. The communications landscape is now more varied and complex, with single providers offering bundles of communications and content services to consumers through a single contract and providing online platforms that offer a range of communications, content and commercial services. It is now difficult to draw discrete lines between what we traditionally referred to as telecommunications, audiovisual content and information society services.

2.2.2) The Commission has issued several consultations in quick succession in the second half of 2015 on the Audiovisual Media Services Directive, platforms regulation, standards, consumer protection for digital content, and copyright issues. It is due to launch a separate review of the E-Privacy Directive following conclusion of the renegotiation of the General Data Protection Regulation. The Commission has to ensure that any proposals resulting from these consultations are consistent. The Commission must avoid regulating the same services in multiple ways and must ensure consistent application of definitions. This is discussed further in section 5.9.

3 INVESTMENT AND COMPETITION

3.1 Delivering the desired connectivity

The UK government's response:

- **The UK has seen substantial investment in digital communications infrastructure roll out in recent years – both for mobile and fixed connectivity. This has largely been driven by commercial investment, but there has also been the need for government intervention, both via the use of public funds and through policy and regulatory measures, to support roll out to areas of market failure.**
- **The UK needs a framework that continues to support commercial investment across fixed and wireless infrastructure – that meets the needs of citizens and businesses right across the country – while minimising burdens on the public purse.**

3.1.1) Ensuring access to high-quality fixed and mobile connectivity for people across the UK, no matter where they live, is a top priority for the UK government. The market

³ <http://stakeholders.ofcom.org.uk/consultations/dcr-discussion/?showResponses=true>

has had its limitations in providing the levels of coverage that many expect, as some areas are not commercially viable for fixed superfast broadband deployment based on current demand profiles. The UK has sought to address this, as have other Member States, through a range of policy, regulatory and legislative measures, and as a last resort the provision of public funding. This has enabled the UK to implement plans to deliver superfast connectivity to 95% of the population by the end of 2017. For mobile, obligations in the mobile operators' licence conditions have been used to ensure adequate coverage through competition. Ofcom has placed an obligation on Telefonica to deliver 4G coverage to 98% of the population by the end of 2017. In addition, in December 2014, the UK government signed an agreement with each of the four mobile network operators to deliver 90% geographic coverage for basic voice and text by the end of 2017.

3.1.2) To date, obtaining the necessary State Aid clearance for investment in fixed superfast infrastructure has been a challenge. Going forward, if State Aid is to be one of the tools used by Member States to deliver the necessary levels of connectivity, then some State Aid modernisation should be considered, although this needs to be supported by a robust evidence base, taking into account what is actually happening in Member States now, rather than being based on historical decisions. We believe that the Commission needs to be clearer in its own 'balancing test' assessments and the weight that it attaches to the component parts. This is the foundation for State Aid decisions. It still remains too opaque, with a lack of clarity about the assigned weights e.g. does the effective deployment of the NGA network dominate in the calculation?

3.1.3) Further private investment is required to ensure nationwide coverage at superfast speeds, and, importantly with regard to the timing of this review, the deployment of ultrafast networks. These networks will need to meet the increasing expectations of users in terms of access speed, reliability and resilience of the networks. There will also be increasing demand for backhaul for wireless services, including the Internet of Things (IoT). We anticipate that even if technological developments help reduce the future costs of infrastructure provision and deployment, future investment requirements will be significant - with estimates from some suggesting as much as €200bn is required to meet the EU's digital goals.⁴ Although we have been unable to assess the validity of these numbers, we acknowledge that future investment requirements are likely to be substantial and ensuring the right conditions to support and incentivise that investment will present a challenge that the framework should seek to deliver against.

3.1.4) A number of the Commission's questions seek to find ways to address this investment. Our preliminary view is that although the existing framework has delivered much, the fact remains that significant challenges remain in ensuring future needs are met, e.g. the universality of services and quality of experience. Fostering competition to spur future investment will be essential to meet those challenges and we will need to

⁴ Five Priorities for Achieving Europe's Digital Single Market, Boston Consulting Group, October 2015 https://etno.eu/datas/publications/studies/FINAL_BCG-Five-Priorities-Europes-Digital-Single-Market-Oct-2015.pdf

consider whether the existing framework can be strengthened to further promote that outcome.

3.1.5) The government's long term strategy is to understand whether there are particular barriers to private investment in new ultrafast infrastructure, and to explore with providers of both the networks and the finance how these might be overcome – including innovative financial and commercial models. However, the UK currently faces a number of challenges in setting out a clear pathway for the period when the revised framework is likely to be implemented. There are potential, yet significant, changes to the structure of the telecoms market that are as yet uncertain. For example, Ofcom's DCR raises questions about the possible structural separation of BT retail and Openreach and the impacts that this would have on both the fixed and mobile market. There are also possible mergers and acquisitions in the mobile market. We will have a better sense of the outcome of these potential changes and the response by the market in early 2016.

3.1.6) The pace of technological development and convergence is also extremely rapid. We are aware that we must strike the right balance between ensuring the right conditions for the future so that we can continue to have world-class connectivity, but without getting ahead of ourselves and dismissing the existing technology which is likely to be sufficient for years to come.

3.1.7) We therefore propose to keep an on-going dialogue with the Commission over the coming months as our position on delivering the desired connectivity becomes clearer. In the meantime, we would like to share with the Commission our emerging conclusions.

3.2 Network technology

The UK government's response:

- **The UK government believes that a range of technologies will still have a role to play in meeting user needs. We therefore encourage the Commission to adhere to the principle of technology neutrality.**
- **To keep up with the rate of change, and to ensure consumers have access to the best services, the Commission should ensure that the framework gives NRAs the flexibility to allow the market to adopt and invest in new technologies and allows these to flourish, while also ensuring that proper safeguards are in place to ensure that this does not harm public security.**

3.2.1) The actual level of investment required will depend on the outcome that we are collectively seeking, and on the technology that can be deployed to achieve it. Two of the most important aspects of the evolution of network technology over the next five years will be the convergence of fixed and mobile infrastructures as users grow to

demand and expect more seamless connectivity – all the time and everywhere – and the ongoing shift to IP based networks. This period will see the roll-out of faster and more capable 4G networks, which will grow to cover most of the land mass of the EU. In five years' time we expect to see the roll-out of 5G.

3.2.2) On the fixed side we can expect more networks taking fibre to the premises (FTTP) offering very high speed connectivity, but more will be delivered through existing copper networks enabled to deliver very high speeds using advanced technologies such as G.Fast. Cable will continue to compete with both FTTP and copper connections and the capability of satellite communications will also grow, important mainly in hard-to-reach areas and in delivery of specific content. Wi-Fi will grow in importance as a bridge for connectivity within premises and outside; and to offload the increasing volumes of data from mobile devices to fixed networks. Networks will become more responsive through the deployment of network function virtualisation and software defined network technology, leading to more efficient networks and reduced costs.

3.2.3) This period will also see a dramatic growth in the IoT, with many connected devices. These will range from very simple sensors with low data requirements to very complex big data applications requiring the utmost in terms of speed, reliability, low latency and security from the network. The IoT will also demand advanced technology to reduce power consumption, both to offer extended unattended lifespans to battery-operated devices and to limit the total energy demands of systems. We will also see the development of low bandwidth networks centred on the needs of IoT systems.

3.2.4) The evolving infrastructure will require considerable work by national and international standards bodies and industry to ensure the interoperability required to provide a truly seamless experience. Fortunately, this is mostly already underway or planned, including for IoT, advanced 4G networks and 5G. The Commission should continue to support this work.

