

Public consultation on the evaluation and the review of the regulatory framework for electronic communications networks and services

Fields marked with * are mandatory.

1. Purpose of this document

1.1. Objective of the public consultation

The review of the regulatory framework for electronic communications is one of the 16 actions of the [Digital Single Market Strategy](#) adopted by the Commission on 6 May 2015 and a key element for creating the right conditions for digital networks and services to flourish (second pillar of the Strategy). In accordance with the [Commission Work Programme for 2015](#), the review will be preceded by a Regulatory Fitness and Performance Programme (REFIT) evaluation aimed at assessing whether the current regulatory framework is 'fit for purpose'.

The purpose of this questionnaire is therefore twofold. First, it aims to gather input for this evaluation process in order to assess the telecoms regulatory framework against the evaluation criteria according to the [Better Regulation Guidelines](#):

- Effectiveness (Have the objectives been met?)
- Efficiency (Were the costs involved reasonable?)
- Coherence (Does the policy complement other actions or are there contradictions?)
- Relevance (Is EU action still necessary?)
- EU added value (Can or could similar changes have been achieved at national/regional level, or did EU action provide clear added value?)

Second, the questionnaire is designed to seek views on issues that may need to be reviewed with a view to reforming the regulatory framework in light of market and technological developments, with the objective of achieving the ambitions laid out in the Digital Single Market Strategy. More information on relevant developments and the emerging challenges for the existing sector rules can be found in a [background document](#) to the public consultation.

1.2. Details of the timetable and process

The Commission invites citizens, legal entities and public authorities to submit their answers by 7 December 2015. The Commission will assess and summarise the results in a report, which will be made publicly available on the [website](#) of the Directorate General for Communications Networks, Content and Technology. The results will also be reflected in an evaluation report assessing the functioning of the current regulatory framework and in a Communication underpinning the future review proposals in 2016.

You are invited to read the privacy statement attached to this consultation for information on how your personal data and contribution will be dealt with.

Personal data

Contributions will be published on the website of the Directorate General for Communications Networks, Content and Technology. The responses received will be available on the Commission website unless confidentiality is specifically requested.

To this end we would kindly ask you to clearly indicate in the general information section of this questionnaire if you would not like your response to be publicly available. In case your response includes confidential data please also provide a non-confidential version of your response.

Please read the [Privacy Statement](#) on how we deal with your personal data and contribution.

1.3. Structure of the public consultation

You are invited to fill in the online questionnaire, which is available below. An accessible version for persons with disabilities can be provided upon request. Please note that it is available in English only.

The questionnaire of the public consultation has a first section with general questions on the overall evaluation of the functioning of the current regulatory framework and five sections, which are dedicated to different policy areas (you can download the public consultation document):

- Network access regulation
- Spectrum management
- Communication Services
- Universal service
- Institutional set-up and governance.

These sections are further split into backward and forward looking subsections to distinguish between the evaluation of the current performance of the regulatory framework for each specific policy area and the modifications that you consider need to be introduced for the future.

You can skip questions that you do not feel comfortable responding to. You can also pause at any time and continue later. Once you have submitted your answers, you would be able to download a copy of your completed responses.

Please note that due to technical requirements for processing the questionnaire and in order to ensure a fair and transparent consultation process, only responses received through the online questionnaire will be taken into account and included in the report summarising the responses. Questionnaires sent by e-mail or in paper format will not be analysed except those due to accessibility needs of persons with disabilities.

2. General information

* **Question 1:** You answer as:

- Private individual
- Consumer association or user association
- Business (please specify sector)
- Electronic communications network or service provider
- Internet content provider
- Government authority
- National Regulatory Authority
- Other public bodies and institutions (please specify)
- Other (please specify)

Please specify business sector (if applicable) or if "other"

Text of 1 to 250 characters will be accepted

Telecommunications and Media

* **Question 2:** Is your organisation registered in the Transparency Register of the European Commission and the European Parliament?

- Yes
- No
- Not applicable (I am replying as an individual in my personal capacity)

If yes, please indicate your organisation's registration number in the Transparency Register.

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If you are an entity not registered in the Transparency Register, please register in the [Transparency Register](#) before answering this questionnaire. If your entity responds without being registered, the Commission will consider its input as that of an individual.

* Please enter the name of your institution/organisation/business.

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If you object to publication of the personal data on the grounds that such publication would harm your legitimate interests, please indicate this below and provide the reasons of such objection

* **Question 3:** What is your country of residence? (In case of legal entities, please select the primary place of establishment of the entity you represent)

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- The Netherlands
- United Kingdom
- Other

If other, please specify

99 character(s) maximum

3. Issues for consultation

3.1. Introduction

Since the liberalisation of the EU telecommunications markets at the end of 1990s, the EU regulatory framework on electronic communications networks and services has been founded on the use of regulatory tools to open markets, free up bottlenecks and enable access to key inputs. These tools have facilitated market entry, protected end-users and enabled them to avail of market opportunities, and ensured social and territorial inclusion. This common framework, applied by Member States authorities and independent regulators and the Commission, has provided consistency of underlying economic principles and a degree of legal security and predictability which have enabled a transformation of European telecommunications markets.

Successive adaptations of the electronic communications regulatory framework, combined with the application of EU competition rules, have been instrumental in ensuring that markets operate more competitively, bringing lower prices and better quality of service to consumers and businesses. Moreover, effective competition is also a key driver for investments. However, important policy and regulatory challenges remain. Since the last review in 2009, electronic communications networks and services have been undergoing significant structural changes characterised by slow transition from copper to fibre mainly via hybrid networks (FTTC), more complex competition with the convergence of fixed and mobile networks and rise of retail bundles as well as emergence of new online players (so called OTTs) along the value chains which challenge the traditional role of Telcos and Cablecos in providing vertically integrated communications/audiovisual services in addition to broadband/internet access, and not least changing end-user expectations and requirements. At the same time societies have become increasingly dependent on broadband networks and demand for capacity is growing year on year. Challenges the reform has to respond to include the following:

- Relatively little full "infrastructure competition" has emerged in the fixed-line networks, except in very densely populated areas, where cable networks were already present, or where local authorities have been active; and the extent of upgrades to the highest capacity networks varies markedly;
- Progress towards more integrated telecoms markets is slow and the provision of connectivity to consumers and business remains highly divergent across the Union;
- Significant differences remain with regard to approaches to spectrum governance and strategies to make spectrum available which cannot be justified solely by differing national circumstances;
- Online services are increasingly seen by end-users as substitutes for traditional electronic communications services such as voice telephony, but are not subject to the same regulatory regime;
- Technological and economic developments, such as fixed/mobile convergence, network virtualisation and the shift to all-IP networks, are likely to profoundly change the functioning of the electronic communications sector.

Further information on policy challenges can be found in the background document and annexes.

Major additional benefits can be derived from a European market with genuinely common rules on key parameters, where players of different scale and business models can seek comparative advantage from economies of scale or from local focus and market knowledge (see background and annexes for more).

At the same time, the content of the rules counts: it is time to examine whether the framework of common rules devised for liberalisation of markets needs remains fit for purpose or needs to be adapted, in particular to face the challenge of growing needs for connectivity and changing consumer demand, habits and expectations.

In this regard, it should be noted that companies in most economic sectors are subject to general law (itself a mix of Union law and of the laws of the respective Member States), whether it be as regards the authorisation to do business, the application of competition rules to their market behaviour ex post, the commercial negotiations to purchase key inputs, the geographic areas or customer segments that they choose to address, or the protection of consumers. On the other hand, electronic communications networks have certain specificities, not least their sine qua non character for the very functioning of the digital economy and society. Moreover, the EU telecoms regulatory framework prevents a possible proliferation of divergent national sector-specific regimes.

The review of the telecoms regulatory framework is one of the 16 actions of the [Digital Single Market Strategy](#) adopted by the Commission on 6 May 2015 and a key element for creating the right conditions for digital networks and services to flourish (second pillar of the Strategy). It encompasses, in particular, the review of the Framework Directive (Directive 2002/21/EC), the Authorisation Directive (2002/20/EC), the Access Directive (2002/19/EC) and the Universal Service Directive (2002/22/EC) as they were modified in 2009 by the Better Regulation Directive (Directive 2009/140/EC) and the Citizens' Rights Directive (Directive 2009/136/EC) and more recently in 2015 by the draft Telecoms Single Market Regulation, as well as the BEREC Regulation (Regulation 1211/2009). This exercise will not cover: the Directive on privacy and electronic communications (Directive 2002/58/EC because of the ongoing legislative process of the general data protection regulation (see COM(2012)11 final); the Roaming Regulation (Regulation 531/2012) as covered by the draft Telecoms Single Market Regulation (COM(2013)627); or the Broadband Cost Reduction Directive (Directive 2014/61/CE), which is currently in the process of being transposed by Member States.

3.2. General questions on the current regulatory framework

3.2.1. Evaluation of the overall functioning of the current regulatory framework

This section of the public consultation includes some general questions on the overall evaluation of the functioning of the current regulatory framework for electronic communications in relation to the key evaluation criteria established in the Commission's [Better Regulation Guidelines](#) (i.e. effectiveness, efficiency, coherence, relevance and EU added value).

Question 4: To what extent has the regulatory framework **effectively** achieved its objectives of:

	significantly	moderately	little	not at all	do not know
a) the development of internal market	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) the promotion of competition	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) the promotion of the interests of the EU citizens, including citizens with disabilities	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your responses, in particular the reasons for the levels of achievement and if there are factors other than the regulatory framework which have contributed to those objectives.

Development of internal market

There is a high degree of fragmentation in Europe due, amongst other reasons, to the strong interventionism and micro-management enshrined in the current regulatory framework. The current framework has not achieved an internal market. There is a risk that all institutions seek to use the review to justify their continued existence (and size), rather than allow the right policies to be determined and only then determine the most appropriate institutional framework to deliver that in a proportionate way.

For example, when it comes to access regulation - which generally relied on a form of a Ladder of investment approach - the application of the framework has generated several layers of access products, involving complex regulatory measures. The application has implied a large degree of discretion for regulators to find SMP and to apply remedies, which generates an increasing demand for detailed regulatory provisions and provokes a vicious circle of continuous market distortions and conflicts. NRAs frequently go beyond their remit by getting involved with product management, business cases and steering market outcomes. In this context it is no surprise that different approaches and solutions can be found across the EU even in areas with similar circumstances.

It is also worth mentioning how the current framework has not managed to stop national initiatives that burdened the telecoms sector, including those aimed to fulfil fiscal objectives other than those attributable to the sector. An outstanding example is the tax imposed on telcos in Spain to finance public TV.

Promotion of competition

The application of the current regulatory framework in the EU has achieved a substantial degree of service-based competition and led to price reductions. Except in a number of countries where the application of the regulatory framework has focused more on supporting the creation of new networks (e.g. Spain and/or Portugal) this progress has generally occurred at the expense of the conditions for European companies to invest more in advanced digital infrastructures which would have ultimately benefited consumers in a different, but equally important, manner. Rules that were designed to spur competition in existing networks did not provide the right incentives to invest in new ones. If these rules are not reformed, they will preserve the status quo, rather than stimulate further infrastructure investment and facilities based competition. The current rules involve both the burdensome access conditions and the pre-eminence of (low and unrelated to risk) linear - based wholesale pricing models (in combination with the margin squeeze price control) set by regulators which have led to:

- Market structures where alternative operators prefer to "wait" and rely on incumbents' wholesale services rather than undertaking risky investments, and incumbents are encouraged to delay investments since they do not see the competitive advantage of undertaking them.
- Reduction of market size (for both access seekers and access

providers), which for access providers complicates even more the business case for investments.

(continue here if necessary)

The promotion of the interests of the EU citizens, including citizens with disabilities

We believe that, as a result of the current framework, there is a problem of underinvestment (particularly outside the densest areas) and delays in the deployment of new networks. This in general terms comes at the expense of overall benefits for citizens which could have enjoyed more widespread and powerful communications services should the regulatory condition have been conducive to better investment cases, for example when operators are allowed to capture the benefit of their investment by allowing them to differentiate their service proposition as a result of the investment in new network technologies without the obligation to offer their innovation in replicable and regulated terms immediately once the investment is made - just as happens in other parts of the internet value chain.

Although the framework has encouraged the availability of diffusion of cheap price packages (EC reports have systematically cheered countries where ARPU were low and criticised those where ARPU were higher) at the same time the EU allocates a smaller part of its resources and much less resources per capita to electronic communications networks than other regions of the world. This is a consequence of the availability of lower tariffs which may be seen as positive from a customer point of view, in the short run. But it also implies lower grade network infrastructures in the long run, able to provide less capacity, less speed, delays in the roll-out of efficient technologies, higher marginal costs, and in the end lower level of usage, less benefit and value for money and higher prices per unit of consumption than in other regions of the world. Therefore the outcome of European regulation for customers is mitigated.

Besides, we believe that part of this overregulation comes from the fact that the application of regulation has missed (many times rejected) the broader picture on services, which many times come from OTTs, and consequently has also resulted in fragmented consumer protection frameworks.

Finally, we note that the interests of European citizens are larger than the interests of European people as consumers. Europe once a leader has lost this worldwide position. The European framework has contributed to an imbalance in the digital value chain; it has negatively impacted the investments capabilities of operators in segments of the value chain where Europe was strong (networks) and positively impacted the

bargaining power of other segments of the digital value chain at the detriment of Europe innovation (Internet platforms, services, or devices). This has negative consequences on the industrial development of European digital industries and thus European citizens.

Concerning citizens with disabilities, most of the improvements have come from technical innovation and market based initiatives. The role of regulation has been modest.

To summarise, we would like to stress that the importance of pursuing in practice the objective of investment, adopted in the 2009 Review and considered essential to meet the proposed objectives of the Digital Agenda. Because of its importance, this review should at least cover the extent to which both the NGN and the Non-discrimination and costs Recommendations have supported the attainment of this objective. We believe that this has not been the case, as the figures about DA objectives show in practice.

Question 5: As regards the **efficiency** of the regulatory framework, if you compare the administrative and regulatory costs borne by your organisation with the results achieved, how do you rate the cost-benefit ratio at scale 1 to 5 (1=costs exceed significantly benefits, 5=benefits exceed significantly costs)?

- 1
- 2
- 3
- 4
- 5
- do not know

Please explain your response.

While the current regulatory framework has been effective in producing the conditions that facilitated market entry for providers of services, yet it has achieved little when it comes to encouraging the investment in network infrastructures. The regulatory interventions are, in many cases, disproportionate, as a result of excessive and multi-layered regulatory intervention. Even when regulatory objectives have been achieved, there has been little evidence of consequent de-regulation. NRAs appear to wish to preserve access competitors, rather than create incentives for better competition at the infrastructure level.