3.2.5) Although the principle of technology neutrality has long been part of the regulatory approach, much of the underlying narrative in the consultation paper assumes the need to move to an extensive fibre network, ultimately to every home. Indeed some of the Commission's questions, for example, question 32, suggest a bias towards fibre-based networks and the switch-off of copper. We consider that, at this stage, the business case for such an outcome remains uncertain given the technological developments described above – accepting, as noted, that extensive fibre deployment will still be needed to provide backhaul. **We therefore believe that a range of technologies still have a role to play in meeting the UK's connectivity needs. To keep up with the rate of change, and to ensure consumers have access to the best services, the Commission should ensure that the future framework gives NRAs the flexibility to allow the market to adopt and invest in new technologies and allows these to flourish.**

3.3 Creating a balanced and transparent market

The UK government's response:

- **The UK government welcomes the flexibility in Article 8(5)(e) of the Framework Directive that enables Member States to adopt their own solutions and believes that this flexibility must be maintained to take into account developments in infrastructure and technology.**
- **Competition should remain a core objective of the framework as a driver of investment, but NRA's should continue to have due regard to Article 8(5)(f) of the Framework Directive in considering whether there are regulatory obligations no longer necessary to drive competition and where general competition law can apply.**
- **While it remains desirable that end to end competition is encouraged as far as is possible, we recognise that *national* end to end competition is unlikely in the UK fixed telecommunications market due to the economics of deployment in particularly rural areas. There are no obvious signs that this will change in the near term, so a one size fits all approach is unlikely to be achievable. A range of measures, such as co-investment models, may be required to address specific challenges, possibly on a geographical basis.**
- **We would encourage progress towards greater harmonisation of wholesale access remedies for business connectivity markets across Europe, noting the Body for European Regulators for Electronic Communications (BEREC) is developing a common position on Layer 2 access products during 2016.**

3.3.1) The UK has thriving and competitive telecoms markets. The current communications regulatory framework has in general worked well by offering communications providers a good degree of regulatory certainty across the EU while allowing the flexibility for Member States to adopt their own solutions, for instance, by encouraging competition in their national markets through an appropriate balance between end-to-end infrastructure and service-based competition, as national circumstances and digital strategy dictate. **The UK believes that the flexibility in Article 8(5)(e) of the Framework Directive must be maintained to take into account developments in infrastructure and technology. This will ensure a truly competitive environment for electronic communications in the EU and take forward the Digital Single Market.**

3.3.2) The UK believes that competition should remain a core objective of the framework as a driver of investment. Competition in network technology has grown markedly since the last review of the framework in 2009, so we would reiterate the need for NRAs to give due weight in their market assessments to Article 8(5)(f) of the

Framework Directive to determine where regulatory obligations are no longer necessary to drive competition and where general competition law can be applied.

3.3.3) Although to date we have considered that end to end competition is desirable and should be encouraged as far as possible, going forwards, we recognise that there is a primary question about the type of competition we are seeking that will best encourage investment – whether it should continue to be end to end, or whether it should be access-based competition using passive and active remedies, or a mixture of the two. In the UK, end to end competition exists, primarily between cable and fibre networks, to around 50% of homes. Recent announcements of further commercial investment will extend this to around 70% of homes. End to end competition is generally the norm in the mobile market. We have four main mobile operators in the UK. These are complemented by multiple wholesale provision to mobile virtual network operators (MVNOs), of which we now have around forty.

3.3.4) Competition has been encouraged through the prominent use of access-based remedies, driven in part by the thesis of the ‘ladder of investment’, which posited that alternative providers would invest more and more in infrastructure via a ladder of remedies, each of which would require greater investment than its predecessor. Recently, this thesis has come under challenge from some commentators as access remedies are not perceived to be leading to increased levels of investment in infrastructure. End to end competition has undoubtedly delivered benefit in the mobile market, but in spite of the investment in rural fibre networks by providers such as Gigaclear, it has always been argued that in the fixed market, *national* end to end competition is unlikely due to the economics of deploying in rural areas where the return on investment would not be sufficient based on current demand profiles. This has been identified by the investment community and some industry respondents to Ofcom’s DCR. **There are no obvious signs that this will change in the near term, so a one size fits all approach is unlikely to be achievable. A range of measures, such as co-investment models and the incentives considered in section 3.4, may be required to address specific challenges, possibly on a geographical basis.** The UK NRA’s DCR seeks to consider these questions in detail and the UK government is very keen to consider the outcome of this review, the emerging findings of which are expected to be available in early 2016.

3.3.5) The consultation also raises the question of oligopolies and whether the current model of ex-ante regulation is able to meet the challenge of oligopolistic markets now and into the future. In the UK, the position of the incumbent is very different to where it was when the existing framework was introduced. BT now has a 37% market share of fixed lines, the lowest of any incumbent fixed provider in Europe.

3.3.6) This is not a new issue. In its response to the last review, the UK government noted the possible doubts as to whether the framework was capable of dealing with this problem and it is clear those doubts remain. We share the view of the Commission that oligopolies do not necessarily result in a poor competitive outcome to the detriment of the consumer, equally we recognise that the existence of two, or even three, players might not necessarily result in the best outcome for consumers.

3.3.7) Enabling access to key bottlenecks through wholesale remedies has underpinned the growth of services across Europe. Access to infrastructure, backhaul and infrastructure sharing will remain major topics as networks converge. The UK believes that vigorous competition in dynamic markets is integral to ensuring that adequate investment in infrastructure takes place and regulation should facilitate this wherever possible. Infrastructure sharing for commercial reasons such as reducing roll-out costs and ensuring better coverage, as is often done by mobile operators is to be encouraged, but NRAs should have the power to place conditions on this to safeguard the resilience of networks in the national interest.

3.3.8) The Commission should also consider whether differentiation in approach is justified between business-to-business (B2B) and business-to-consumer (B2C) markets, for example looking to achieve a greater level of consistency in wholesale products across Europe. There remain challenges to providers of pan-European B2B services in delivering services in different Member States to the detriment of the end user. **We would encourage progress towards greater harmonisation of wholesale access remedies for business connectivity markets across Europe, noting that BEREC is developing a common position on Layer 2 access products during 2016.**

3.4 Regulatory incentives for first movers

The UK government's response:

- **The UK government would not be against considering an approach to incentivise first movers, on a geographic basis, as long as suitable safeguards were built in that protected consumers and did not undermine the potential for emerging competition.**

3.4.1) The Commission's questions around providing more incentives to first movers hint at possible alternative approaches, such as co-investment. We recognise that a major driver for investment is the need to get an adequate return on that investment, some would argue it is the only driver for the level of capital expenditure required. Investors would consider the right regulatory framework in this instance to be one where none of the return on the investment was regulated away through access conditions or similar, although this is achievable under the existing framework e.g. in the UK Virtual Unbundled Local Access (VULA) access conditions that do not set the wholesale price.

3.4.2) There would clearly be concerns in adopting an approach to first movers that would potentially be contrary to the focus on competition as a driver for investment and it would be important not to undermine this. There is clearly scope for encouragement of first movers to be in conflict with the principle of competition, and although this needn't be the case, such an outcome needs to be guarded against. As already noted, the UK market is seeing increasing investment in alternative infrastructure, even into rural areas and there is a danger that such investment could be undermined by premature regulatory action of this type, unless there were some extremely well defined criteria to protect the possible returns of such investment. **Notwithstanding these concerns, and**

recognising the scale of the investment required, in principle the UK government would not be against considering an approach to incentivise first movers, on a geographic basis, as long as suitable safeguards were built in that protected consumers and did not undermine the potential for emerging competition.