We believe that ex-ante intervention should be thoroughly justified. It should not to be taken for granted that it should always exist, particularly taking into account that it implies a very intrusive intervention which collides with fundamental rights, such as the right to property. The burden of proof for ex-ante regulatory intervention needs to be high. Its need must be very rigorously analysed and, if applied, it should be on a transitory basis and be focused on the achievement of very specific objectives as well as based on sound economic theory that guarantees that social welfare will increase as a result of it.

For example, we note that imposing obligations, e.g. related to Universal Service, aimed at filling the gaps caused by the lack of investment incentive produced by the application of the regulatory framework is one and especially inefficient way to address the extension of consumers benefits to all the population.

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Question 6: Could you give an estimate of annual direct costs for your organisation in applying the regulatory framework? Please indicate, if possible, the cause of these costs.

In a sector as heavily regulated as it is telecoms in Europe, the application of the Regulatory framework involves costs of multiple nature to the regulated company and results in massive impact on the whole organization and on the sector to the extent that a large share of market revenues are impacted by regulation. Of course, this phenomenon is intensified for those companies that has been regularly found as having SMP and thus suffer asymmetric regulation.

Indeed, after almost twenty years of strong intervention in the telecom

markets, the application of the regulation has had and continues to have a significant impact on market size and competitive dynamics, structure, prices, investments, cost of capital, time to market, etc. which implies costs that cannot be captured by the annual direct costs borne by the individual organizations and cannot meaningfully reflect its impact on the market overall.

This means also that to a large extent the direct cost of applying the regulation cannot be meaningfully estimated except for some items which may concern to the cost of implementing specific obligations of the regulatory framework, for example (a) organizational and labour costs (i.e. required to cope with regulatory compliance, management of regulatory processes and reporting to the Authorities, both at National and European level); (b) administrative fees and specific taxes imposed on operators, including those destined to fund the costs of the NRA as well as those related to the allocation and use of scarce resources such as numbers or spectrum; (c) Cost derived from the compliance with regulatory obligations such as the Universal Service Obligation (the part not funded by the rest of the industry) or number portability; (d) costs of implementation of wholesale services imposed by regulation (such as local loop unbundling, duct access, bit stream access services, carrier selection and pre-selection, wholesale line rental, leased lines, etc.). The above mentioned costs which alone could be estimated in the order of several hundred million euros per year represent a high burden imposed by regulation on the organization, and ultimately on end-users, many times as a result of regulatory decisions taken without going through proper cost-benefit analysis.

However, as said above, they would only represent a fraction of the actual costs of regulation since the figure does not capture the effects of distortions created by regulation or the loss in competitiveness for the regulated companies.

The continued application of regulation at so many layers and for so many different concepts imposes a significant loss of competitiveness on the concerned organizations. For example, regulatory compliance procedures provoke that service definitions processes become more complex and longer. They often require cumbersome regulatory compliance processes involving the negotiation with regulators or even their previous approval, with important impact on the innovation and on the time to market for new services. These elements often cause that services that would have been launched in the absence of regulation were launched with important delays or even not launched at all, causing a loss of competitiveness for the involved undertaking. Regulation also provokes restrictions to concerned organizations to timely react to their competitors' offers. Other times, investments that would have been made in the absence of regulation are finally discarded or delayed until more regulatory clarity is achieved or made less intensively as a result of the obligations to provide wholesale services on a regulated basis.

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Regulatory decisions may also provoke other type of distortions that need to be taken into account. For example just consider the spectrum cost example. While these are in many cases the outcome of competitive bidding processes, they are also highly influenced by spectrum auction designers aim to maximise its outcome. In our experience, elements such as for example inefficient lot sizes, artificially high reserve prices, etc. contribute to artificially raising bidding outcomes and should also be regarded as direct regulatory cost, however difficult they may be to estimate.

And it is not only the direct annual costs what matters. It is also the accumulated effect over the years in which the regulation has been applied. For example, the net cost of Universal Service. More important than the fact that the last calculation was around € 21 million (in 2012, last figure available) what is relevant for this assessment is the fact that over the period in which this figure has been calculated (2000-2012) its total amount exceed € 1 billion.

These are just examples of the impact and cost of regulation for the concerned undertaking which cannot be fully captured by the direct costs of regulation. Indeed, these elements can have a big impact on society, both for consumers and enterprises. For example, the costs of delaying mobile telephony in the USA were estimated at around \$50 billion per year in a classic study by Hausman (1997) and reflects that regulation imposes high losses on social welfare, because it delays new services and, even more important, it completely inhibits some other possible new services, whose impact on society remains in consequence unknown.

The review should be the opportunity to set up a much more simplified and investment and innovation friendly framework.

Question 7: Have you identified any areas in the regulatory framework where in your view there is room for improvement in terms of simplification, elimination of regulatory burden or reduction of associated costs? Please explain.

We believe that there is plenty of room for improvement, principally regarding:

- Access regulation: The first priority should be the streamlining of the telecom rules in order to provide a new regulatory framework that incentivizes the investment in high-speed broadband networks. As further developed in the section on access below, the current system has been designed to cope with one single legacy network (the incumbent's one) moving from monopoly to a liberalised market. It has been implemented in a way that has created a lot of complexities and

constraints, notably with the variety of wholesale regulated access offers and price regulation, which do not support the new challenges the telco sector is now facing, meaning infrastructure-based competition with other networks (cable operators) and building new networks. The framework should be substantially reduced in scope, modernised and simplified to become more investments friendly. It should be limited to fixed access infrastructures

- Services regulation, including consumer protection: as further developed in the section on services, the current framework with specific rules on services provided by telcos is not justified anymore and has created a distortion of regulation and competition with competitive services that are de iure outside the scope of the framework. This has created a fragmented level of consumer protection that is completely unjustified and deserves a complete overhaul. Services provided by electronic communication providers should be subject to the same horizontal laws applicable to all digital services. A fundamental rethink of the already obsolete USO concept is needed.

- Spectrum: A more efficient and agile framework for spectrum policy is needed: For mobile networks, ensuring certainty in relation to spectrum allocation is a must. Licensing conditions must not be restrictive since they would constrain limit the ability of operators to fully utilize spectrum resources and risk delaying investment in new services. Allocation of sufficient spectrum and its harmonization for mobile broadband services across Member States is and will continue to be critical. European businesses cannot expect to stay competitive if they are not able to integrate mobile broadband in their productive processes. Spectrum supply for mobile broadband need to be increased in order support the offering of quality services at competitive prices due to the economies of scale that can be achieved.

- Institutional set-up: it is also worth mentioning the need to undertake a profound streamlining of the institutional set-up, consistently with the new competitive environment, that requires a reduction of the regulatory intervention. Form should follow function: that is to say that the objectives and policies should be determined and then the institutional framework should enable these to be delivered in the most efficient manner possible. There remains a real risk that existing institutions seek to preserve their role and the scale of their operations, rather than seek the most proportionate outcome for the sector.

- Ensuring a level playing field for all services and providers: Telefónica firmly believes that all providers, that are providing digital services to European citizens, should be subject to the same rules than EU providers in order to achieve a level playing field for all businesses to compete on equal footing avoiding the competitive disadvantages that European telecom companies are facing nowadays.

(continue here if necessary)

Question 8: As regards the **relevance** of the regulatory framework, to what extent is a regulatory framework for electronic communications at EU level still necessary for EU citizens and businesses in the following areas:

	significantly	moderately	little	not at all	do not know
a) Market analysis and access regulation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Universal service and end-users' protection	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Management of scarce resources (such as numbering, spectrum access)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Authorisation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Network and service security	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Other areas	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your responses.

Ex-ante regulation in the Telecom Sector has already played its role for introducing service based competition in the market and now it is the time to deliver on the progressive removal of most ex ante supervision and the handover to competition law. To the extent that ex ante regulation may still have a role on specific circumstances it should be reduced significantly to address only bottlenecks. In fact, ex-ante regulation is now proving to be counterproductive, as it is hampering the required investments in new networks, slowing down the development of the digital economy in Europe. Ex-ante regulation has significant counter-productive effects on investments and innovation which should never be overlooked. In particular, current regulation with its focus on number of players, its replicability conditions (contrary to any kind of innovation), and strict price reduction goals are hampering effective competition in Europe and, at the same time, European competitiveness in the global arena.

This is even more valid for sector specific service regulation as defined in the Universal Service Directive and in the e-privacy Directive. Services provided by electronic communications should be subject to the same horizontal law that services provided by other providers of digital services, with possibly provisions inspired by the telecom framework for digital services including communications functionalities.

Ensuring the highest levels of network and service Security is critically important at all of the value chain. The regulatory framework should be applicable to all critical assets of the value chain, ideally on the basis of a common law on security.

Concerning universal service obligations; as further developed in the section on this topic, the current system is already obsolete regarding most obligations and will be obsolete for all obligations when the new framework will be in place. While the principle of a Universal Service may be retained in the Framework, it should concern Member States instead of specific operators and the current mechanism of designation and of sector specific financing should be completely abandoned. All goals of public interest like broadband coverage, e-skills, disabled users or rolling out high-speed networks would be better achieved by using more efficient tools giving the priority to efficient market mechanisms and focussed and timely public interventions.

An EU framework for authorisation can still be of significant importance and benefit for European industry and consumer, since first it protects the regime of general authorisation all over Europe and, second, it can contribute to support fair and efficient procedures and criteria to allocate scarce resources such as spectrum.

(continue here if necessary)

Question 9: To what extent are the policy objectives as defined in Article 8 of the Framework Directive (developing the internal market, promoting competition and promoting the interests of EU citizens) **still relevant?**

	significantly	moderately	little	not at all	do not know
a) the development of internal market	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) the promotion of competition	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) the promotion of the interests of the EU citizens, including citizens with disabilities	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your responses.

Current regulatory objectives are quite open to interpretation and have no clear priorities. We believe that it is necessary to reinforce the objectives of sustainable investment & competitiveness of the EU industry, by:

- o Making these objectives more important than others and a compelling priority for NRAs.
- o Clearly establish the objective for NRAs to promote the interests of citizens by promoting investment in network based competition.

We note that promoting competition may have been a legitimate transitory objective when moving from a monopoly situation to liberalised markets. Europe could have chosen a better model of competition (see Q4). However, the model and intensity of competition that can be achieved and that is desirable in political terms to achieve should be seen in the light of their outcomes in terms of welfare, investments, prices, etc.). The current model is not adapted to the Europe's future needs in terms of competitiveness of its economy. The priorities for the future framework should be to keep market open, to safeguard competition and to incentivise investment in order to achieve large adoption of high performance connectivity without pushing for specific market structures. There is no magic number of players. In this regard, the framework should make clear that going forward the "promotion of competition" should be about removing legal barriers, and no longer about guaranteeing the existence to any agent.

The development of internal market is an important political objective. But this objective has to be assessed together with network realities. Fixed and mobile networks are deployed at national level; operations like reaching the end user with fibre or setting up new antennas remain local. The internal market should be attained by removing legal barriers (as was the original spirit of the EC and its Treaties), and not by imposing the same regulation across Europe, which could have made sense if all countries had the same features. More importantly, the internal market should be a space for free initiatives from market players, not of design and industrial policy from the Authorities.

Setting up European rules harmonising criteria for the management by national authorities of specific and scarce resources specific to the sector like numbering or spectrum remains a relevant objective for the future regulatory framework.

(continue here if necessary)

Question 10: As regards the **internal coherence** of the regulatory framework, to what extent have the different elements (legislative and non-legislative) which form part of the regulatory framework contributed coherently to the policy objectives of developing the internal market, promoting competition and promoting the interests of EU citizens in the following areas:

	significantly	moderately	little	not at all	do not know
a) Market analysis and access regulation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Universal service and end-users' protection	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Management of scarce resources (such as numbering, spectrum access)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Authorisation	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Network and service security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
f) Other areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Please explain your responses.

a) Regulation has played a very relevant role for introducing competition in the market but internal coherence has been seriously hampered by “overregulation” and micro-management.

Access regulation based on market analysis has not always been implemented or oriented in a consistent way. For instance there are inconsistencies between provisions of the Commission recommendations on NGA and on non-discrimination and costs methodologies for instance on the price regulation principles to be applied to NGA wholesale access prices.

National implementations of sector specific universal service and of end-users protection rules are heterogeneous within the EU. Moreover, they come in addition to general consumer laws or other cross-sector rules on digital services, which do not really contribute to an efficient internal market.

Authorisation and management of scarce resources are consistent with the objectives but insufficient today to generate a consistent outcome, e.g.

a consistent approach to services irrespective of the nature of service providers be they telcos or OTTs. Different rules apply to telcos and OTTs; however these latter provide services that compete directly with telcos' services which are subject to more restrictive rules.

Networks and service security rules are not consistently applied across the entire value chain; only electronic communications providers being under the scope of the those rules, which does not contribute positively to the objectives of internal market and citizens interests.

As far as other areas are concerned, there has been a strong lack of coherence with the objectives in terms of

- Support to innovation; industry cooperation usually seen as suspicious; which can have delayed the launch of time-to-market innovative services based on open platforms;
- Privacy and data protection: the adoption of a European regulation on data protection should be the opportunity to end with sector specific directive on the same matter.

Regarding other areas, it is also important to consider the Institutional set up, including within national borders. The mandate and competencies of National Authorities sometimes overlap. Their policies are not always consistent and their actions sometimes lack coordination. Besides, some Authorities seem to be more prone to regulate in greater detail. In order to avoid these situations, we consider that the objectives should be more harmonized and clarified and not being subject to the particular NRA considerations. Many differences arise not from national markets differences but from different interpretations and/or weights of the objectives carried out at national level by each regulatory body.

In practice, the regulator intervention hinders the possibility of reaching agreements between operators. This is because alternative operators many times prefer to seek the NRA's intervention as they expect that they will get better outcomes. This intrusive mode should be limited as it interferes in the proper functioning of the internal market that should be desirable for a correct market development.

Local or regional fragmentation should also be considered and be avoided as much as possible. For example, only in Spain operators face the concession of municipal licenses for the network deployment (8.200 municipalities which cause 8.200 different situations). A similar example can be found in the Consumers and End-Users Act with 17 autonomous communities with stricter legislation than the national level.

(continue here if necessary)

Question 11: To what extent is the regulatory framework for electronic communications **coherent with other EU policies**, in particular:

	significantly	moderately	little	not at all	do not know
a) Competition policy and state aid	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Data protection and privacy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
c) Audiovisual policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
d) Rules applicable to online service providers under the e-Commerce Directive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
e) Other EU policies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Please explain your responses and indicate if you have identified specific areas for improvement.

a) Besides the consistency considerations, it is worth mentioning that although some parts of the framework were inspired by competition law methodologies, the overlap of framework regulation and of competition law tend to have effects on the number of constraints imposed to telecom operators which is extremely negative for legal and regulatory security and for investment incentives. We have all seen decisions in the past whereby the application of competition law has resulted in penalties on operators which were fully compliant with the regulatory framework. This is exacerbated by the inconsistencies between both policies which leads in specific cases to negative effects on the investment decisions, for example:

- It is inconsistent to allocate funds to finance new high-speed networks in areas already being serviced by broadband networks developed by private investors (distorting competition amongst market players), while universal service is still maintained in many cases at the expense of industry. In our opinion, it would be much more efficient to allocate public funds to cover the needs identified in the context of the provision of universal service. The role of public funding should be limited to address the specific reasons of a market failure, i.e. for

example lack of sufficient demand, lack of skills, high cost elements disabling the investment process, i.e. in-building wires or other elements in low density areas, etc. without which investment would not have taken place.