3.5 Regulatory stability

The UK government's response:

- **The UK government encourages the Commission to consider giving a longer time frame for market reviews and believes every five years would be more appropriate.**

3.5.1) Encouraging investment is one of the prime objectives of the framework by applying regulatory tools to open up markets and remove bottlenecks. In discussions with the investment community on what promotes investment, regulatory stability is often mentioned. Investors want as much certainty as possible that investments will not be undermined by subsequent actions by NRAs.

3.5.2) There is of course a balance to be struck between achieving that stability and creating an environment that actually stifles competition and the emergence of new services and business models. However, our view would be that the current cycle of market reviews by NRAs every three years creates a continual cycle of regulatory change that could discourage investment and places considerable burden on NRAs and the industry participants required to provide information.

3.5.3) In the UK the time taken to complete and implement one review's recommendations can often be such that it is closely followed by the start of the next review. The average duration of a market review in the UK is 18-20 months, and where the resulting market assessments and/or remedies are the subject of appeal by industry, implementation of the review can overlap with the next iteration of the review of a given market. In addition, industry stakeholders can only be confident that the outcome of a market review will apply for the relatively short period of that market review. Whilst some industry stakeholders in the UK prefer reviews every 3 years to keep up with the pace of change, where an outcome might have a large impact on the commercial freedom of industry stakeholders, this can undermine their ability to plan, for example, major investment with regulatory certainty. Market reviews every three years also makes it difficult for Ofcom to assess the impact of interventions undertaken in previous market reviews and determine whether the intervention requires adjustment.

3.5.4) We therefore think consideration should be given to a longer time frame for market reviews and believe every five years might be more appropriate. There would of course have to be some flexibility, e.g. to address any significant market changes within that period, such as mergers and acquisitions, though we would expect this to be looked at by the relevant regulatory authorities at the time.

4. SPECTRUM MANAGEMENT AND WIRELESS CONNECTIVITY

4.1 Principles and objectives of spectrum management in the Digital Single Market

The UK government's response:

- **The UK government welcomes the Commission's recognition of the significance of spectrum to telecommunications. Any future proposals need to continue to accommodate non-telecoms calls on scarce spectrum.**
- **We want to see a reorientation of EU spectrum policy towards achieving the greatest practicable convergence between the practices of Member States, and away from legislative harmonisation. Such non-legislative approaches could most readily achieve the Commission's goal to speed up the deployment of telecoms services.**
- **We believe that any consideration of changes to the spectrum management framework should look to reduce the number, scope and duration of harmonisation measures to the absolute minimum required, as well as considering any possible improvements to common rules affecting spectrum management. For example, the application of a 'sunset clause' to harmonisation decisions would merit examination.**

4.1.1) Radio spectrum is required for some key telecommunications services, including Wi-Fi and mobile broadband, to function effectively but is also used for many other purposes including broadcasting, earth observation and scientific research. **The UK government welcomes the Commission's recognition of the significance of spectrum to telecommunications, however any future proposals need to continue to accommodate non-telecoms calls on scarce spectrum.**

4.1.2) The UK government attaches considerable importance to a functioning internal market in digital goods and services, and recognises the need to guard against market failure. As such, the Commission's scrutiny of the spectrum management framework is particularly welcome. That said, the UK government believes that the increased prevalence of globally standardised technologies noted by the Commission makes it harder in general to justify an internal market case for harmonisation in spectrum use. European spectrum management operates in a global context.

4.1.3) With standards and spectrum allocations increasingly being developed for global markets, legislative harmonisation at a European level is unnecessary to stimulate the adoption of common approaches to spectrum. For example, the high degree of commonality of approach to 700 MHz spectrum, not only between Member States but across the world, has been achieved without EU harmonisation measures to date, and the development of 5G technologies looks poised to evolve in a similar way. Far from being the key to unlocking investment in 5G across Europe, a premature harmonisation

could put Europe outside the mainstream of 5G technology development with the consequent loss of economies of scale and influence over future evolution of 5G. The most important issue for Europe is engagement with the 5G standards and spectrum allocation process, which needs to reflect the varied needs of Member States to be fully effective.

4.1.4) The benefits of common use of technologies derive principally from these global economies of scale, which are motivating Member States to adopt converged solutions for spectrum without the need for legislative harmonisation. Harmonisation that departs from global standards would therefore risk causing harm to, rather than creating benefits for, Europe. For example, it is important that governments in major markets globally give indications of what spectrum might be available when new concepts and new radio based products are being researched, designed, standardised and rolled out.

4.1.5) The UK government is also sympathetic to the view that a major source of legal uncertainty for businesses that use spectrum is the proposal of harmonising legislation. The announcement of such legislation creates uncertainty that is only resolved when the measure is finally agreed. By contrast, non-legislative approaches could achieve the Commission's goal to speed up the deployment of telecoms services (*inter alia*) by eliminating the time-consuming legislative process. We would welcome careful consideration of whether there is a case for strengthening the Commission's facilitation role to ensure Europe doesn't fall behind at a global level and for non-legislative sharing and adoption of best practice to raise the performance of spectrum management across Member States. The UK government would be pleased to engage in dialogue with the Commission prior to the publication of proposals to consider the need for non-legislative approaches.

4.1.6) The UK government therefore believes that any consideration of changes to the spectrum management framework should look to reduce the number, scope and duration of harmonisation measures to the absolute minimum required, as well as considering any possible improvements to common rules affecting spectrum management. For example, the application of a 'sunset clause' to harmonisation decisions would merit examination.

4.1.7) The UK government also believes that harmonisation in spectrum use is inherently limited in its ability to create the outcomes that the Commission and the UK (with other Member States) both seek to achieve in terms of effective use of spectrum across Europe; maximising spectrum's contribution to Europe's diverse economy, society and culture; and ensuring a competitive telecoms market across Europe. This limitation arises from fundamental differences between Member States in geography, market dynamics and cultural values.

4.1.8) Firstly, the sometimes radical differences between Member States in population distribution and physical geography impact directly on the utility of many spectrum bands. Weather, trees and mountains can all adversely affect the propagation of radio waves and, as a result, a particular block of spectrum is not of equal utility across Europe. In some cases, therefore, the best overall value will come from having the *best* use for each Member State, not the *same* use.

4.1.9) Secondly, the territorial licensing that Member States undertake to deal with this issue must also take account of the state of competition between players in these markets. For example, in the wireless broadband market some Member States have three Mobile Network Operators (MNOs) while others have four, and in some including the UK there are proposed mergers that would move from four MNOs to three. Even where there are the same number of MNOs in a domestic market, wider competition considerations mean that such factors as the extent of horizontal integration in a market (e.g. the ability to offer triple- or quad-play bundles of telecoms and media services) must also be taken into account in setting the terms of any spectrum licence. As a result to harmonise terms of spectrum licences, even across Member States with similar geographies, risks adverse impacts on competition, both within individual Member States and in the internal market as a whole. For example, a geographical coverage obligation that is appropriate to one territory could be commercially unachievable in another, and lead to under-investment as operators simply do not bid for unattractive licences.

4.1.10) Thirdly, there are cultural and other factors that impact upon both historical and current choices in spectrum management in individual Member States that cannot lightly be set aside. A case in point is the UK public's particularly strong relationship with free-to-air digital terrestrial television (DTT): around 19m homes in the UK have DTT services⁵. This makes DTT output an aspect of common culture⁶ in the UK, in a way that it is perhaps not in some other Member States. Decisions on spectrum for DTT thus have correspondingly wide and individual implications for the UK.