- In some cases, the inhibiting factor for the deployment of new networks has been investment-adverse regulation. In this case, the use of public funds to compensate for it is inefficient. The most effective way to foster investment is to simplify regulation. If not properly managed, public funding can also be wasted or, even worse, crowd out some private investment that would have otherwise been incurred.

b) Both consumer protection and privacy are two good examples of the inconsistency of the applicable rules which depend today on the type of services provider. To achieve coherence and level playing field between competing players of the digital value chain, sector specific rules on privacy should be integrated within the EU regulation on data protection. Similarly security is currently covered by the Framework directive but other relevant actors of the same value chain should be governed by similar rules; this is under debate with the draft directive on NIS whose outcome in terms of scope remains currently unclear.

c) The same considerations apply for audio-visual services. There is no justification today for the dichotomy between telco and OTT when it comes to the put into practice of EU policies.

d) The regulatory framework should also support the R&D, innovation, standardisation and technological leadership strategies of the EU when the outcome of these policies depends on their success in the market. In particular the framework should encourage, support and secure strong cooperation between market players necessary to launch end to end open, and interoperable innovative services, further than the R&D and standardisation phases. Concerning complementary services, cooperation between market players can secure positive outcome for consumers even if they concern commercial strategies. Regulation could have a role to secure good forms of cooperation between firms.

(continue here if necessary)

Question 12: As regards **EU added value** of the regulatory framework, to what extent is there still a need to continue action at EU level by maintaining/establishing sector specific legislation for:

	significantly	moderately	little	not at all	do not know
a) Market analysis and access regulation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Universal service and end-users' protection	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Management of scarce resources (such as numbering, spectrum access)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Authorisation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Network and service security	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Other areas	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your responses.

- a) As further explained below, the review should be the opportunity to set up a future proof and modern common European framework that would cover all digital services.
- b) As far as universal service is concerned, see answer to question 8.
- c) Sector specific regulation will be required for resources like numbering and spectrum.
- d) As far as authorisation is concerned, the rules should be as simple and technology neutral as possible.
- e) On network and service security there is an added value to have common EU rules as within the digital value chain several types of players do interact with services that do not stop with borders. Setting up a European and holistic approach (a combination of the current article 13 FWD and the NIS draft directive as proposed by the EC) would be required.
- f) In terms of support to European innovation; industry cooperation - needed to launch of time-to-market innovative services based on open platforms - should be better considered in the European framework, rather than taken as suspicious of breaking competition rules.

(continue here if necessary)

Question 13: In your opinion, what is the additional value resulting from the implementation of the EU regulatory framework for electronic communications? Please explain your responses.

In our opinion, ex-ante regulation in the Telecom Sector has already played its role for removing former monopolies and introducing competition in the market, although in a very costly way. We believe that now it is the time to think on the removal of most ex ante supervision and the handover to competition law. Reducing the scope of regulation to the maximum extent would provide less substance to fragmentation.

This said, by no means we suggest that the implementation of an EU framework do not add value on other elements of the framework provided it is applied in a holistic way across the ecosystem (rather than “for electronic communications”). Harmonisation at EU level would be welcome on several aspects, e.g. some aspects of spectrum management, authorisations, consumer protection or privacy and security and provided it does not lead to increase the complexity when implemented;

The European telecoms sector experienced revenues declines since a number of years. It contrasts with the trend in other regions such as the US and the rest of the world, where revenues for telecoms services experienced year on year increases. Europe is losing its attractiveness for investors as opposed to what is happening in other countries. Its contribution to GDP has decreased as well as its market value on the stock market.

We must not forget that this relevant sector should serve as a growth engine that pulls other sectors and labour forces forward as well. However the regulatory intervention, so focused on achieving short term static outcomes such as price declines has made this impossible to achieve.

(continue here if necessary)

3.2.2. Review of the objectives of the regulatory framework

The 2002 regulatory framework laid down as objectives the promotion of competition, development of the internal market and promotion of the interests of EU citizens. The 2009 reform included the promotion of efficient investment and innovation in new and enhanced infrastructures as a regulatory principle to be applied by the National Regulatory Authorities (NRAs) while pursuing the aforementioned policy objectives.

Access by all citizens and businesses to high-quality networks is a prerequisite for them to reap the full benefits of digital society. As set out in Commission's Communication on the Digital Single Market strategy, individuals and businesses should be able to seamlessly access and exercise online activities under conditions of fair competition. This goal cannot be achieved without ensuring access to connectivity based on ubiquitous, high-speed and high-capacity fixed and mobile broadband infrastructure. The telecoms review therefore offers an opportunity to recognize achieving access to such high-performance connectivity, on terms which would enable widespread take-up by end-users, as the main substantive policy priority sought by the Commission and as one of the main objectives of the regulatory framework.

Question 14: As regards the policy objectives included in Article 8 of the Framework Directive and taking into account the need to reflect adequately and completely the main European policy priorities in the electronic communications field, and more generally in the digital sector:

	yes	no	do not know
a) Should any policy objective be withdrawn or amended?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Should any additional policy objective be included?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your responses.

Please also see answer to question 9.

Since its adoption back in 2002, the electronic communication markets have drastically evolved with new challenges faced by the sector. While it may have been legitimate to temporarily promote competition starting from monopoly situations by stimulating new entries when the framework was designed, the level of competition in the EU has reached a threshold that does not call anymore for specific actions aiming at stimulating new entries, just to eliminate legal barriers that prevent market entry; Instead, achieving investments in new networks allowing wide adoption of highest performance connectivity, for the benefit of citizens, by promoting infrastructure deployment should become clearly a top priority objective;

Therefore, we believe that promoting service-based competition - many times at the expense of new infrastructures deployment - is no longer appropriate. The new Regulatory Framework should try not only to promote the creation of new networks, but also differentiation and competition between operators via infrastructures investments, under equal conditions. After nearly twenty years of the telecom sector liberalization, the new regulatory framework should be configured as more transparent, less intrusive, more homogeneous and flexible within the EU countries to successfully achieve it.

To take on board the interests of both consumers and the European producers' interest, that is using a social welfare rather than a consumer welfare standard, additional objectives should be inserted;

- competitiveness of the EU industry
- innovation

Likewise, the framework should also have as objective to encourage the development of end to end open and interoperable innovative services, and to support and secure the industrial and commercial cooperation between market players necessary to this end.

In addition, the regulatory framework needs to enshrine the objective of achieving "minimum intervention" as well as "proportional regulation" by making sound cost-benefit analysis of every market intervention mandatory. Finally, enhancing legal certainty should be another objective to be considered.

(continue here if necessary)

Question 15: Should those primary policy objectives explicitly include the promotion of investment in and wide take-up of very high-performance fixed and mobile broadband infrastructure corresponding to the future needs of the European digital economy and society?

- yes
 no
 do not know

Please explain your responses.

To be in line with EU political objective to build a connected digital market, permanent investments in successive network technologies providing more and more capacity to meet always growing demand, and large scale adoption of highest speed connectivity services, should become top priorities for the new framework.

Against this background, the primary policy objectives should have more explicit focus on the promotion of investment (to make those new networks possible) and wide take-up (in order to assure that those networks will be properly used).

We consider that the current framework has been incapable to provide favourable conditions for the intensive investments required to build the networks needed to meet the new digital economy demands. So, we believe that the first priority should be the review of the telecom rules in order to incentivize the investment in high-speed broadband networks. To unleash investments, European telecoms infrastructures need to be made more attractive for private investors.

Although it is a well-known motto of authorities that in theory and in general, investment is a mean to an end and should not be an objective in itself, here and now, it is legitimate for the EU to make an objective of investment because:

- the demand growth is and will continue to be massive and is largely exogenous
- matching the demand for high capacity connectivity is a precondition for top class services and efficient usages, and
- this requires a substantial amount of investment in new networks.

To conclude, the new regulatory framework should establish the adequate conditions for the development of modern infrastructures, ensuring the most favourable environment for the investments needed, that not only enables the attainment of proper returns in the long run, but also enables the establishment of a robust, sustainable and competitive market structure

(continue here if necessary)

Question 16: Have you identified regulatory or any other type of obstacles which could constrain fixed-line networks from fully contributing to the provision of full ubiquitous and accessible very high-speed connectivity across the EU?

- yes
- no
- do not know

Please explain your responses, outlining any obstacles you have identified.

The current form of access regulation to fixed networks is an obstacle to investment in fixed lines, as already developed in the answer to previous questions:

- As a general principle, access obligations tend to favour non investors at the expense of investors
- Multiple access products imposed to the incumbent operator strongly constraints its technical and pricing strategy while providing a competitive advantage to alternative operators
- Deprive the incumbent operator from enjoying a competitive advantage from its investment, therefore eliminating investment incentives
- Weakens infrastructure competition, and its potential benefits in terms of investments, by distorting this competition
- Deprives the investor through actual or potential price regulation from the ability to price its product efficiently to recover its investment costs.
- Limits the possibilities of risk sharing access prices and providing unclear and possibly inappropriate specification of the Economic Replicability Test, regulation can impose a wrong allocation of the investment risk between the access provider and access seekers, at the expenses of the former and the advantage of the latter, thus hindering investment incentives.

Finally, the risk that public funding may overcrowd private investments in “grey” areas increases the risk and reduces the incentive to invest.

In this regard, we refer to some of the conclusions reached in a recent study commissioned by ETNO to BCG
https://etno.eu/datas/publications/studies/FINAL_BCG-Five-Priorities-Europe-Digital-Single-Market-Oct-2015.pdf:

- Europe’s digital ecosystem still trails that of other developed

countries in North America and Asia, and the rest of the world is not standing still

- Global information and communication technology (ICT) revenues are projected to grow 5 percent a year from 2014 to 2019, but Europe is growing more slowly and its share is expected to decline by 2 percentage points over this period. Across the four segments of the digital sector—telecommunications, “over-the top” (OTT) content and service providers, TV and other broadcast, and operating systems (OS) and devices—Europe’s market share is expected to stay flat or fall.

- Equally troublesome, Europe lags other developed countries in deployment and adoption of next generation networks, the cornerstone of the Internet economy. While individual countries vary (Sweden has better NGA coverage and higher adoption than the US, for example), overall the EU is far behind nations such as the US, Japan and South Korea in both coverage and penetration of critical technologies such as LTE and especially fiber to the home or business (FTTH/FTTB).

- Clearly Europe has more catching up to do.

(continue here if necessary)

Question 17: Have you identified regulatory or any other type of obstacles which could constrain advanced wireless technologies from fully contributing to the provision of full ubiquitous and accessible very high-speed connectivity across the EU?

- yes
- no
- do not know

Please explain your responses, outlining any obstacles you have identified.

Insufficient profitability resulting from excessive regulatory driven market fragmentation and supporting low mobile revenues negatively impacts investments in mobile networks.

Also uncertainties in terms of spectrum renewal (timing, prices) or allocation conditions (high auction reserve prices, bands reserved for new entrants, MVNO obligations delayed calendar for the 800MHz) do not help incentivising investments.

(continue here if necessary)

Question 18: In your view, should there be a prioritisation amongst the current and/or future policy objectives?

- yes
- no
- do not know

Please explain your response and describe possible conflicts which may have been experienced between the objectives. If your answer is yes, please explain how any conflicts between such priorities should be resolved.

It is required a new investment-friendly regulation for new generations of networks, encouraging investment and infrastructure competition in Europe. All the activities in the digital economy depend on networks. Indeed, powerful and reliable broadband networks are a pre-requisite for the existence of the Digital Economy.

There are currently too many objectives given to regulators in the framework directive without any priority. Moreover national legislators have also added specific objectives to that list. This gives a great discretion for regulators and great confusion for market players, which is not conducive of investments.

Today the priority objective in terms of physical indicator should be the availability and the adoption of world class connectivity services permanently integrating successive technologies. All other objectives should be subject to this one.

From an economic perspective, the regulatory framework should aim at maximising European social welfare instead of pure consumer surplus.

This can also mean supporting European competitiveness and the ability of the sector to provide end to end open and interoperable innovative services and systems.

(continue here if necessary)

3.3. Network access regulation

The current framework for electronic communications has delivered more competition, better prices and choice for consumers, and spurred operators to invest. However, it is often criticised for not having sufficiently promoted the transition towards high-capacity Next Generation Access (NGA) networks fit to meet future needs, and the huge investments required, especially in rural areas. Progress towards more integrated telecoms markets is slow and the provision of connectivity to business and consumers remains highly fragmented and divergent across the Union today. It is also important not to lose the benefit of the positive pro-competitive effects of the liberalisation achieved over the past years.

The Digital Agenda for Europe targets of universal access to connectivity at 30 Mbps by 2020 indicated the ambition to ensure territorial cohesion in Europe. The penetration target of 100 Mbps (50% of subscriptions in Europe by 2020) sought to anticipate future competitiveness needs, in line with the likely global developments.

The vision of ubiquitous, high-speed, high-capacity networks as a necessary component for global competitiveness lies at the heart of the Digital Single Market strategy. While the 30 Mbps target for 2020 is likely to be largely reached on the basis of current trends, the uncertainty of adoption dynamics remains a key constraint to investment in very high-speed fixed connectivity. The EUR 90 billion investment gap identified in order to meet the 100 Mbps take-up target for 2020 will not be entirely filled from EU and national public sources, which was also never intended. Moreover, in late 2015, it is already necessary to look further than 2020, and to seek to identify and anticipate the needs of Europeans in 2025 and beyond. The incentives for investors to do more must therefore be examined afresh, along with alternative regulatory regimes which have been applied in certain areas. The review offers this possibility.

3.3.1. Evaluation of the current network access regulation

The first set of questions aims at providing input for the evaluation of the functioning of the current regulatory framework.

Question 19: To what extent has the access regulatory regime overall contributed to deliver the three objectives set in Article 8 of the Framework Directive:

	significantly	moderately	little	not at all	do not know
a) Competition in the provision of electronic communications networks, electronic communications services and associated facilities and services?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) The development of the internal market?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) The interests of the citizens of the European Union?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your responses.

a) The current regulatory framework has put a very strong focus on competition and the promotion of entry, in already existing networks, with the ladder of investment theory behind and without taking into account dynamic effects. The problem is that this model has failed to bring the desired results, since it does not sufficiently stimulate the investment on the new networks that the completion of the DSM Strategy requires.

b) We believe that, although there are regulatory principles and objectives valid for all the countries, national realities are very different and the scope of development of a harmonized internal market, in terms of telecommunications, is necessarily limited. Additionally, we believe that, previous to progress in the harmonization of the Digital sector, there are many other policies that should previously be addressed (eg:taxation)

c) The current framework has led to a competitor-welfare paradigm not necessarily compatible with the general interest of the European citizens, particularly when we look at this issue under a dynamic perspective (not only focused on short term price decreases). Telefónica considers that "competition's protection" should not be confused with preservation of a given number of competitors. In the current situation of NGAs development, priority should not be given to promote entry of further competitors at the expense of the possibility to transfer efficiencies to the end customers. That would be contrary to the ultimate purpose of regulation, which is to benefit customers. An appropriate balance between sustainable effective competition and incentive to invest is essential.

(continue here if necessary)

Question 20: Within the current model of access regulation, to what extent have the rules to determine whether a market should be regulated, based on the definition and analysis of relevant markets, on the three criteria test used to identify markets susceptible to ex ante regulation under the Recommendation on relevant markets, and on the identification of Significant Market Power (SMP) operators, been effective in:

	significantly	moderately	little	not at all	do not know
a) Promoting competition?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Maximising incentives for different types of operators to innovate and invest efficiently, in respect of both networks and services?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
c) Delivering the desired level of availability of electronic communications networks and services, as well as quality of connectivity, throughout the Union?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Promoting to the extent possible take-up of high-quality services by end-users?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Ensuring efficiency, bearing in mind in particular the impact of compliance costs on providers of electronic communications networks and services?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your responses.

a),b),c) See answer to question 16

d) Taking the situation of the European Union as a whole it is possible to say that there is a certain problem in the development and take-up of high speed networks, as reflected by the data from the Digital Agenda Scoreboard.

The EU needs a revitalization of investment in NGNs to increase employment and productivity. The current regulatory rules were designed with the idea of promoting competition and with the ladder of investment theory behind. Today there is a considerable inertia to continue applying this framework to new networks, even to fully fledged FTTH networks, and it has failed to encourage sufficient investment. Hence, a great deal of change is needed here.

e) Regulation has been very costly, particularly for SMP operators, which are obliged to provide a full set of wholesale services to make possible the "investment ladder". In addition, the concept of "associated facility/ ancillary service" has sometimes been used to include other possible network elements, information or access to systems.

(continue here if necessary)

Question 21: To what extent has the definition of the type of networks and services to which SMP regulation can be applied, been effective in :

	significantly	moderately	little	not at all	do not know
a) Promoting competition?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Maximising incentives for different types of operators to innovate and invest efficiently, in respect of both networks and services?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Delivering the desired level of availability of electronic communications networks and services, as well as quality of connectivity, throughout the Union?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Promoting to the extent possible take-up of high-quality services by end-users?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Ensuring efficiency, bearing in mind in particular the impact of compliance costs on providers of electronic communications networks and services?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your responses.

While the ultimate goal of the regulation should be to foster competition at retail level, the definition of very narrow wholesale relevant markets and notional markets has resulted in a deep and extensive regulatory intervention, losing sight of the final goal, that should be having competition at retail level and improve consumer welfare.

In general, the framework has been directed to regulate the network of the historic player. The clearest example is the "market" for local loop unbundling, which is defined bearing in mind a specific network topology (old copper telephony network). This approach should not be extended to new networks, focusing on the historic way to provide services. Indeed we believe that the new framework should not be directed to specific players. For example, today there are debates in some member states about the feasibility of cable networks to provide VULA.

See also answer to Question 20.

(continue here if necessary)

Question 22: To what extent have the provisions of Directive 2009/19/EC (Access Directive) concerning the principles that guide the imposition of remedies on SMP operators, as well as the description of the types of remedies that can be imposed, been effective in:

	significantly	moderately	little	not at all	do not know
a) Promoting competition?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Maximising incentives for different types of operators to innovate and invest efficiently, in respect of both networks and services?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Delivering the desired level of availability of electronic communications networks and services, as well as quality of connectivity, throughout the Union?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Promoting to the extent possible take-up of high-quality services by end-users?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Ensuring efficiency, bearing in mind in particular the impact of compliance costs on providers of electronic communications networks and services?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your responses.

See answer to question 20. Additionally it could be added that:

- While the provisions of Directive 2009/19/EC (Access Directive), concerning the principles that guide the imposition of remedies on SMP operators, remark that the imposition of a specific obligations on an undertaking with significant market power requires a justification that the obligation in question is appropriate and proportionate, in practice, and often, both NRAs Decisions and EC Recommendations have imposed the entire range of obligations, and, in addition, they have chosen the most interventionist measure within each obligation. The result is a disproportionate regulation which has discouraged investment
- Cost oriented price regulation is the most intrusive regulatory intervention and one which inevitably shifts market dynamics away from investment and innovation to a 'price focused' competition. In order to build the new NGA networks it is necessary to attract high levels of investments. No one would be willing to invest and run significant risks in order to just recover the costs. Cost orientation of Prices is a very onerous remedy that will no longer be proportionate in scenarios where there is effective infrastructure competition (from cable, fibre, wireless networks) and, therefore, pricing pressure at retail level make cost-orientation needless.
- Finally, the current framework has induced significant delays in delivering new technologies, such as vectoring, and poses a threat for the network evolution.

(continue here if necessary)

Question 23: To what extent is the current scope of the symmetric obligations (i.e. imposed irrespective of SMP) of co-location and sharing of network elements and associated facilities for providers of electronic communications networks as established in Article 12 of the Framework Directive effective?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your responses.

Symmetric obligations have had a positive impact in countries where competition is based on infrastructure competition (e.g.: France, Portugal, Spain), and there are ducts to the home. Evidence shows that, in those cases, symmetric regulation for in-building wiring, together with an effective asymmetric regulation for granting access to the ducts, have been instrumental in allowing alternative operators to deploy their own networks and create competition based on independent infrastructures.

(continue here if necessary)

3.3.2. Review of the network access regulation

a) Addressing bottlenecks in access networks with an appropriate regulatory regime

The telecoms review offers an opportunity to assess ex ante wholesale access regulation, in light of market and technological developments including in particular the transition to new and enhanced infrastructures such as NGA networks, fixed-wireless convergence and the migration to an all-IP environment. The objective would be in particular to ensure that regulation addresses the remaining "bottlenecks" or obstacles that impede effective competition and choice for consumers, lowers barriers to investment and facilitates cross-border services, while insisting on the sufficiency of ex post competition law in markets where competition has sufficiently developed. This includes taking stock of the level of competition, including infrastructure competition, which has developed in the market since liberalisation, and identifying any areas where enduring – often local - bottlenecks require particular attention in view of both a potentially persistent risk of abuse of dominant market positions and the European ambition to have a universally connected society. In this regard, the telecoms review offers an opportunity to consider whether access regulation is focused on the necessary inputs to allow alternative operators to deploy NGA networks in the future and compete effectively in the market, and whether they, as well as historic incumbent operators, have effective incentives to do so according to realistic timeframes.

Question 24: Should access and interconnection to electronic communications networks and services continue to be regulated *ex-ante*?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your responses.

The question is quite wide, it would depend on the specific case. We believe that ex-ante intervention for access should be thoroughly justified and never be taken for granted, particularly taking into account that it implies a very intrusive intervention which collides with fundamental rights, such as the right to property.

Thresholds for ex-ante regulatory intervention have to be high. The need for it must be very rigorously analyzed and, if applied, it should be on transitory basis and be focused on the achievement of very specific objectives. In particular, on markets with effective competition like numerous mobile telecommunication markets, ex-ante regulation is no longer proportionate.

(continue here if necessary)

Question 25: Will the current access regime model, including the analysis of relevant markets and the identification of Significant Market Power (SMP) operators as well as the three criteria test used to identify markets susceptible for ex ante regulation, continue to be the appropriate operational tool in determining the threshold for ex ante regulatory intervention beyond 2020, in all types of geographic areas and economic conditions?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your responses.

Regulation should aim for an efficient and sustainable level of competition at retail level. So if it is necessary to introduce some form of access regulation, to allow sustainable competition at retail level, this should be substantially simplified and reduced to the essential obligations. Regulators should take into account current and prospective geographic variations of infrastructure development. In areas where the retail market can be competitive without access obligations, no regulation should apply.

The reasoning behind the Ladder of Investment principle has obviously failed and what the sector needs now is to focus on preserving the value of the infrastructure to promote further investment in the upgrade of existing networks or the deployment of new networks and not to promote competition without investment.

The current framework in theory is designed around principles that aim to promote competition at retail level by imposing regulation in the presence of market failures, and lifting it where there is competition, but in practice these principles have evolved into a circular analysis generating further regulatory intervention. Therefore the current market analysis process is biased towards promotion of entry, trying to find competition at several wholesale levels. The concepts of wholesale markets (particularly the notional markets) should be abandoned as a reference for regulation.

We believe that, in the future regime Regulators should not look at the market structure as such any more, but focus on identifying what we could call relevant "Key Network Input (KNI)" (competition can only happen if accompanied by an access obligation on those assets).

The decision about the KNIs:

- Should not hamper the development of full infrastructure competition where it is feasible.
- Will strongly depend on network architectures and other peculiarities which could vary in different geographies. See answer to Question 30 below

In conclusion Ex-ante regulation, if needed, should be concerned on the lasting/enduring bottlenecks (or Key Network Inputs), if any, of the networks. Once they have been addressed, it should be left to market forces to find the most proper market structure. This Market Structure, as such, should not be the trigger for ex-ante regulation, but the outcome of the competitive forces. In the hypothetical case that this outcome raises competitive concerns they should be addressed by the horizontal competition tools, as applicable to any other sector.

(continue here if necessary)

Question 26: Do you consider that the current ex ante regulatory approach gives regulatory authorities adequate tools to map and reflect in their analysis the local variations in infrastructure availability, investment and competition within many Member States?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your responses.

We believe that, although in theory there could be sufficient tools to address those local variations; in practice they have not been properly considered by regulatory authorities.

Some of the factors which have had a decisive influence on this are for example:

- The lack of prospective analysis
- Self-provision of significant competitors, such as cable operators, has not be taken into account in the definition of product markets.
- Influence of other markets and competitors (for example, OTT providers)
- The extra workload that analysis of geographic segmentation implies.

(continue here if necessary)

The review will have to consider whether the parts of the networks that are regulated under the current rules are the appropriate and sufficient point of intervention to address the market failures that limit the growth of the Digital Single Market, or whether - in certain cases - it would (also) be necessary or more proportionate to address retail market failures at the level of services and/or content, which are increasingly important to consumer choice and to the competitive dynamics at the retail level, and are in many circumstances controlled by undertakings that are not network owners.

Question 27: Should the regulatory framework indicate more clearly that the absence of effective retail competition is the justification for regulatory intervention?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your responses. In case of a positive reply, please indicate what should be the mechanism for determining such intervention.

We believe that the reason for regulatory intervention should be competition at the retail level. See answer to question 25. The concepts of wholesale markets (particularly the notional markets) should be abandoned as a reference for regulation.

(continue here if necessary)

Moreover, electronic communications networks are currently undergoing significant technological changes due to the transition to new and enhanced infrastructures such as NGA networks, fixed/mobile convergence, and future developments such as network virtualisation and the shift to an all-IP environment. These trends need to be taken into account in the effort to make access regulation simpler. It is opportune to verify whether the number of wholesale access products to SMP networks should be reduced, in order to reduce administrative burden while addressing the most important types of demand expressed by access seekers, and adapting to technological change.

Question 28: In 2020 and beyond, will the essential inputs that an access seeker would need to effectively compete downstream in the retail market be the same as they are today, when legacy copper networks still play an important role? If not, which will be those vital inputs?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your responses.

There are throughout Members States a variety of national and local different characteristics. Hence, a targeted assessment to the inputs needed to effectively compete downstream in the retail market is crucial, as there will be no “one size fits all” solution. The justification for regulatory intervention analysis should be carried out from a retail market perspective as referred to in question 27 and focused only on the non-replicable inputs of the fixed network, trying to keep regulation on it as simple as possible.

In this regard, we believe that the technologies used for NGA deployment will play a very relevant role when deciding about the most fitting regulation. In particular it is possible to make the following difference:

- **FTHH:** In FTHH countries, the experience shows that alternative independent networks can develop based on access to ducts (provided they are available up to the buildings) + unbundling of the last fibre drop. When access to ducts and to the building wiring is guaranteed, and operators are using this to deploy their networks, then all operators are on an equal footing. Hence, the single bottleneck could be the last fibre drop in the building, but this potential bottleneck is prevented by imposing a symmetrical obligations to all operators, in order to ensure that the first operator in develop the in-building wiring provides access to it. Once essential facilities (ducts / in-building wiring) are opened and are being used by alternative players for FTHH deployment, no other obligation should be imposed, as operators are able to develop their own networks in equal conditions than incumbent operators. The experience in the Spanish market is a good example of this approach, where, based on access to legacy ducts and symmetrical access to the last fibre drop, all operators are making a large investment in NGNs, unparalleled in Europe (alternative operators such as Orange and Vodafone have committed to pass, respectively, 14 millions of households in 2020 and 11 millions of households in 2016).

Therefore, competition, in FTHH architectures, is based on independent infrastructures and does not depend on regulation of active products.

- **FTTN:** In FTTN countries the copper legacy networks remain a barrier to entry, and new technologies over copper make unbundling not feasible, so regulation of active products would remain necessary in all geographic areas. Competition in FTTN architectures strongly depends on regulation of an active access product.

(continue here if necessary)

Question 29: Should the number of wholesale products providing access to SMP networks be reduced?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your responses. If you agree with the above, what are the most relevant access products?

Regarding regulation on NGNs networks we refer to question 28 above, since the regulation of essential inputs is enough to ensure competition at retail level and it is the most suitable for guaranteeing investment, a sustainable competition, not only in prices, but also in services and quality, and, specially, that the goals of the Digital Agenda are reached, preventing Europe from a digital divide with other countries.

- In the geographic areas in the EU that have achieved a level of infrastructure competition (for which we believe that the availability of ducts to the buildings is essential), there should be also a drastic reduction of sector-specific regulation. In those areas national regulatory authorities should lift wholesale obligations leaving to market forces the negotiation of access agreements under market conditions, defining the transition period to move towards deregulation. In these cases, competition law is enough to solve potential competition problems that could arise.

- In non-competitive areas, regulation should only be made at the access level with a significantly reduced number of regulated wholesale products. We believe it is not conducive neither to innovation nor to investment to mandate the current range of wholesale Access products

- Regulation should not hamper copper switch off in reasonable periods

The upcoming framework should abandon the concept of the “ladder of investment”. The “ladder of investment” approach has failed, as favourable conditions for access seekers encourage service-based market entry but discourage infrastructure competition. This philosophy cannot be applicable to regulate the deployment of new infrastructures built in a market where there is already effective competition and there are even areas where the traditional incumbent has infrastructure market shares even lower than other players. In fact, this approach has been proved to be failure even for legacy infrastructures, as low prices for access seekers encourage entry but discourage moving up the ladder.