4.1.11) That does not mean the UK is unwilling to contemplate change in DTT spectrum use – on the contrary, it has, for example, already begun a programme to clear the 700 MHz band for mobile broadband. However, it emphasises the centrality of Member State decision-making to effective spectrum management in Europe. Similar arguments apply to spectrum use in defence and security, which are exclusive Member State competences.

4.1.12) A consequence of Europe's history and diversity is that current spectrum management arrangements also vary considerably between Member States, not least in respect of defence applications. The costs of uprooting these arrangements must be fully factored into decision-making on the case for any EU-wide measures. Market-led convergence of use over time as older systems are retired may therefore be preferable to legislative harmonisation.

4.1.13) For all these reasons, the UK government recommends a reorientation of EU spectrum policy towards achieving the greatest practicable convergence between the practices of Member States, and away from legislative harmonisation. This would reduce the demands placed on the Radio Spectrum Committee (RSC) but

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http://www.digitaluk.co.uk/_data/assets/pdf_file/0020/88310/Digital_UK_Update_Report_July_2015_Online.pdf

⁶ The EU has competence under Article 6 TFEU to support, coordinate or supplement actions of the Member States on culture but this cannot extend to harmonisation.

could benefit from additional effort in coordinating the strategies of Member States and of the EU through the Radio Spectrum Policy Group (RSPG).

4.2 Spectrum management

The UK government's response:

- **On coordinated spectrum assignment, the UK government remains to be convinced of the need to go beyond common principles for assigning spectrum contained in the Authorisation Directive.**

Legislative framework

4.2.1) The UK government is of the view that the existing legislative framework is generally effective. There is no particular need to simplify or consolidate it in terms of spectrum management, although the UK government is likely to be sympathetic to any efforts in this direction. We cannot comment on the experience in other Member States but believe that Ofcom is applying the framework appropriately. However, we note that some companies operating in the UK have observed difficulties caused by different applications of the framework in other Member States.

4.2.2) The UK government believes it is critical to good spectrum management for Member States to act in response to their own particular circumstances and that to weaken this would impair the overall value of spectrum. Any gross benefits from additional economies of scale in harmonisation are unlikely to be sufficient to compensate for the consequent costs, impaired competition and lost opportunities noted in section 4.1 above. However, the UK government would welcome action to ensure that common European rules and principles are being applied uniformly and correctly across the Union.

EU-level coordination of policy

4.2.3) The UK government sees a continuing need for coordination at EU level, on the model of the current Radio Spectrum Policy Programme (RSPP). No more active approach is required for the reasons discussed in section 4.1 above; the UK does not believe harmonisation to be an end in itself and remains to be convinced of its value to the internal market. However, there may be a benefit to European and global industry in having a single European point of contact to both influence and be influenced by a pan-EU spectrum position.

Coordinated spectrum assignment

4.2.4) The UK government believes that efforts to coordinate spectrum assignment methods between Member States that go beyond collaborative sharing of best practice or development of voluntary agreements between Member States are likely to impair rather than promote competition. To the extent that benefits to investment may arise from common approaches, the geographical and other factors identified in section 4.1

above mean that the most effective approaches are likely to be Member State-led. Pan-EU *assignment* processes are neither necessary nor desirable.

4.2.5) The Authorisation Directive already provides for common principles for assigning spectrum. **The UK government remains to be convinced of the need to go beyond this, but could consider the introduction of further general principles or minimum standards (e.g. following a similar approach to the Collective Rights Management Directive) if action proved necessary. However, issues relating to licence valuation and payment must be left to Member States.**

Shared access to spectrum

4.2.6) Shared access to spectrum is making and will increasingly make an important contribution to meeting demand for spectrum. It is not clear that out-of-band emissions require additional policy attention: the Radio Equipment Directive is contributing to reducing such emissions at source. Of the methods identified in Q89, only use of white spaces and other dynamic spectrum access techniques have significant potential to open up new spectrum: trading and incentive auctions can potentially improve allocative efficiency by allowing spectrum to pass to a user that values it more highly, but do not create additional opportunities for use. It should be noted that trading and incentive auctions may be of limited value if the usage of a band is constrained by a harmonisation decision. A recent spectrum trade in the UK (of L-band spectrum by Qualcomm to MNOs) illustrates this: the trade was catalysed by a regulatory decision permitting the spectrum to be used for supplementary downlink (i.e. additional download capacity for mobile broadband).

Network technologies

4.2.7) The UK government does not observe or envisage practical difficulties with Radio Local Area Network (RLAN) deployment that would require EU-level action. The UK's Super Connected Cities Programme (now ended) successfully provided public wireless in 1,400 public buildings, and on 1,400 public buses, trams and trains and in city centres without practical difficulties related to spectrum.

4.2.8) Many domestic Wi-Fi access points in the UK are already available for use by third parties, but in many cases this requires payment of a fee to the provider. Based on the UK experience, a simple permission for end-users to share their Wi-Fi can achieve the result sought without additional legislation. We have seen increasing deployment of public Wi-Fi in recent years. It is an easier and possibly cheaper route for operators to provide data capacity in well occupied areas, in comparison with mobile phone technology. The increasing ability for easy and automatic switching between the two technologies that is now being rolled out is also likely to increase the popularity of Wi-Fi.

5. SECTOR SPECIFIC REGULATION

The UK government's response:

- **The UK government wants to see increased transparency across the full range of quality of service metrics, including: speed, geographic coverage and reliability of the connection, resilience and security, and other factors that can impact the user experience. NRA powers to gather and publish information should support this.**
- **We support quick and easy switching in the telecoms markets and we would welcome measures that: provide consumers with access to clear and reliable information about offers; enable the consumer to assess and compare those offers in a well-reasoned way; and, act on that information.**
- **The UK believes that where a bundle includes TV and/or other services as an element of the bundle, providers should not be able to frustrate or deter switching as a result of different rules applying to different core elements of the bundle. We would welcome the Commission clarifying in the framework the status of pay TV within bundles to establish regulatory certainty. This could involve extending Article 21 or Article 30 of the Universal Service Directive transparency and switching provisions to potentially cover notification of better deals and alignment of bundle contract termination dates and cover those issues not already covered under existing consumer rights and protection legislation.**
- **We also want to see the framework quality of service provisions extend to cover the ease and speed of customer contact with operators and the provision and quality of repairs or compensation. These obligations should be set out in consumers' contracts.**
- **The UK government does not wish to see any further regulation aimed at harmonising promotion of the European emergency number, 112, or performance targets specifically related to it.**

5.1 Empowerment and enforcement

5.1.1) Consumer expectations are changing and the framework must keep up to enable operators to continue to meet these expectations. In November 2015, the Prime Minister signalled that fast broadband be put on a similar footing as other basic services – it should not be a luxury but a right. We believe empowered consumers drive competition and that competition is the most effective way to deliver investment in innovative services that meet consumer needs.

5.1.2) In a society where two-thirds of the 86% of the population who use the internet in the UK have used it to purchase goods, services or tickets online,⁷ and the government is committed to increasingly delivering government and public services online, consumer rights and protections must be a paramount driver in scoping the review. The revised framework must “empower and protect consumers through greater transparency and awareness of services, and safeguard consumer privacy and use of their data”.⁸

5.1.3) Alongside consumer empowerment there is a need for effective enforcement to ensure that consumers rights are protected and that there is a level playing field so that businesses that do not treat customers fairly do not benefit at the expense of those that do treat customers fairly. While many consumers will be able to effectively enforce their rights, others may need the regulator to do this on their behalf or in the collective interests of other consumers.

5.1.4) The framework needs to enable NRAs to be vigilant and have the ability, where needed, to protect consumers in increasingly concentrated markets with complex options to choose services and/or bundled services. Many of the welcome successes on consumer rights and protections in the UK in recent years have been achieved through voluntary agreements with industry, but these are often achieved where there is a credible threat of principle-based intervention provided for in the framework. These interventions can be deployed if and when needed (rather than relying on prescriptive rules which could create loopholes and raise the need for additional enforcement action).

5.1.5) In a society where digital inclusion has moved away from meaning reaching out to various excluded groups (be that disabled users or the elderly) to mainstreaming access to the digital economy through affordable accessibility; digital skills; and provision of online, social, business and governmental services, we should not lose sight of the basic principle of the Universal Service Obligation (USO) which has always been “accessibility for all”, nor confuse it with the plethora of quality of service demands. More on the UK government’s views on the USO can be found in section 6.

5.2 Quality of service

5.2.1) The UK government is of the view that the effectiveness of networks needs to be judged by the quality of consumer experience enjoyed, or suffered, by the user, be they an individual consumer or business, and not just by the speed of connection. This is essential to encourage the market to drive up standards. Increasingly users will need not just a particular access speed, but will need to be sure of the reliability of the connection, its resilience, and other factors that can impact the user experience

⁷ Ofcom’s “*Internet use and attitudes 2015 Metrics Bulletin*”
http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr15/Internet_use_and_attitudes_bulletin.pdf

⁸ UK non-paper objectives <https://www.gov.uk/government/publications/uk-non-paper-review-of-the-electronic-communications-regulatory-framework>

5.2.2) Complete quality of service provision will enable consumers and businesses to do what they want to do, where they want to and when they want to. This will be crucial in anticipating future use of technologies. For example, app-based universal access to e-Health information will be as much critically dependent on geographic coverage, security, and latency, as it is on speed of connection or bandwidth. Universal geographic access to catch up TV services will be the same.

5.2.3) As availability and use of device becomes seemingly ubiquitous and without limitation **the UK government feels that NRAs powers to impose obligations on operators to publish information should be reviewed. Existing powers cover prices and tariffs, costs of alternative usage patterns, changes to termination date, standard terms and conditions, number and service tariff ranges, access limitations, access to emergency services and equivalence measures for disabled end-users. This information could be augmented with data on all-round quality of service metrics covering availability of coverage, latency and security, fault repair and a wider range of quality of service metrics.**

5.2.4) Quality of service has been traditionally focussed on technological provision of services. Of course, the all-round customer experience extends beyond that and in addition to the points above, **the framework quality of service provisions could also extend to cover the ease and speed of customer contact with operators and the provision and quality of repairs or redress.** As currently with consumer expectations, these could be set out in consumers' contracts with providers expected to work to meet their contractual obligations.

5.3) Switching

5.3.1) Competition will be a key driver to quality of service provision and the UK is committed to supporting quick and easy switching in communications markets. Convergence means that consumers will increasingly look to buy bundles of services from single suppliers.

5.3.2) Ofcom is currently considering potential improvements to switching processes for mobile customers. This includes considering options in which the gaining provider leads the switch and minimises the customer's need to interact with the losing provider. Ofcom has also started work to examine the consumer experience of switching bundled telecoms services, broadband and standalone services. Using findings from that work, we will work with Ofcom to make it easier for consumers to switch bundled services. This new work is also looking at consumer experiences of switching triple play (landline, broadband, Pay TV) services between the Openreach copper, Virgin cable and/or Sky satellite networks. Where Ofcom identify any difficulties, they will consider whether there are process and/or non-process reform options to help address these in a proportionate way.

5.3.3) Increased take-up of bundled services, including bundles of electronic communications services with other products and services, demonstrates the need for NRAs to have the flexibility to make conditions that apply to such bundled services. That

is particularly important in terms of setting standards for how such services are sold and how consumers may switch between them.

5.3.4) If NRAs have limited flexibility to set conditions for such bundled services, there may be less provision for consumer protection and switching in the market, meaning that opportunities for innovation and competition are not maximised. For example, the UK government believes providers should not be able to frustrate or deter switching bundles as a result of different rules applying to different individual elements of a bundle. We would avoid redefining electronic communications services and instead simply seek the extension of the switching-relevant provisions (term, termination, gaining provider led model, etc.) to all the elements of the bundle. However, some concerns remain about other rules applicable to electronic communications services being extended to the non-electronic communications service elements of a bundle, which could see a disproportionate increase in the regulatory burden. **In that context we would welcome the Commission clarifying in the framework the status of pay TV within bundles to establish regulatory certainty.**

5.4 Transparency

5.4.1) Markets work well when there are efficient interactions on the demand side (consumers) and supply side (providers). In the telecoms market, that requires consumers to be informed about the range of services on offer, to understand what they need from a service or bundle of services and to make informed decisions about which services to buy based on those needs. Providers are incentivised to react to consumers' needs by tailoring their services, which intensifies competition and strengthens infrastructure and growth.

5.4.2) Empowering consumers through transparency and provision of information, (including, as noted in section 5.2, on reliability, capacity, latency and resilience, unit costs, security as well as connection speed) and supported, where necessary, through enforcement and redress will drive further innovation and competition between communication providers, consequently improving the standard of consumer experience.

5.4.3) We want to make sure consumers have more transparency about the service they are getting. Ofcom will release a new mobile app so that consumers will be able to check if their home Wi-Fi is working as it should be. They are also planning to release even more detailed, address-level mobile and broadband speed data next year. This will help people make more informed decisions about things like moving home or starting a business.

5.4.4) Transparency of information will inform market choice. Based on a model by the Office of Fair Trading,⁹ there are four stages to a consumer's decision to take out a

⁹ OFT, March 2010, pp.10-11

http://webarchive.nationalarchives.gov.uk/20140402142426/http://www.offt.gov.uk/shared_offt/economic_research/oft1224.pdf

product or service, and therefore four points at which obstacles could dissuade the consumer from making that decision. Those points are:

- Awareness (when consumers who have not previously considered changing provider become engaged in the market);
- Access (clear, reliable information about offers);
- Assess (comparing those offers in a well-reasoned way); and
- Action (on that information and analysis).

5.4.5) There is nothing in the framework to prevent this approach being adopted and, as such, **we would welcome the adoption of these four points across the telecoms market to complement work that the UK government and Ofcom have already done and are doing to simplify switching.**

5.4.6) Some of these issues are addressed, or could be addressed, under existing consumer rights and protection legislation, but **the Commission could explore extending its Article 21 (Transparency) or Article 30 (Facilitating Change of Provider) Universal Service Directive provisions to potentially cover notification of better deals and alignment of bundle contract termination dates.**

5.5 Equivalence of access for disabled users

5.5.1) The UK was able to expedite the introduction of Next Generation Text Relay (NGTR) for hearing-impaired users at the time of the 2011 implementation, pursuant to Article 23a of the Universal Services Directive. The UK government continues to pursue an agenda of cost-effective improvements for the disabled and hearing impaired community.

5.5.2) Although there is work to be done to fully provide equivalence for disabled end-users, the UK government feels that provisions in Article 23a are sufficient to provide for this.

5.6 Other consumer protection issues

5.6.1) In the UK the government, the regulator and industry have enhanced the provisions of the framework with voluntary agreements with industry, under an umbrella heading of the Telecommunications Consumer Action Plan (TCAP). In 2015 the four mobile operators – EE, Vodafone, O2 and Three, together with Virgin Mobile – agreed to cap consumers' liability for bills for the use and abuse of mobiles when they have been lost or stolen. The cap was fixed at £100, provided the loss of the phone is reported to the operator within 24 hours, helping to avoid high bills caused by unauthorised use of mobile phones that have been lost or stolen. This illustrates how positive outcomes can be achieved without regulation where there is a credible threat of intervention. Statutory protections in place for unauthorised use of debit/credit cards provided a useful precedent.