(continue here if necessary)

Question 30: What will be the appropriate type, layer and number of wholesale access products that would ensure that investment is incentivised and that retail competition thrives in new and enhanced infrastructures, such as NGA networks?

Should the answer to this question take into account the interest in incentivising all market participants – historic incumbents and alternative operators – to invest in the highest capacity networks, instead of more incremental upgrades, in areas where infrastructure competition is possible?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your responses.

The future access regulation regime should be much simpler, efficient and proportionate, , limiting access regulation to essential facilities, with the final objective of improving social welfare by fostering investment and sustainable competition.

Different from what the question suggests, no single answer at EU level can be given to what could be the appropriate access obligations. The decision should be made taking into account several factors such as geographical conditions and the technologies used to deploy the new NGAs. From our point of view, the availability of ducts to the buildings constitutes a key element. Particular, care should also be taken that mandated access does not freeze network upgrades and the evolution of NGA technologies.

See our answer to the previous Question 28.

(continue here if necessary)

Question 31: Should NRAs have the powers to address access bottlenecks in relation to other inputs, whether or not these relate to electronic communications services and networks, if such inputs are considered to be decisive for the development of the retail market (i.e. such as for example access to content)?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your responses.

Not in general terms. We believe that ex- ante regulation, in the field of electronic communications, should in principle be focused only on bottlenecks related to network essential facilities. From our point of view, addressing other alleged bottlenecks would not be practical/feasible due to reasons such as:

- Currently it is very imprecise to talk about anything other than possible network essential facilities.
- Future services are unpredictable and difficult to be addressed applying ex-ante specific rules. It would be extremely complex to grasp all possible future situations
- Sector specific rules could be difficult to enforce to global players.
- Specialised ex-ante regulators could not cover significant parts of the expertise required to address new issues.

In our opinion, those possible bottlenecks should be addressed by other bodies using cross-sector rules. For instance, in the case of access to content, mentioned as an example, there are strong debates in several Member States about this issue, with competition proceedings completed or underway (eg: DTS-Telefónica Merger Control approval by competition authorities in Spain).

(continue here if necessary)

One important aspect is the enduring importance of legacy copper networks, which continue to be controlled by former monopolies in all Member States and continue to be a vital input for a large share of access seekers, and have an impact on their owners' incentives to roll out NGA networks. In this regard, the state of copper switch-off in Member States needs to be examined.

The Commission Recommendations on regulated access to Next Generation Access Networks (2010/572/EU, NGA Recommendation) and on Consistent Non-Discrimination Obligations and Costing Methodologies (C(2013) 5761, Non-discrimination and Costing Recommendation) aim at fostering the development of the single market by enhancing legal certainty and promoting investment, competition and innovation in the market for broadband services in particular in the transition to NGAs.

NGA coverage has reached 68% of households in the EU, to a large extent through incremental upgrades of cable networks and of copper networks through FTTC. As NGA networks become more common, it needs to be assessed whether – at least in more densely populated areas or in areas where such upgrades are already far advanced – the risks linked to NGA roll-out beyond 2020 will mainly concern the roll-out of new networks up to the end-users' premises, justifying a corresponding focus of regulatory incentives on those challenges.

In addition, it is necessary to reflect on the question whether all investors – including incumbents - in higher risk, more costly infrastructures, in advance of short-term demand in many cases, are able to draw sufficient benefits from the differentiating effect that such an investment can give them in competing in the area in question. At the same time, equality of investment opportunity may be desirable – network economics may not allow every operator present in a given area to build its own network, leaving SMP operators a significant strategic advantage even if others are willing to commit capital to raising network performance and competing at a new level.

Question 32: Are incremental upgrades to copper networks likely to be exposed to such a level of investment risk in 2020 and beyond, that specific regulatory incentives will continue to be justified for all NGA technologies?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response, and indicate which incentives you would consider appropriate (e.g. continued application of the Non-Discrimination and Costing Recommendation to Fiber-to-the-premise (FTTP) networks only (or equivalent), improved access to passive infrastructure, adaptation of wholesale access products to SMP networks, lifting of access obligations to the highest capacity SMP networks if a credible anchor access product is made available, or others).

We believe that regulatory intervention should not steer the market into any technological direction. It does not mean that it should not be adapted to the different architectures and conditions prevailing in different countries/geographies.

(continue here if necessary)

Question 33: Should incentives linked to an adaptation of regulated wholesale access to the highest-capacity SMP networks (lifting of access in the presence of an anchor, or regulated access without direct price controls) – which would be principally directed to the SMP operator – be conditional upon the offer to alternative operators of reasonable co-investment opportunities in such infrastructure roll-out?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your responses.

As we have explained above, in question 30, we believe that, in any case, regulatory intervention should be limited to provide access to essential facilities, for the implementation of true equality of opportunity for all operators. Since these conditions are guaranteed, a 'first-mover advantage' on the highest speed and quality products can improve investment incentives both of the first mover and competing players that would have to invest in turn to fully match the capacity of the initial investor.

The suggested approach should not be related to the highest capacity networks and not subject to conditions such as obligations to offer co-investment opportunities.

In addition, the negative effect of direct price control on NGA investment incentives is already recognised by the Commission and is part of the current framework (recommendation on costing and non-discrimination). It is unclear why they should be made subject to additional conditions or limited to certain technologies.

(continue here if necessary)

Question 34: To what extent will connections provided via purely copper-based access points continue to represent effective access points for competitive market entry (inter alia, as a competitive anchor vis-à-vis the most advanced NGA networks) in face of network upgrades?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response. If your response is negative, and in the absence of other infrastructures that could serve as a credible competitive anchor, could regulators require intermediate wholesale NGA access products that could serve a similar function?

We consider that purely copper-based accesses provide a clear anchor for NGA development. In fact, retail prices of the services provided with those accesses constitute a reference for "equivalent" NGA services (price premium of fiber networks are not very high). On the wholesale side, ULL prices have also a relevant impact for the migration from legacy networks towards the new NGAs. Indeed, the enduring pressure to reduce wholesale copper prices, highly disincentives NGA investments and take up (i.e. the migration rate from copper to fiber services, both at retail and wholesale level).

(continue here if necessary)

Question 35: Should copper switch-off be promoted to increase the speed of transition to NGA networks, and if so, within what time frame and geographic range and by what means?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

If so, should any unintended effects of such switch-off (e.g. potentially higher costs for some users who would not voluntarily migrate) be mitigated, and if so by what means?
What transitional measures might be necessary in case of copper switch-off to safeguard sunk investments by access seekers and existing levels of access-based competition?
Please explain your response.

We believe that legacy copper switch-off policy should be facilitated, but not forced by regulation, consistently with the DSM Strategy targets. It should be taken into account that strict requirements to maintain copper lines imply that:

- operators have to spend OPEX to maintain two networks
- the NGA business case will be harmed

Regulation should allow copper switch off in reasonable periods, bearing in mind that:

- In areas with infrastructure competition, wholesale services provided over the copper network should be deregulated within a period of no more than one year. Hence, the copper switch off in these areas should be allowed to take place in this period of time.
- When NGA deployments are based on FTTH, in exchanges where at least one year has elapsed since the date of the last ULL operator entry, fibre investors operators should be allowed to address the switch-off within a period of no more than two years
- NGA investors should be able to set the migration pace, within the condition above
- Negotiation between parties should be prioritised
- Relevant markets related to the PSTN should be removed, without transition periods

(continue here if necessary)

The trend towards convergence between fixed and wireless mobile retail broadband access has accelerated in the last three years. Wireless, including mobile, networks can contribute to a more cost-efficient network roll-out, especially in the less dense areas. Whilst current mobile network upgrades usually relate to the last mile of the access network, they also typically include other parts of the network, both backhaul and backbone up to the core (switch). These parts of the network can in many circumstances also be used to route fixed traffic. A [recent report](#) by the Radio Spectrum Policy Group has stressed that backhaul links with insufficient capacity would become a bottleneck, impacting the operations of the mobile broadband system. It is therefore necessary that access to fixed networks is available, preferably via commercial market mechanisms.

Question 36: Is access to fixed-line back-haul capacity for denser wireless networks likely to constitute a bottleneck in future, to which wholesale access regulation should be extended?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response, including what market developments are likely to have an impact on fixed backhaul needs and availability if any.

This issue was already addressed in the revision of the relevant market recommendation conducted by the EC last year. The EC concluded that it was not necessary to include a new market for passive access to backhaul infrastructures in the list of markets susceptible to ex ante regulation. In the future, it is likely that competition will be more based on infrastructure than today, due to the availability of ducts of operators and other utilities, with the implementation of the cost reduction Directive.

More specifically, it is necessary to note that the answer to this question is strongly influenced by the "ducts availability". In the cases where an effective and capillary regulated duct access offer exists (e.g.; Spain), alternative operators have been investing and are in a position to invest in that infrastructure in the same terms than the incumbent operator, so that no further regulation is needed.

(continue here if necessary)

Question 37: If wireless high-capacity broadband were facilitated by commercial or regulated access to backhaul on an SMP operator's fixed-line network, would the resulting competitive constraint justify a relaxation of wholesale access regulation for the purposes of provision of competitive fixed-line services?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

In general we agree that backhaul is essential for wireless broadband, but it is difficult to tick a response, as the different competitive constraints applicable in different countries should always be taken into account. In particular, availability of ducts will be key to decide whether some regulation is required or not.

(continue here if necessary)

In light of the upgrade to NGA networks, one way of lowering deployment costs is to avoid costly duplication and to take more advantage of existing infrastructures that are unlikely to be replicated. This could be achieved by mandating that assets be shared at various levels of network deployment, in particular civil infrastructure (ducts and poles).

Moreover, the regulatory framework was drafted at a time when a high level of vertical integration prevailed in the markets, i.e. when one single undertaking was providing the electronic communications network and services as well as the facilities associated with the provision of these, such as ducts and poles. Other, often competing, business models have developed since then and pure providers of associated facilities, such as ducts and masts, which only provide wholesale services, have had a significant influence on the competitive landscape. On the one hand, municipalities and other local authorities have invested in ducts, while a number of mobile network operators (MNOs) have sold their masts. While providers of associated facilities are within the scope of the regulatory framework, not all its provisions are applicable to them. Certain provisions, and in particular the provisions related to rights of way and to facility sharing, only apply to providers of electronic communications networks.

Question 38: Will obligations to grant access to ducts and civil engineering infrastructures play a role in enabling the rollout of new and enhanced infrastructures (such as NGA networks), irrespective of whether or not they are associated to the provision of access to other network elements?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. If yes, how and what adjustments in this regard are needed in order to facilitate rollout, and is sector specific regulation required?

Ducts to the buildings and civil engineering infrastructures play a key role, once they are open for NGA deployment. This is the experience already in several EU countries. For FTTH networks, access to the last part of the fibre cable (terminating segment/ last fibre drop) will normally be necessary for economic and practical reasons.

As stated above, Telefónica believes that once essential facilities (ducts / in-building wiring) are opened and are/will be effectively used by alternative players for FTTH deployment, no other obligation should be imposed, as operators are able to replicate the network up to the building/ concentration point.

Indeed, there is strong evidence that, in the countries (such as Spain, Portugal or France) where there is effective regulation for granting access to the ducts, in combination with other measures for the access to the last drop fiber, FTTH deployment by alternative operators is possible and there can be strong competition without the need to regulate other traditional remedies as wholesale products such as VULA or other wholesale broadband access

(continue here if necessary)

In addition to the obligations imposed following the analysis of relevant markets and the identification of Significant Market Power (SMP), the current regulatory framework also empowers NRAs to impose certain type of symmetric obligations on providers of electronic communications networks, i.e. irrespective of whether they hold significant market power. In particular NRAs are empowered to impose objective, transparent, proportionate and non-discriminatory symmetric obligations of access and/or interconnection in order to ensure end-to-end connectivity, interoperability of services to end users and accessibility for end-users to digital radio and television broadcasting services (Article 5 of the Access Directive). Such measures are subject to the Article 7 of the Framework Directive consultation procedure, when they affect trade between Member States.

Moreover, the current regulatory framework also empowers NRAs to impose symmetric obligations of co-location and sharing of network elements and associated facilities for providers of electronic communications networks (Article 12 of the Framework Directive), in order to protect the environment, public health, public security or to meet town and country planning objectives and only after an appropriate period of public consultation. Such obligations may concern the sharing of facilities or property, including buildings, entries to buildings, building wiring, masts, antennae, towers and other supporting constructions, ducts, conduits manholes, cabinets of electronic communications network operators.

Question 39: Should in your view the NRAs be empowered to impose obligations set out in Articles 9 to 13 of the Access Directive on operators irrespective of whether they hold SMP, in circumstances other than those listed in Article 5 of the Access Directive?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. If your answer is yes, please specify these circumstances.

Regulatory intervention should not be justified beyond obligations linked to the essential /inputs facilities required to allow competition.

(continue here if necessary)

Question 40: Is the current procedure envisaged for supervising the application of symmetric remedies effective, or could a more efficient procedure be envisaged?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and indicate possible improvements.

We believe that the effect of all remedies (symmetric and asymmetric) should be taken into account when assessing competition. It is important the recognition of the effectiveness of symmetric remedies: if symmetric remedies provide competition at retail level, no other obligations are necessary downstream.

(continue here if necessary)

Question 41: Are current rules in the Framework Directive, in the Access Directive and in the Cost Reduction Directive (2014/61/EU) sufficient to ensure that operators that roll out networks to a building have access to entries to buildings and to building wiring, for example where that wiring is not owned by an operator?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We believe that the currently available tools should be sufficient, as the evidence coming from some countries confirms. The Directive on broadband cost reduction may bring considerable benefits in the future, although it is very early to assess them. We should wait after 2016 following the Directive's transposition in all Member States.

(continue here if necessary)

Market developments in several Member States point towards an increasing prevalence of oligopolistic market structures, at regional if not national level. To an extent, oligopolies have come about as a result of the regulated access regime and the transition from monopolistic market structures to competition following liberalisation. Given the high fixed costs of electronic communications networks, in particular of fixed-line networks, it can be expected that, in most areas, at the network level only a limited number of infrastructures will be deployed or would be efficient. Such a scenario, however, does not necessarily lead to an uncompetitive market outcome.

This development may raise the question, however, of the extent to which, in circumstances where SMP (individual or joint) might be difficult to demonstrate, but retail competition is still thought to be at risk, the current model of ex ante regulation is sufficient for answering the challenges of the markets that will develop in the future. This also raises the question whether ex ante regulation, which currently is exceptionally applied in the electronic communications sector, requires a lower intervention threshold than ex post antitrust rules applicable to all economic sectors and whether such a further exceptional approach is sufficiently justified.

Question 42: Should there be exceptions to the principle that ex ante access regulation can only be imposed in circumstances where regulators can demonstrate SMP, individual or joint?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. In the case of a positive response, please indicate the additional circumstances under which wholesale access remedies should in your view be possible (which retail market conditions, a broader wholesale market structure test, generalised symmetric wholesale access obligations, or other).

We believe that for the future framework, sector ex-ante regulation, where needed, should be focused on the provision of access to the indispensable network inputs in order for competitors to be able to compete at retail level. Once this has been addressed, it should be left to market forces to seek the proper market structure. A market structure, as such, should not constitute the trigger for ex-ante regulation, but be the outcome of competitive forces.

We agree with the preamble of the question that the application of ex ante regulation to the electronic communications sector is “exceptional”. The policy makers that conceived the current ex ante framework foresaw a process of ex ante regulation giving way to the application of competition law; denoting successful sector liberalization. Now BEREC is seeking to extend the perimeter for ex ante regulation just at the point when SMP is being removed from some of the remaining regulated markets. The regulatory framework does not exist to provide a *raison d’être* for NRAs to perpetuate regulation. Once its function is fulfilled, the current “exceptional” ex ante regulation should be removed, not extended in scope.

Creating a lower intervention threshold for ex ante regulation, one that is even lower than that for ex post antitrust intervention – in the same sector – creates substantial uncertainty for market participants. The concept of “tight oligopoly regulation” would pave the way to impose regulation in virtually all situations of current telecom markets. Such an approach is both inefficient and potentially ineffective (as we show below) and sends completely the wrong message to investors at a time when the Commission is looking to sharpen investment incentives in the sector.

In particular the proposal by BEREC to create an analogue of the SIEC test from merger control misses an important distinction – the SIEC test is a “before and after” test that compares the state of a market before the merger, with a hypothetical market structure existing after the merger. BEREC’s proposal, by contrast, is an absolute test requiring the finding of a dysfunctional market outcome with no objective point of reference (a demonstrably perfectly performing market).

It would require NRAs to determine whether the current mix of prices, investment, quality and innovation (amongst other elements) is providing a sub-optimal welfare outcome (a subjective test) and that there was a more beneficial set of prices, investment, quality and innovation (again subjective) that could be achieved through the application of remedies (speculative).

(continue here if necessary)

Just looking at one parameter - prices - we note that there has never been a successful prosecution of a stand-alone excessive pricing case under competition law. It is hard to envisage how NRAs could suddenly do better than the accumulated case law of the antitrust regime and show that prices are in themselves excessive. Whilst NRAs might believe that they can, today, determine what the "right" prices should be for SMP operators, in order to set SMP price controls, this is not the same as determining what an efficient set of market based prices should be for a multi-product firm. In this regard we note that price regulation of mobile networks is limited to one wholesale product, call termination. Even then, for this one reference point, regulators have avoided the question of the allocation of the substantial fixed and common cost into regulated prices, by assuming they are recovered in the call origination and other market(s). It is unclear on what basis NRAs could now determine the efficient recovery of fixed and common costs across all a firm's prices based on Ramsey Pricing principles, given their stated reticence to do so when setting MTRs in the past. For regulation to be defensible it should have a sound basis in economic theory. The novelty of ex ante oligopoly regulation is shown in a recent academic paper. It was noted that:

1. The very limited economic literature proposing regulation of oligopolies relies on the use of the perfect competition model as a paradigm for ideal market, which implies that any price above marginal cost prices is welfare harming. If NRAs were to use this cost standard then investment incentives in the sector would be removed completely, as recovery of fixed and common costs would go unrewarded. No academic paper concerned itself with determining the "right price" in oligopoly markets which require continuous investment and an adequate return to be achieved by those investors.

2. There is no consensus amongst academics on the criteria to classify a given market into one of the theoretical oligopoly models. The same market may be classified in different categories by different analysts.

3. Even if a poorly functioning oligopoly could be determined, the paper concludes that "the surveyed literature is far from being conclusive on what ex-ante remedies could be imposed on a welfare harming oligopoly. The only useful conclusion that may be extracted is that the usual remedies for monopoly (or SMP) do not seem to work for an oligopoly."

Finally, we note that if there were ex ante regulation of "non-functioning oligopolies", where this regulation was developed to mirror the SIEC test in merger control, it would lead to a situation where all of the "theories of harm" raised in recent telecom mergers would no longer exist, because they were addressable under the ex ante framework. Such a regulation would effectively result in a transfer of responsibilities from DG COMP to DG CNECT.

Question 43: In the event that the wholesale access market in a given area is deemed no longer subject to SMP, or that access remedies are no longer deemed appropriate in that area, by virtue of ongoing infrastructure-based competition on quality and price between a limited number of operators, would you consider it justified in the interests of market stability and existing levels of competition to maintain for some period wholesale access comparable to that previously enjoyed by access-based operators?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. In the case of a positive response, please indicate under which conditions (e.g. what degree of infrastructure competition, nature of the transitional access product, duration, etc.)

Ex ante regulation is normally very late when removing regulatory obligations. If an area is deemed competitive, it is not justified to maintain regulation. In case transitory measures would be considered necessary they should not last more than one year and be applied only to already existing services (no to new requests).

(continue here if necessary)

An assessment of the future evolution of the regulatory framework also needs to explore how to simplify and make more predictable the current rules for economic regulation, which are based on a forward-looking assessment of market and technology developments, and are necessarily subject to policy drivers at national and EU level, which may not always be consistent. This includes, inter alia, the possibility to extend the review cycles (and as a consequence the implemented remedies) beyond the current 3 years, more routinely than for the exceptional circumstances currently foreseen by the regulatory framework, for instance where the market conditions are unlikely to change significantly or where regulated operators make longer term commitments and access seekers agree. It is also necessary to assess the benefits of reflecting in the regulatory framework itself the key principles outlined in relevant Commission Recommendations, namely the 2010 NGA and the 2013 Non-Discrimination and Costing Recommendations, with the aim of further promoting legal certainty and predictability for NRAs and market actors.

Question 44: Should periods of review longer than the current three years be systematically considered for certain markets which are less likely to change?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. If you agree, which markets do you consider to be suitable for such longer review periods.

While ex-ante regulation would be focused on the provision of access to the indispensable network inputs, under a revised framework, in case ex-ante remedies will be imposed, they should be kept stable over time and their evolution predictable, (especially for new investments, that have long pay-back periods). Regulatory uncertainty greatly discourages long-term investments.

At the same time, telecommunications markets are immersed in an era characterized by constant change and evolution towards NGN networks, which recommends that generally market reviews would be carried out at intervals of not more than three years, these reviews should be made taking into account the need to provide a stable regulatory framework for new fibre networks.

(continue here if necessary)

Question 45: If so, should this be subject to certain criteria (for example to binding regulatory commitments and agreements between access providers and access seekers) in the interest of legal predictability and certainty for the market and/or to specific investment or other performance criteria required to the SMP operator?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We believe that Commercial solutions (i.e. voluntary wholesale arrangements) should take precedence to regulatory impositions, so that successfully concluded commercial contracts should be deemed compliant with regulatory requirements and given priority to regulated solutions. Anyway, in the context the question is posed, it is important to remark that the existence of those agreed commercial solutions should constitute a reason to remove regulation not to delay market analysis.

(continue here if necessary)

Question 46: Should key principles of the non-binding guidance provided in Commission Recommendations on EU-wide regulatory approaches in respect of wholesale access regulation be made binding?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We believe that national conditions could be very different. Commission Recommendations should constitute a reference, but not made directly binding, otherwise they could have a distorting impact on national markets where they could not be directly applicable.

(continue here if necessary)

b) The impact of network technologies developments: facing new challenges

The telecoms review offers also an opportunity to assess the regulatory framework's capacity to cope with the electronic communications sector's fast-moving technological environment, and in particular to identify regulatory areas which could require adaptations in order to keep up with the main trends in network technologies, operations and market developments. Against this background, it is necessary to already anticipate these developments taking into consideration relevant time horizon(s) matching the technology's life cycles, from research and development to the roll-out of infrastructure, extending beyond 2020.

The shift to "all-IP" networks has been driven by the gradual roll-out of NGA, and implies moving the point of interconnection for voice services from distributed local central offices to a central point in the network, thereby enabling cost savings for operators as well as a more efficient network management (including across countries). For the time being, one can observe in Europe that the migration to "all IP" in the Member States is moving at various speeds and does not receive the same degree of attention from national regulatory authorities.

Question 47: Is it necessary to establish regulatory incentives to speed up the migration to "all IP" networks?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

IP migration require a high level of investment. The IP migration is company's strategy defined in respect to interest, needs, cost, opportunity costs. Industry should have the final say on this, depending on the evolution of the market. As per technology neutrality such decision should not be forced by the regulation. Regulation should not put barriers or delays to switching (e.g. copper switch off conditions).

(continue here if necessary)

Question 48: Would a common EU approach be required to ensure that the migration towards "all IP" networks in the EU contributes to the achievement of the single market objectives?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Telefónica believes that IP migration is a business issue, not a regulatory one. This means that each company has to manage its own deployment taking into account its own constraints and notably the market ones.

(continue here if necessary)

There is a trend in communication network architectures towards the "virtualisation" of network infrastructure and functionality (through various approaches such as "Software Defined Networks" (SDN) and "Network Function Virtualisation" (NFV)). The definition of open network interfaces enables to abstract the actual physical deployment, removes proprietary dependencies and allows flexible service provisioning. Network functions (such as set-top boxes, mobile signal encoding/decoding, routers etc.) run in software on general-purpose hardware, instead of expensive locally-distributed and dedicated hardware equipment, and hence add further flexibility, scalability, security and cost savings for operators and their customers.

Question 49: Will the on-going virtualisation of communication network infrastructures have an impact on the future demand for wholesale access products for the provision of connectivity services?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

We believe that this debate is very premature, taking into account that virtualization is still a technology in its initial stages, as an implementation choice. In any case, we believe that the usual network concepts will still apply. In a scenario of a regulation which encourages investment, based on network essential facilities, virtualization should rarely have an impact.

(continue here if necessary)

Question 50: Will the virtualisation of network infrastructures and services have a role to play in the provision of pan-European services?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

Virtualization of the network offers new possibilities for centralization and global models, not necessarily pan-European.

Its impact on the provision of pan European services should depend on market demand and commercial negotiations. The process should be market driven.

(continue here if necessary)

Question 51: What is the relevant timeframe you foresee by when the biggest impact of virtualisation will be reached?

- 5 years
- 5-10 years
- > 10 years

Please explain your response and provide examples.

Few small applications already exist or are planned, notably in the domain of MVNE and Business. Nevertheless, this trend is some sort of revolution in the industry organization as well as the standardization one and a lot of elements of the eco-system will have to be changed or must be reinvented. Still there remain questions about the finalization of these new products and their implementation that means also a migration process to set up - with the assumption that the virtualization will be mainly done, at least at the beginning, with new services.

(continue here if necessary)

Appropriate interoperability of electronic communications services throughout the EU is critical to ensure freedom of choice for end users and achieve the Digital Single Market. Standardisation is likely to become a prominent issue in the move towards software defined networks (SDN) and network functionality virtualisation (NFV), whose implementation relies on the definition of open network interfaces. In ultra-high definition television (UHDTV) interoperability issues may emerge if industry agreement is not reached on standards across the whole value chain, from film production to the end user's screen. Account needs to be taken of the trend over the last 15 years towards the multiplication of global industry-led fora and consortia involved in the development of common technical specifications for ICT and their implementation, e.g. through certification schemes. This has resulted in a situation which, if not addressed, could lead to an increased fragmentation of Europe, as one can observe at the moment in the area of wholesale access products. The Commission has encouraged the use of a standard for mobile TV from 2008 and (from 2006), for access to unbundled local loops, interconnection, caller location, quality of service for voice telephony and for digital radio. The Commission competence to make the implementation of certain standards and/or specifications mandatory has not been used so far, but the existence of such a competence could in principle help to foster voluntary industry consensus on the use of standards.

Question 52: Will the current voluntary and market-driven approach in standardisation remain valid and efficient enough to cope with the future needs of stakeholders in 2020 and beyond, while taking into account the community interest, including of EU citizens?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

Telefónica believes that Policy makers should let the market decide if it is necessary to get common approaches or not, without regulatory intervention. In what concerns Electronic Communication Networks we think that the current approach will remain valid. In fact, Regulation should not steer the market, as it could result in unintended distorting effects.

(continue here if necessary)

Question 53: Will regulatory safeguards as provided under the regulatory framework for electronic communications (in particular the competences to encourage and ultimately to mandate the use of standards) still be needed in the future to preserve service interoperability across the EU and improve the freedom of choice of end users in addition to the general purpose EU legislative mechanisms on ICT standardisation in place?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

Agreements in the industry should be encouraged. Regulation should only act as a safety net in exceptional cases.

(continue here if necessary)

Achieving better end-to-end quality of service would allow for more innovation on the application layer (e.g. more widespread use of cloud computing, eHealth, telepresence etc.), with potentially very significant economic and social benefits. Greater consistency in the design of access and interconnection products may facilitate this process. Furthermore, the issue of service interoperability with assured quality level between different networks will also have to be considered if pan-European services with specific quality requirements are to be provided on Europe's still fragmented networks, in particular services with real-time needs.

Question 54: Is there a need for common access and interconnection products that can operate across the EU with a view to foster the emergence of high-quality connectivity services, including at pan-European level?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We strongly disagree, as it would imply more costs and complexity, without any clear benefit. Moreover, in the field of access, any kind of new harmonized product would mean the continuation and strengthening of a competition model for fixed networks based on an ever more complex set of regulated wholesale services. We think that in practice it would mean for most Member States destabilising the regulatory framework. It would be needed to review current arrangements and add new layers of regulation for wholesale products, since closing current wholesale services or migrating wholesale customers is always problematic. This will increase costs and complexities for the management of wholesale services.

It would increase regulatory complexity as it would lead to more discussions about prices, several levels of price squeeze tests, etc. It would also go against the policy of fostering deregulation and infrastructure competition.

In addition, it is likely that the harmonisation of services would put pressure on harmonizing its price although this is would not be justified from the point of view of competitive conditions in the national access markets.

(continue here if necessary)

Question 55: How can service interoperability with end-to-end assured quality level between networks be best guaranteed for the development of services with specific needs in the Digital Single Market? Please explain.

The issue of Interoperability with end-to-end assured quality level between networks should be left to commercial agreements between operators.

Regulation should not be aimed to attend specific needs, otherwise the problems discretion and fragmentation that plague the current regulatory regime will be reproduced in the future framework.