5.6.2) Given the very wide-scale awareness of our historic, national 999 emergency number and the fact that calls to the European emergency number 112 are handled identically within UK networks, **the UK government does not wish to see any further regulation aimed at harmonising the European emergency number.**

5.7 Over the top (OTT) services

The UK government's response:

- **The UK government would advocate taking a principled, light touch approach to the regulation of OTT services.**
- **We believe that to create a transparent and competitive market, the Commission should also consider deregulation of existing electronic communications services where this does not harm consumer interests, undermine regulatory enforcement powers, or compromise national security, public security or prevention, detection and prosecution of criminal offences.**

5.7.1) The Commission has committed to look at consistent application of the framework to market players to the extent that they offer competing services in order to create a more transparent and competitive market. Whilst we have set out below a number of concerns we wish the Commission to consider, we welcome the Commission's intention to limit the scope of this consideration to OTT communication services that compete with electronic communications services.

5.7.2) Various issues have been identified as anomalous because OTT services are generally not regulated by the framework. With a few exceptions, OTT services do not fall within the definition of an electronic communications service and so are not regulated in the same way as "conventional services". These anomalies include:

- a. Privacy
- b. Quality of service
- c. Consumer protection generally
- d. Interconnection and access between similar services from different providers
- e. Portability of data when changing provider
- f. Emergency calls (in relation to VoIP)
- g. Numbering (in relation to VoIP)

5.7.3) Because of these anomalies, there have been calls to create a "level playing field". However, this does not necessarily mean "levelling up" by extending all regulation to new players.

5.7.4) We should be wary of any knee-jerk reactions to change. OTT services provide innovative new services that meet consumer and business needs. Achieving the

Commission's objective of creating a transparent and competitive market must not stifle this innovation and any new regulation needs to be proportionate and the benefits clearly understood. New regulation should not be used to shield companies from the competition of legitimate, more popular alternatives.

5.7.5) We would encourage the Commission to provide more clarity on the desired outcome of applying regulation to OTT services. We have identified three possible areas that the Commission may be considering.

1. **Competition:** If the desired outcome is to address market abuse, then the Commission should use existing ex post EU competition law effectively.
2. **Investment:** If the Commission desires to encourage investment in networks by OTT services, then we would encourage the Commission to look for evidence to justify whether regulation is required to achieve this. For example, some OTT service providers already invest in networks to improve delivery of their services. A recent albeit much broader study by Analysys Mason¹⁰ suggested that content and application providers already invest between USD28 billion and USD36 billion annually in the last three years (2011-13) in networks, facilities and equipment of the internet. The report noted that in this period Europe appears receive the largest proportion of this investment, benefitting from approximately USD8.2 billion (€5.9bn¹¹) direct and USD2.2 billion (€1.6bn) indirect investment. The Commission should also consider that OTT services drive up demand for data services provided by traditional telecoms companies. In the UK we are seeing the market respond by changing business models focussed on generating revenue from data consumption.
3. **Consumer choice and protection:** Lastly, the desired outcome may be to improve consumer choice and protection. The consultation asks which of a set of end user rights should apply to communications services. We believe that the starting point should be to look for evidence that absence of these rights is causing consumer harm, and indeed whether the existing application of these rights to traditional electronic communication services is effective in the first place. If sector specific end user rights are no longer required and can be replaced by horizontal consumer protection, then the Commission should aim to take a consistent approach to substitutable services.

5.7.6) Should the Commission wish to achieve a combination of these outcomes then a balance will need to be struck by taking a proportionate approach.

5.7.7) We believe that it is important to consider the difference between OTT services and traditional telecoms services and whether the reasons for applying consumer choice and protection regulation to the traditional services are relevant to OTT services. This is particularly pertinent to the application of consumer protection regulation, but also

¹⁰ <http://www.analysysmason.com/Research/Content/Reports/Content-application-provider-Internet-infrastructure-Sept2014/>

¹¹ Conversion using historic exchange rate for 1 January 2014 of 0.725 Euros to the USD Dollar

economic regulation. Although two services may appear the same or very similar, traditional telecoms services are vertically integrated services tied to scarce resources such as numbering and spectrum. Many OTT services are horizontally integrated, providing the software layer to maximise competitive, innovative use of these scarce resources yet relying on others to deliver the network layer. Scarcity of these resources has led to regulation of, for example, switching and interoperability between traditional services which may not be justified in the case of all OTT services. By contrast, as far as we are aware there is no practical limit on the number of OTT apps a consumer can install and use on their device at any one time. It is important that the Commission makes the distinction between regulation of infrastructure networks and the regulation of communication services, reflecting that OTT service providers have little control over the infrastructure upon which they rely. For example, the quality of many OTT services are delivered by best efforts, rather than a managed service.

5.7.8) Creating a transparent and competitive market should not automatically mean extending blanket regulation to all OTT services. Consistent with the UK's better regulation agenda as well as the Commission's own Better Regulation Guidelines, **the UK would advocate taking a principled light touch approach to the regulation of OTT services.** Rather than second guessing which services might be considered functional substitutes for traditional electronic communication services, we would support principles allowing NRAs the flexibility to judge whether OTT services have reached direct competition with traditional services and are considered functional substitutes by consumers at the most appropriate time and on the basis of clear evidence. Extension of regulation should therefore only take place where there is clear economic evidence that regulation is proportionate and necessary to protect consumers from harm. Regulation also risks fixing OTT services at a particular point in time, which could prove problematic in a fast-moving, innovative sector, with new business models and services developing all the time. The framework already takes a similar principled approach with respect to SMP allowing NRAs to regulate electronic communications services where they are judged to hold SMP. We also note that the draft BEREC report¹² on OTT services appears to be suggesting a principled approach.

5.7.9) A principled proportionate approach should allow the protection of consumer interests and Member States' ability to protect public security, while not simply extending regulation to all new players. For instance, a particular rule might be extended to an OTT service where users consider that OTT service to be a close substitute for traditional electronic communication services, and where it is judged that the failure to regulate that service risks causing consumer harm. The assessment should also consider whether the rationale for the original intervention remains true. Consequently the outcome might be to extend regulation to the OTT service or to remove regulation from the traditional service to address the problem. An example may be inconsistent application of reasonable contract terms or the protection of vulnerable consumers. Therefore, **to create a transparent and competitive market, the Commission should also consider deregulation of existing electronic communications services where this does not harm consumer interests, undermine regulatory enforcement powers, or**

¹² http://berec.europa.eu/eng/document_register/subject_matter/berec/download/0/5431-draft-berec-report-on-ott-services_0.pdf

compromise national security, public security or prevention, detection and prosecution of criminal offences. This principled proportionate approach should help to manage the financial and regulatory burden on the telecoms industry at a time where the Commission and Member States are looking for significant levels of investment in infrastructure and services.

5.7.10) We would also draw the Commission's attention to the challenges of regulating services provided by international operators, in particular those based outside the EU. Many OTT services are provided subject to an express condition that a foreign law is applicable to the relationship between the supplier and the consumer (e.g. the conditions for Facebook, WhatsApp and Twitter all specify the law of California). By contrast, the application of the framework to a provider based outside the EU is usually clear because it is tied to the concept of an electronic communications network. It should be possible easily to establish that a network is located within the EU and should therefore comply with EU regulation because of the presence of the network's physical infrastructure. Application of the framework to OTT services through changes to the definition of electronic communication services or otherwise might therefore be problematic because most OTT services by their very nature are not tied to network infrastructure.