(continue here if necessary)

c) Addressing "challenge areas" to deliver the desired connectivity levels

In certain areas, primarily rural or semi-rural areas, private investments might not be expected on the basis of current regulatory incentives, due to long-run cost structures and low and long-term returns on investment. Where the SMP analysis leads NRAs to finding national markets and to the imposition of nation-wide remedies, this may lead to sub-optimal incentives to invest at regional or local level, particularly in areas characterised by natural monopoly (e.g. in less densely populated areas) and where public funding may not be available. In these so-called "challenge areas" there is a need to reassess sector-specific access regulation. This could include measures focusing more on "competition for the market", i.e. rewarding/providing incentives to the first mover towards very high capacity network provision that might not otherwise be provided, while safeguarding effective competition and end-user interests.

From the perspective of incentivising the roll-out of NGA networks to such challenge areas, it is also necessary to consider the appropriateness and need of a regulatory approach to co-investment and wholesale-only models (see Annexes for more background).

Question 56: Should access regulation aim at addressing network coverage needs in all geographic areas?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

If so, which alternative regulatory models should be considered to give greater security to investments in areas unlikely to be served by the market under current regulatory conditions, with the overall aim of promoting the fullest possible coverage of new and enhanced infrastructures, such as NGA networks, across the EU and how should such challenge areas be defined by NRAs (e.g. classic market definition with additional criteria, State Aid like mapping exercise, other)?

Not necessarily, as it should be considered as a public policy issue. Nevertheless, it is important to identify what are the sources of investment gaps and, in which way regulation could have an influence on them. In this regard, we believe that regulatory action should be focused on:

a) Primarily by making Europe an attractive place to invest private money. We are convinced that allowing operators to differentiate amongst themselves and compete to extend their coverage and services should be the overarching principles to overcome this challenge in Europe. In this regard Europe is in the urgent need to review its regulatory framework, simplifying access regulation in order to boost investment in broadband networks. This should be the priority.

b) Limiting the role of public funding exclusively to address the specific reasons of a market failure, i.e. for example lack of sufficient demand, lack of skills, high cost elements disabling the investment process, i.e. in-building wires or other elements in low density areas, etc. without which investment would not have taken place. In these cases, it is of the utmost importance to ensure that public support takes place in a competitive neutral manner, i.e. avoiding at all cost distorting competition amongst market players.

(continue here if necessary)

Question 57: Is there a need for regulatory measures and/or incentives to better secure the benefits of investing in challenging areas for the first mover, and should this be conditional on the type of network improvements that have been undertaken?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and what these measures/incentives could be (e.g. exclusive protection subject to reasonable access terms for a limited period of time, other). Please see also question 130.

Consistently with the answer to the question above, we believe that the first priority would be to improve the prospect of investing in all the areas, without complex regulatory solutions. Regulation should remain technology neutral, and not favor specific technologies.

(continue here if necessary)

Question 58: Should any such regulatory measures and/or incentives to secure the first-mover investment benefit be subject to conditions in the interest of service competition (e.g. reasonable wholesale access requests)?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

See answer to the question above.

(continue here if necessary)

Question 59: Should specific measures be devised to prevent strategic overbuild of new NGA or very high capacity NGA networks? If so what are possible regulatory means to do so, and under what conditions as to safeguarding of competition and end-user interests?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Regulatory intervention could lead to artificial inefficient outcomes. In fact, the term “strategic overbuild” is very difficult to define and subject to many interpretations. It could even be difficult to distinguish from a healthy infrastructure competition environment. It should be left to the market forces to reach the equilibrium situation.

(continue here if necessary)

Question 60: Can the following investment models contribute to foster investment incentives and promote deployment of NGA or very high capacity NGA networks in challenge areas:

	strongly agree	agree	disagree	strongly disagree	do not know
a) Co-investment models	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Wholesale-only models	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

If so, what would be the most important features of such models, and how can they be accommodated by the regulatory framework without compromising other objectives? Please explain your responses.

We believe that co-investment models foster investment and healthy infrastructure-based competition scenarios, but it is not the only technical and economic solution, since once the essential facilities are opened, any operator could invest with a relatively low cost of deployment. Spain and Portugal are clear examples of that.

Wholesale-only models necessarily lead to competition in services scenarios that are hardly compatible with the promotion of investment. Additionally, they remove all the advantages of vertical integration.

(continue here if necessary)

Question 61: Should regulatory requirements regarding access to NGA or high-capacity NGA networks be made lighter if the network owner sought co-investment on reasonable terms at the time of the roll-out or the upgrade?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your responses. If your response is positive, is it contingent on being applied in a challenge area / natural monopoly area, or would you apply such an approach more generally to SMP access regulation?

In our opinion, what is really relevant is that regulation does not put obstacles to co-investment and facilitate players to reach agreements. Commercial negotiations should be the default solution for access agreements and NRAs should not interfere when parties reach commercial agreements. The principle of minimum intervention should be followed.

(continue here if necessary)

Question 62: Do you consider that wholesale-only network operators have stronger incentives and opportunities to develop new NGA or very high-capacity NGA networks to serve long-term needs?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

See answer to question 60

(continue here if necessary)

Question 63: If your response to question 62 is positive, should there be regulatory incentives for voluntary structural or functional separation of existing vertically integrated SMP operators?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response, in particular what kind of regulatory incentives could be considered (e.g. in terms of wholesale access terms).

We firmly believe that if a priority objective is to foster investment on new NGA networks, policies should be aimed to simplify and reduce the regulatory burden, giving more leeway to commercial forces. Intrusive regulatory measures, such as Structural/Functional separation, should not be promoted, as they have major drawbacks. For example:

- Those are intrusive remedies that demand a very strong justification from the legal point of view (in particular in the case of the structural separation). Its introduction will be followed by conflicts, uncertainties and delays.
- Those carry significant inefficiencies associated with the loss of vertical integration for the separated operator and the associated complexities.
- Those highly discourage efficient investment in networks and innovative services.

(continue here if necessary)

3.4. Spectrum management and wireless connectivity

While technical harmonisation of the use of radio spectrum for EU-wide allocations has progressed significantly based on the 2002 Radio Spectrum Decision (RSD), the designation of (additional) spectrum to a (new) application or technology in the EU still requires several steps (first in the European Conference of Postal and Telecommunications Administrations (CEPT), then in the Radio Spectrum Committee) before the Commission can ensure legal certainty in the EU. This iterative process may be particularly burdensome, in terms of costs and delays in "time to market", for innovative new uses, but can also weigh on the ability of existing spectrum users such as wireless broadband providers to expand capacity to meet burgeoning market demand. See also section 3.7.3 below.

In addition, even where globally standardised technologies with universally accepted benefits for users and business (e.g. LTE) do have access to harmonised spectrum, the terms under which the individual authorisations to use spectrum are granted remain widely fragmented, in particular in terms of timing, licence durations and assignment conditions. This may be due not only to objective differences in national circumstances but also to diverging objectives or approaches.

This situation may impede investment, innovation and rapid availability of spectrum for network deployment, broadband capacity needs or new and innovative uses, and prevent the establishment of economically advantageous wireless connectivity at EU scale for new digital services and applications - such as the Internet of Things, connected vehicles or other connectivity-enabled products. Moreover, in particular the exponential demand for spectrum for wireless broadband may require the facilitation of a rapid deployment of denser networks and a more flexible and efficient access and use of spectrum.

In addition, the growing spectrum needs for wireless connectivity are constrained by lack of vacant spectrum and by the high price associated with re-allocating spectrum to new uses, in terms of cost, delays and the occasional need to switch off incumbent users. To satisfy growing demand, greater efficiency and innovation in spectrum use are crucial. Mechanisms such as sharing, trading or leasing therefore deserves more attention, including understanding why they have been used only to a limited extent so far and how to enable an increasing number of users to share simultaneous rights of access to a specific frequency band in a pro-competitive manner (for more details, see [COM\(2012\)478final](#) on promoting the shared use of radio spectrum resources in the internal market).

3.4.1. Evaluation of the current rules on spectrum management

The first set of questions aim at providing input for the evaluation of the functioning of the current regulatory framework.

Question 64: The regulatory principles and policy objectives applicable to spectrum allocation, assignment and use in the EU are based on the regulatory framework for electronic communications (ECRF), the Radio Spectrum Decision 676/2002/EC (RSD) and the 2012 Radio Spectrum Policy Programme (RSPP). To what extent has the fact that electronic communications and other spectrum users are addressed in different legislative instruments (ECRF, RSPP) impeded their effective interpretation and/or implementation?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

Service and technology neutrality are the spectrum management principles that best serve the public interest by ensuring the efficient use of the input. Reserving specific bands for particular uses and applying different spectrum policy strategies to those bands perpetuates fragmentation by ruling out other allocations that could create more value.

The 2011 review of the ECRF represented a significant step towards service and technology neutrality in bands declared available for Electronic Communication Services, even if it allows for justified exceptions (articles 9 and 9a FD). In contrast, the RSPP, which addresses all spectrum uses, calls for the Member States and the Commission to ensure that there is sufficient spectrum available for specific services (articles 6, 7, and 8 RSPP).

The impact of not fully committing to neutrality principles across all uses is substantial, delaying the availability of additional spectrum for ECS services and sending the wrong signal to equipment manufacturers and network operators.

(continue here if necessary)

In 2012 the EU adopted its first Radio Spectrum Policy Programme (RSPP) aiming at developing a strategic planning and harmonisation of the use of spectrum to ensure the functioning of the internal market in the EU in all policy areas involving the use of spectrum, also beyond electronic communications. See [Commission's report](#) of 22 April 2014 with regard to its application for more details.

Question 65: Do you see the need for better coordination of EU spectrum policies beyond ECS to maximise the benefits of spectrum use throughout the economy?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Increasingly policymakers are seeking to refarm bands from one use to another, in response to rapidly changing usage profiles. The legacy of differing regulatory treatments, licensing frameworks and property rights must be addressed to make this transition quicker and less burdensome to all users.

(continue here if necessary)

Question 66: Which of the following policy areas require a more active common approach to EU spectrum policy to benefit from economies of scale?

	strongly agree	agree	disagree	strongly disagree	do not know
a) Transport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
b) Audiovisual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
c) Energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
d) R&D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
e) Satellite	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
f) Internet of Things / M2M	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
g) Other (specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Please specify or explain your response.

Better coordination and a common approach would benefit EU citizens as long as it does not aim to predetermine the final service that makes the best use of the spectrum.

Rather than identifying specific sectors or technologies that require a more active common approach, the appropriate strategy is to remove restrictions to service and technology neutrality across all bands.

(continue here if necessary)

Question 67: Do you consider that the currently applicable regime for coordinating spectrum policy approaches in the EU has contributed to ensuring harmonised conditions with regard to the availability and efficient use of spectrum necessary for the establishment and functioning of the internal market in electronic communications?

- significantly
- moderately
- little
- not at all
- do not know

Please specify or explain your response.

Coordination in terms of allocation policies and band plans is needed, and the harmonisation process adds value. We do not see significant bottlenecks in the technical harmonisation process, although we see a few areas of improvement:

a) Once it is decided that a band should be harmonized and incumbent users cleared, the management of the transition is heterogeneous, making it difficult to reap the benefits of a single market. The clearance window in critical bands like 800 MHz has been too long and there has not been a common approach when introducing measures to mitigate interference with existing uses in neighbouring bands. As an illustration, the usage of DTT channel 60 and above for DTT in Germany's neighbours severely constrained the deployment of mobile services in the 800 MHz band, . DTT signals entered hundredths of kilometres into Germany, rendering unusable large parts of the border regions. It is clear that, unless there is an appropriate coordination for the clearing of the 700 MHz band across Europe, a similar situation will arise and the value of the 700 MHz licences in Germany will be affected.

b) When a band is harmonized for ECS but must be shared with incumbent users, as in the 1.5 GHz band and potentially in 2300 MHz, the lack of a harmonized management of co-existence from a regulatory point of view increases costs and uncertainty for manufacturers and operators.

c) The harmonization process does not cope well with situations in which legacy uses are very heterogeneous and the benefits of competing new harmonized uses are not the same across all countries. The need for flexibility has been obvious for example in the discussions on the 700 MHz duplex gap. Under the current regime there is the possibility to provide Member States with a set of options that is large enough to accommodate all situations, protecting diversity. This approach is appropriate in our view, but in order not to have a negative impact on economies of scale it is important not to depart from neutrality principles, and to set the least restrictive technical conditions.

d) Harmonisation of spectrum should be accompanied by technology and equipment harmonisation in the appropriate fora, ensuring that resilience to changes in spectrum usage is properly incorporated into the standards definition processes. Broadcast networks and railway telecommunications in particular are examples where insufficient resilience has created barriers to the development of more efficient spectrum usage in neighbouring bands.

(continue here if necessary)

Question 68: Do you consider that the currently applicable regime for granting spectrum usage rights based on general or individual authorisations and setting out spectrum assignment conditions has been effective in:

	significantly	moderately	little	not at all	do not know
a) Providing market operators with sufficient transparency and regulatory predictability?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Ensuring an appropriate balance in terms of administrative burden?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Promoting competition in the provision of electronic communications networks and services?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Contributing to the development of the internal market?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Promoting the interests of the citizens of the EU?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Ensuring an effective and efficient use of spectrum?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your response.

a) Providing market operators with sufficient transparency and regulatory predictability?

Spectrum users impacted by policy decisions, including those in other Member States, should be given the opportunity to convey their views, and their comments should be given due attention. This has not always been the case, as there is wide heterogeneity in terms of how each country manages transparency.

This shows in our view that the provisions of article 6 of the Framework Directive and article 7 of the Authorisation Directive have not been effective.

b) Ensuring an appropriate balance in terms of administrative burden?

Administrative burdens involved in the acquisition and usage of spectrum are in general not a problem for spectrum users. In particular, the administrative burdens related to having to deal with several NRAs do not have a relevant impact on the decision to increase or reduce the footprint inside Europe.

Overall, we believe the benefits of a more coordinated approach and higher transparency would outweigh the administrative burdens.

c) Promoting competition in the provision of electronic communications networks and services?

Regulators have in general made arbitrary decisions about competition rules in spectrum assignments, without the need to follow the well established procedures in the access framework:

- Access and other conditions can be imposed, without the need to demonstrate that the market would not deliver access of its own accord.
- New entrants can be mandated, without the need to do a rigorous analysis and demonstrate there is some sort of dominant position to address through increased infrastructure competition.

In our view, disproportionate intervention aiming to preserve competition by favouring new entrants or smaller players can actually work the other way by hindering investment and competition among the stronger players to the detriment of end users.

(continue here if necessary)

d) Contributing to the development of the internal market?
Lack of harmonization in license conditions and, to a lesser extent, in assignment processes, negatively impacts in our view the development of the internal market.

The current regime requires a lengthy legislative process to harmonize assignment procedures and licence conditions, with Parliament and Council having to approve the measures. This results in very few harmonising measures being approved. In addition, the RSPF, which was an opportunity to introduce more harmonization in licence conditions and assignment processes, had a very limited scope, possibly reflecting the lack of political will.

e) Promoting the interests of the citizens of the EU?
Europe is on average lagging behind other regions in terms of mobile NGA coverage and penetration. Even when differences in the timing of availability of LTE bands are taken into account, we see wide variations in outcomes due to divergences in licence conditions and assignment processes. Some countries have very quickly increased coverage and take-up of LTE once the spectrum was available, while others stagnate.