5.8) Definitions

5.8.1) We believe that the discussion around the definition of electronic communications services (ECS) has two aspects. The first is the extent to which the current definition is still appropriate, specifically whether the definition should be amended in order to bring over the top (OTT) services into the scope of the Directives. We note that BEREC's recently published report on OTT services has also raised the question of whether the definition of ECS should be clarified and/or reconsidered to ensure it keeps pace with current technological developments.

5.8.2) The second broader question is whether there is any validity in different definitions that exist in various directives, e.g. between ECS and Information Society Services. Currently, OTT services will generally not be ECS because they do not consist of the conveyance of signals on electronic communications networks. The OTT provider merely provides a service. Any conveyance of signals is done by the owners of the networks over which the OTT service is being provided.

5.8.3) In any event, the question of definitions (how a service is categorised) should be kept separate from the question of whether that service should be subjected to regulation (and if so, which regulation).

5.8.4) At present three categories are defined, ECS, Information Society Services and audiovisual services in the Electronic Communications Framework, E-Commerce Directive and Audiovisual Media Service Directive respectively. How valid the distinctions are and the extent to which there is overlap as markets converge and technology evolves is a pertinent question. Clearly an increasing number of companies find themselves being regulated by all three directives so there may be scope for some rationalisation in the future. We also note the preliminary text relating to contracts for the

provision of digital services that has another definition that would seem to further confuse the situation.

5.8.5) This issue was raised in the report to the Commission on the E-Privacy Directive.¹³ Although the conclusion in this report was that this needed to be considered in the longer term through a more in-depth revision of the current structure, there was no specific time frame referenced. We would suggest this warrants some discussion during the upcoming review, even if no specific action is taken at this time.

6. THE UNIVERSAL SERVICE REGIME

The UK government's response:

- **The UK government has recently announced its intention to implement a new broadband Universal Service Obligation (USO). The public consultation is expected to launch in early 2016. Discretion at the member state level will help us implement this in a way that reflects the UK's specific circumstances, both now and in the years ahead.**
- **The UK government would be wary of dispensing with the USO as a safety-net to provide affordable services for those not adequately served by the market. We do believe, however, that discussions about its scope, including whether the connection should be to the user rather than the fixed location, are necessary to ensure that any USO remains relevant in the future.**
- **The recent paper from Bulgaria suggested the USO might be limited to areas without competition. These issues are worth considering.**
- **Some flexibility may now be appropriate for the provision of directories and directory enquiries, so, for example, NRAs can allow local conditions to be taken into account.**

6.1) The Directive on universal service and users' rights (USD) is an important part of the overall framework. Although competition and innovation has delivered much to the user, the safeguards in the USD and in particular the universal service regime, have provided a safety-net for users across Europe.

6.2) The Commission has set out the three basic characteristics of the current universal concept: availability; affordability and accessibility. The elements that make up the universal service provision include access at a fixed location, with connection to a voice service and functional Internet access and access to publicly available telephone

¹³ ePrivacy Directive: assessment of transposition, effectiveness and compatibility with proposed Data Protection Directive, time.lex and Spark, January 2015
<http://www.sparklegalnetwork.eu/eprivacy-directive>

services, a comprehensive directory, a comprehensive directory enquiry service and, at the discretion of NRAs, the availability of public payphones.

6.3) Although the availability of services provided through the market alone is extensive, there are still gaps where the lack of commercial returns to private investors means a business case for investment does not exist. Technological developments may alter the economics of network deployment in the future, but disparities in the provision of services is likely to remain a reality for the foreseeable future.

6.4) Those disparities are now almost exclusively discussed in terms of access to broadband. **The UK government has recently announced that it is taking steps towards implementation of a new broadband USO.** The public consultation is expected to launch in early 2016, and this will help shape the approach we take to the implementation of the USO and the framework review. Discretion at the member state level will enable us to implement this in a way that reflects the UK's specific circumstances, both now and in the years to ahead. We will work with the UK NRA to develop this in way that minimises market distortion.

6.5) As the Commission notes, a number of Member States have already taken this action. We also note the view of some Member States that the USO also supports affordability, not just coverage, and this is an important element in avoiding a "digital divide".

6.6) We also note that some Member States have indicated that they see the USO as being redundant within the next decade if other policy avenues along with allowable State Aid are pursued. It is not clear to us though that this would be the case in all Member States, given the differing levels of connectivity and challenges. **We would be wary of dispensing with the USO as a safety-net to provide affordable services for those not adequately served by the market. Discussions about its scope, including whether the connection should be to the user rather than the fixed location, are necessary to ensure that any USO remains relevant in the future.** We do not, however, underestimate the implications of extending the USO to the user, including costs, and there will need to be discussion about a wider range of funding options that might be considered as appropriate. **Alternatively, the recent paper from Bulgaria suggested the USO might be limited to areas without competition. These issues are worth considering.**

6.8) In terms of the existing USO, there is a question of whether the provision of published directories, directory enquiries and availability of payphones still needs to fall within the directive. Extensive smart and mobile phone penetration and access to the Internet has reduced the need for these services although there is still widespread use. Research by the UK NRA has found that consumers consider services such as Public Call Boxes, itemised billing and directories as less essential, both personally and for society, as they are generally much less used or are auxiliary services.

6.9) As it stands, the Directive gives a reasonable level of flexibility in provision of phone boxes, giving Member States scope to make decisions in line with their national circumstances. The Directive requires Member States to ensure that directories and

directory enquiries are available and how frequently directories should be updated. **Some flexibility in this may now be appropriate, for example, so that Member States can ensure that NRAs can impose the availability of directories and directory enquiries, which would allow local conditions to be taken into account.** The impact on the elderly and those with disabilities will need to be taken into consideration: research shows that in the UK around 50% of the elderly still make use of telephone directories.

7. BROADCASTING

The UK government's response:

- **The UK government would like to see the flexibility to implement domestic legislation remain as the decision as to what content should be given prominence remain a cultural decision to be taken in each member state individually. However, both 'Must Carry' and prominence are issues that should be discussed further, as and when major changes to platform regulation or the relationship of the existing directives take place.**

7.1) The existing regulation on "Must Carry" and electronic programme guide (EPG) prominence in the framework, in the Universal Service Directive and the Access Directive respectively, do not prevent Member States from implementing domestic regulation. **The UK government would like to see this flexibility remain the decision as to what content should be given prominence is a cultural decision to be taken in each member state individually. However, both 'Must Carry' and prominence are issues that should be discussed further, as and when major changes to platform regulation or the relationship of the existing directives take place.** These are issues to be explored carefully; we consider it unlikely that one set of rules will fit all platforms and players. However 'Must Carry' and prominence are not only issues on platforms. They may also affect devices. Smart TVs are developing new forms of EPGs and interfaces and are using them to do business with content providers, however they are not caught by any of the regulations cited.

7.2) To ensure that public service broadcasting (PSB) content is widely available for consumers in the UK there is legislation in place to ensure that PSB television channels must be offered and must also be carried by major platforms and be given appropriate prominence on EPGs.

7.3) In the UK, Section 310 of the Communications Act 2003 requires Ofcom to draw up a code of practice to be followed in the provision of EPGs containing guidance on the degree of prominence appropriate for the public service channels (BBC TV services, Channels 3, 4 and 5, S4C and Local TV). This code permits a measure of discrimination in favour of PSB channels, but it is not prescriptive about what appropriate prominence means. It gives EPG providers discretion to determine this. In considering whether the

approach is justifiable in terms of securing appropriate prominence, Ofcom has regard to the interest of citizens and the expectations of consumers.

7.4) The UK government considers the regime established by the Communications Act 2003 to secure appropriate prominence for our PSBs to be important because:

- PSBs are responsible for the lion's share of investment in UK content – £2.9 billion, and we want this to continue;
- PSB content, from local news to children's programmes, delivers cultural and social benefits that might otherwise be undersupplied; and
- Consumers value public service content.

7.5) As we were concerned that the regime is at risk of becoming obsolete, because it only applies to broadcast services and does not apply to Video-on-Demand or new technical services like HD and there seemed to be a lack of clarity, or consistency of understanding, about what appropriate prominence means in a multichannel world. DCMS published a consultation on the Balance of Payments between Pay Television Platforms and Public Service Broadcasters.¹⁴

7.6) The consultation focused on the questions of whether the current 'Must Offer/ Must Carry' and Technical Platform Services (TPS) regimes should be amended or removed to allow for freer negotiations between the PSBs and the pay television platform providers, also giving Ofcom a stronger mediating role; and whether the current EPG regime is fit-for-purpose (particularly, whether to amend the existing framework to be technology neutral; whether to include video on-demand; and whether to integrate High Definition (HD) services into the existing framework).

7.7) We are currently considering the responses with a view to publishing the government's response later this year.

8 SECURITY AND RESILIENCE OF NETWORKS

The UK government's response:

- **The UK government considers that the framework has broadly delivered against its objectives in this respect.**
- **As it stands, Security and Integrity provisions in Articles 13a and 13b of the Framework Directive are technology and threat neutral. The UK government would not wish to see any changes that jeopardise currency and future-proofing (either as a result of the rapidly changing nature of modern technology and/or the general threat picture). Given this fitness for purpose we do not wish to see lengthy negotiation and implementation**

¹⁴ <https://www.gov.uk/government/consultations/the-balance-of-payments-between-television-platforms-and-public-service-broadcasters-consultation-paper>. The consultation closed on 30 June 2015.

processes restrict or delay the provisions' applicability at a national level in the event of an incident.

8.1) In accordance with Article 13a of the Framework Directive, sections 105A-105D of the Communications Act 2003, place requirements on communication providers and Ofcom regarding the security and resilience of communications networks and services. These requirements help to mitigate risks to security and resilience by setting out the following:

- Network and service providers must take appropriate measures to manage risks to security, in particular to minimise the impact on consumers and interconnected networks;
- Network providers must take all appropriate steps to protect, as far as possible, network availability;
- Network and service providers must report to Ofcom breaches of security or reductions in availability, which have a significant impact on the network or service;
- Ofcom must, where it thinks it appropriate, notify regulators in other Member States, and the European Network and Information Security Agency (ENISA) of any reports;
- Ofcom may inform members of the public of details of any reports received, or require a network or service provider to do so; and
- Ofcom must prepare an annual report summarising details of all reports it has received and send it to the European Commission and ENISA.

8.2) The UK considers that the framework has broadly delivered against its objectives. Providers routinely report incidents as set out in Ofcom's guidance and are fulfilling the basic requirements of security and integrity. Providers are implementing appropriate measures based on risk management decisions.

8.3) As it stands the regulation is technology and threat neutral. Any specific changes to the regulation may cause it to be out of date due to the rapidly changing nature of modern technology and general threat picture. Additionally it may restrict or delay implementation of the regulation at a national level in case of an incident.

8.4) It is worth noting that Ofcom as the UK's NRA have been the main implementers of this regulation. They are better placed to provide a complete response on its effectiveness within the security and integrity of networks and will be doing so in due course.

9. GOVERNANCE

9.1 Ofcom independence

The UK government's response:

- **The UK government believes that independence is fundamental for any regulatory body to be able to work in the best interests of citizens and consumers, and regulators should be able to fulfil their role free from actual or perceived interference.**

9.1.1) The UK government regards the setting-up of Ofcom as best practice. The independence provisions in the Framework Directive require Member States to ensure that national regulatory authorities (NRAs) act independently and do not seek or take instructions from any other body in relation to the exercise of certain key regulatory tasks assigned to them. Only appeal bodies may suspend or overturn decisions by national regulatory authorities, and the head of a national regulatory authority and other members of the collegiate body fulfilling that function may be dismissed only if they no longer fulfil the conditions required for the performance of their duties laid down in advance in national law. **The UK government believes that independence is fundamental for any regulatory body to be able to work in the best interests of citizens and consumers, and regulators should be able to fulfil their role free from actual or perceived interference.**

9.1.2) The UK government has made a number of commitments to independent regulation, including statutory features that contribute to the independence of Ofcom, the UK communications regulator. The principle of independence is central to Ofcom being able to have oversight of the communications sector and carry out effective regulation of areas such as investment in communications network infrastructure; competition across the market as a whole (including media ownership issues); and maintaining high standards in broadcasting. In particular, independent broadcast regulation by Ofcom ensures that standards for broadcast content are applied in the interests of citizens and consumers rather than for political or commercial benefit.

9.2 Body of European Regulators for Electronic Communications (BEREC)

The UK government's response:

- **The UK believes it may be more appropriate to conduct a further review of BEREC before considering whether any changes might be necessary. The UK government remains open to further discussion on proposals regarding potential changes to BEREC and its operation.**

9.2.1) The UK government notes the content of the 2013 report 'How to Build a Ubiquitous EU Digital Single Market' upon which the case for potential changes to BEREC and its institutional relationships is based. It recognises that whilst there are concerns regarding one element of BEREC's remit – whereby it is perceived that flexibility is prioritised over consistency with regard to single market outcomes – it is

noteworthy that the report is widely positive regarding BEREC's work and outcomes. We also note that this report states that issues relating to consistency could be achieved through other means than wholesale changes to BEREC. We agree that institutional changes to BEREC are not demonstrably linked to greater consistency in regulation. Adopting alternatives could avoid the risk of increasing the existing complexity of institutional relationships.

9.2.2) We also note that the 'Study on the Evaluation of BEREC and the BEREC Office' conducted by PWC for the Commission in 2012 recommended, in the long-term, that a further study of BEREC should take place five years following the effective existence of BEREC, i.e. in 2016. Given this, **it may be more appropriate to conduct a further review of BEREC before considering what changes might be necessary.**

9.2.3) Finally, we note that the proposal contained in the Connected Continent Regulation regarding the Chair of BEREC was not well-received by member states and national regulatory authorities alike. We are keenly aware that any further proposals regarding changes to BEREC may prove contentious and thus stymie the UK government's aim to achieve an early agreement on the wider Review. We believe that this wider aim is shared across a number of stakeholders, including the Commission and should not be placed at risk.

9.2.4) As such, the UK government remains open to further discussion on proposals regarding potential changes to BEREC and its operation in order to address the expressed concerns. However, any such proposals: must be based on a sound and contemporary evidence-base; should not place at risk the independence of national regulatory authorities collectively or individually; and should seek to address the identified issues without further complicating the current institutional structures and relationships.

10. CONCLUSION

10.1) The UK government welcomes the Commission's intention to maintain dialogue with Member States following the close of this consultation. We have indicated in this response the areas that we would wish to discuss further with the Commission prior to the publication of proposals. Specifically, these areas are investment in infrastructure, the need for non-legislative approaches to the coordination of spectrum, and definitions.

10.2) We share the desire of several other Member States to reach a quick conclusion on areas of the framework that received close consideration during negotiation of the Connected Continent Package. We would welcome the Commission's consideration of reaching early agreement on these areas, in particular spectrum and the role of BEREC.