Those divergences have a double negative impact:

- They create a fracture inside the EU, with citizens living in similar regions (in terms of GDP per capita or population density) having very different conditions in terms of access to mobile connectivity and services.
- Manufacturers and operators cannot fully benefit from economies of scale.

f) Ensuring an effective and efficient use of spectrum?
Uncoordinated assignment processes and divergent licence conditions has negatively impacted efficiency

Question 69: To what extent have selection processes for limiting the number of rights of use been coherently applied by authorities in charge in the Member States and only where strictly needed?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

Telefónica believes exclusive licenses are the most efficient regime, especially in low bands, providing the best incentives for users of spectrum to adapt their usage to changes in demand and technology. We can't see any instances where an unlicensed regime or a general authorisation would have been preferable to a selection process intended to grant exclusive licenses.

However, the objectives pursued and the methodologies followed by MS in selection processes differ substantially from country to country, with countries facing similar circumstances following very different paths for example in terms of caps/set-asides or the methodology to set reserve prices. Therefore we do see a certain degree of incoherence in the way the selection processes have been undertaken.

(continue here if necessary)

Question 70: What type of spectrum assignment process has proven most effective for assigning spectrum for wireless broadband, having regard to the objectives listed in question 68?

- Licence exemption/general authorisation ('Wi-Fi bands')
- Comparative administrative licensing ('beauty contests')
- Auctions
- Hybrid models
- Other

Please explain your response.

Auctions in which potential users bid on objective parameters are in general the assignment method that best ensures fairness and efficiency. However, when it comes to license renewal without change of use and licences are relatively short, administrative renewal should be considered as an alternative as the prospect of frequent auctions negatively impacts the investment and innovation incentives of licensees. Our preference is in any case to extend licences to indefinite (or at least 20 years) to avoid this chilling effect on investment.

(continue here if necessary)

Question 71: To what extent does the lack of coordination across Member States regarding the current methods to select spectrum right holders create obstacles to or difficulties for the development of electronic communications?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

Lack of coordination in assignment methods can result in heterogeneity and fragmentation driven by regulation and affect economies of scale and the development of electronic communications.

The assignment procedure can impact market outcomes, resulting in some countries where competition focuses on price, whereas in other it focuses on better quality and better coverage. This divergence hinders economies of scale, but it should be stressed that there is not a single assignment procedure that is optimal under all circumstances. The assignment process should be correctly tailored to the particular circumstances.

(continue here if necessary)

Question 72: To what extent does the lack of coordination across Member States regarding the current system for setting out spectrum assignment conditions create obstacles or difficulties for the development of electronic communications?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

In contrast with assignment processes, it is possible to identify certain licence conditions that are optimal under all circumstances, and should be followed by all member states. In particular, limits to service and technology neutrality should be minimal; licence durations should be sufficiently long or indefinite; leasing and trading should always be permitted; Spectrum usage fees should be clear from the outset; the level of exclusivity granted to licensees should be high; Sharing with other spectrum uses should be voluntary; competition remedies should not be embedded in the license, etc.

Not following best practices in licence conditions results in obstacles to the development of electronic communication services in the countries that depart, perpetuates fragmentation, and reduces the potential benefits of addressing an EU market.

(continue here if necessary)

3.4.2. Review of spectrum management rules

The Commission seeks the views of all stakeholders as to the need for greater predictability and consistency in the way radio spectrum use is governed in Europe and whether this could require a revision of the regulatory framework for electronic communications, in particular the Framework and Authorisation Directives, which set fundamental principles and certain operational requirements for spectrum allocation and assignment, as well as the current institutional arrangements for spectrum strategy in the Digital Single Market.

Taking into account the identification of remaining or new obstacles to the efficient use of spectrum, the further development of electronic communications, investments and the development of wireless innovation, it is appropriate to consider whether more coordination or additional measures are needed at EU level, to ensure a future-proof framework which maximises the economic benefits of spectrum use, by providing investment predictability, facilitating business decision-making, driving competition and meeting the future connectivity needs in Europe.

a) Principles and objectives of radio spectrum management in the Digital Single Market

Question 73: Would more consistency in spectrum management across Europe increase legal certainty and the overall value of spectrum in the Digital Single Market?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

The current EU framework for Spectrum management is essentially permissive in terms of assignment processes and licence conditions, allowing ample room for different approaches by Member States. As explained in other questions, not all areas of spectrum management require the same degree of harmonization, but overall better coordination, and an EU wide implementation of best practices, would level the regulatory context across Europe, speed up the development of an ecosystem of handsets and equipment, and mitigate interference in border regions.

(continue here if necessary)

Question 74: Is it necessary to remove barriers to access to harmonised spectrum across the EU in order to foster economies of scale for wireless innovations and to promote competition and investment?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

Once harmonised, we do not see significant barriers to access the spectrum, beyond those inherent in the scarcity of the resource and the need for a transition time to clear the band from previous uses where appropriate. There is in particular no evidence of spectrum hoarding by licensees and especially the spectrum below 2.5 GHz is intensively used. On the other hand, the recent report from RSPG on the review of the RSPG shows that Europe has less harmonised spectrum in use than other regions, and less harmonized spectrum available below 2.5 GHz. This evidences, in our view, that there is no oversupply of harmonized spectrum in Europe, especially in low bands.

(continue here if necessary)

To our knowledge, networks in Korea, Japan and the US are much more capillary than in Europe , reflecting among other things the higher barriers to densification in Europe due to urban planning restrictions and excessive fees charged by local authorities. Europe has a legacy of site distribution that reflects these constraints, and even if the barriers to densification were reduced substantially the inherited network structure implies that spectrum frequencies suitable for deployments based on macro or micro base stations are more valuable in Europe than in other areas. Obviously, if the barriers to densification remain or it takes too long for the measures to be effective, the need to make additional harmonized spectrum available in lower bands will be more acute.

In sum, in a horizon of 2020, the main barrier to access harmonised spectrum is the risk of insufficient supply. To avoid a bottleneck, it is critical that the spectrum in the pipeline in 700 MHz, 1.5 GHz and 2.3 GHz is harmonized and made available in a timely and appropriate manner.

Question 75: Do you see benefits in integrating the objectives and principles relating to spectrum management for both electronic communications services (ECS) and other spectrum users in a single legislative instrument (see question 65 above)?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Integrating the objectives and principles in a single instrument would increase consistency, ensure that there is no discrimination between uses, and foster efficient use.

(continue here if necessary)

b) Granting individual spectrum usage rights for wireless electronic communications (ECS spectrum)

Provided that it fulfils the very general rules and criteria set by the EU regulatory framework, the process of granting spectrum usage rights – or assignment - is managed today at national level and in various ways across Member States, as the national authorities in charge may be ministries, national regulatory or other authorities or a combination of these, and subject mainly to national considerations. Under the Authorisation Directive, where it is necessary to grant individual rights of use, such rights should be granted upon request; a selection process is only allowed where a Member State considers that the number of rights has to be limited.

Question 76: To what extent does the spectrum assignment process in Member States determine the mobile markets and the competitive landscape for mobile electronic communications, including wireless broadband, such as the number and type of operators in the market and their economic models?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response and provide examples of the impact.

Spectrum policy is used extensively and inconsistently across Europe as a means to introduce competition measures and predetermine market structures. Different approaches by MS in the assignment process result in heterogeneous market outcomes, with some markets in which competition focuses on price, and others where the focus of competition is quality and coverage.

In some Member States (e.g. Germany) the NRA has decided that it cannot reserve spectrum for any prospective new entrant, as a matter of law. Yet in Czech Republic, Austria and the Netherlands, for example, this appears to be permissible.

In all cases, the analysis undertaken to determine the optimal potential number of future players in a market falls well short of that required to determine the competitive nature of a market suitable for ex ante regulation under the economic framework. Furthermore, it is striking the rigor applied to the ex post regulation of mergers - for the removal of a competitor - is so much greater than the ex ante decision to increase the number of competitors. It has been shown in the economic literature that there is an inverse correlation between investment and the number of suppliers (see for example the recent CERRE report "Evaluating Market Consolidation in Mobile

Communications"). By deciding to mandate an increase in the number of competitors, MS are deliberately choosing to worsen investment conditions in their markets, yet the analysis undertaken to justify such an approach is superficial at best.

In addition to rules explicitly having to do with competition in final markets, the level of reserve prices and the extent to which the NRAs prioritize auction revenues also have an impact on investment levels and market outcomes, and increase the risk of divergences inside the EU. Member States such as Greece and Ireland have explicitly set revenue objectives, which is not a valid efficiency criteria.

All of the above creates a high risk of discrepancies and overlapping between the decisions of NRAs in charge of sector regulation and the decisions of NRAs in charge of spectrum policy within the same country. It also generates scope for MS bypassing article 7 mechanisms in place to ensure consistency at EU level.

(continue here if necessary)

Question 77: Could greater coordination of methods for granting spectrum usage rights and of selection processes achieve greater consistency in the Union, thereby removing barriers to entry and promoting further competition and investment?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

Common response to Q77 & Q78

Greater coordination is needed to ensure that all NRAs follow the same path in terms of selection process when facing similar circumstances. This consistency would promote competition and investment, increase predictability and facilitate planning for investors. The recent Polish spectrum auction shows what can happen when national licensing regimes fall behind the development of a European framework. The Polish legislation did not allow for bids in awards process to be committing, something that is a standard requirement of an auction. It is therefore hardly surprising that the auction was so problematic to conclude.

One key objective for this review of the framework must therefore be to create greater alignment of national spectrum licensing legislation, by facilitating an update in Member States' national legislative instruments in conformity with the new rules. The degree to which this happens via harmonisation or via national legislation is a matter for the institutions to decide, although harmonisation would ease the process for national administrations and would increase predictability for investors, and should in our view be the preferred option in areas that are not contentious.

We note in any case that different circumstances in general call for different assignment processes, different award methods and different auction formats. Harmonization should therefore be understood as having similar processes under similar circumstances, rather than having the same type of award method or auction format in all EU countries.

Stipulating a particular assignment process will ossify a process that is actually seeking to improve the efficiency of award processes. In general we are more concerned about inefficient execution of auctions (e.g. Poland, Czech Republic, Finland) than we are about the choice and impact of choosing a particular method (with the notable exception of the recent sealed bid award process in Norway that led to a consolidation in the market).

(continue here if necessary)

Question 78: Could more consistent spectrum assignment processes throughout the Union, based on greater harmonisation of the choice of selection or award methods on the basis of experience and best practice:

	strongly agree	agree	disagree	strongly disagree	do not know
a) ease the process for national administrations?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) increase the predictability and planning sought by investors?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your response and provide examples of the impact.

Common response to Q77 & Q78

Greater coordination is needed to ensure that all NRAs follow the same path in terms of selection process when facing similar circumstances. This consistency would promote competition and investment, increase predictability and facilitate planning for investors. The recent Polish spectrum auction shows what can happen when national licensing regimes fall behind the development of a European framework. The Polish legislation did not allow for bids in awards process to be committing, something that is a standard requirement of an auction. It is therefore hardly surprising that the auction was so problematic to conclude. One key objective for this review of the framework must therefore be to create greater alignment of national spectrum licensing legislation, by facilitating an update in Member States' national legislative instruments in conformity with the new rules. The degree to which this happens via harmonisation or via national legislation is a matter for the institutions to decide, although harmonisation would ease the process for national administrations and would increase predictability for investors, and should in our view be the preferred option in areas that are not contentious.

We note in any case that different circumstances in general call for different assignment processes, different award methods and different auction formats. Harmonization should therefore be understood as having similar processes under similar circumstances, rather than having the same type of award method or auction format in all EU countries. Stipulating a particular assignment process will ossify a process that is actually seeking to improve the efficiency of award processes. In general we are more concerned about inefficient execution of auctions (e.g. Poland, Czech Republic, Finland) than we are about the choice and impact of choosing a particular method (with the notable exception of the recent sealed bid award process in Norway that led to a consolidation in the market).

(continue here if necessary)

Question 79: Do you see benefits of greater coordination with regard to the elements of the spectrum assignment processes (listed in the table below) and if so, what would be the appropriate level of such coordination:

A: General Approximation. *setting only common or harmonised general objectives and principles, leaving the definition of exact criteria and solutions to Member States.*

B: Partial harmonisation: *setting out common or harmonised general objectives and principles, as well as specific solutions for some of the items below (to be indicated) while leaving room for additional national conditions.*

C: Full harmonisation: *setting out common objectives, principles and specific solutions for specific bands or types of wireless communications, with no room for national exceptions or additional conditions (e.g. definition of identical criteria and conditions for all Member States, creation of a common authorisation format or single common or totally synchronised selection process as used for mobile satellite systems).*

Please tick the relevant boxes in the table below. If you consider that none of these assignment parameters would benefit from greater coordination, please explain your response.

	This issue should not be covered by the Review: National measures adopted are sufficient, no need for legal certainty at EU level.	A - General Approximation	B- Partial harmonisation	C - Full harmonisation
Determination of need for selection process	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Level of transparency to the market regarding the selection process and conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Determination of selection process type (auction, beauty contest, first come first served, hybrid model)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Objectives pursued by the selection process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
The appropriateness of an ex ante competition assessment	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
The national authority which is responsible for the ex-ante competition assessment	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The need for specific measures (spectrum caps/floors, new entrant spectrum reservation)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Selection timetable	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Timing of advanced information to market participants.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Frequencies covered, packaging of lots	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Spectrum valuation and pricing, fees, charges.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Payment modalities.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Enforcement and ex post auction assessment and enforcement.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Please explain your response(s).

- a) Determination of need for selection process
- To the extent that the “determination of need for selection process” refers to the choice between a general authorisation regime or an exclusive regime, it should be subject to full harmonisation to foster EU economies of scale.
 - To the extent that the “determination of need for selection process” refers to an existing license, and to the choice between an administrative renewal or a re-auction, it should be subject to partial harmonisation to increase consistency and provide certainty to investors.
 - In our experience some NRAs do not undertake a pre-award process to determine whether a complex award process is necessary. If spectrum can be administratively awarded (demand is less or equal to supply) then a simple assignment procedure is preferable.
- b) Level of transparency to the market regarding the selection process and conditions
- The EC should ensure through binding legal texts that all selection processes are transparent and all interested parties have the chance to make comments.
 - The general provisions in the Framework and Authorisation Directives (article 6 FD and 7 AD) leave room for interpretation and should be further detailed.
- c) Determination of selection process type (auction, beauty contest, first come first served, hybrid model)
- The EC should ensure consistency in the choice of award method, including auction type (SMRA, CCA, ...), by defining general principles and restricting “bad practices” like sealed bids, which should only be

allowed in exceptional circumstances.

- However, full harmonization is not needed as the optimal award method is heavily dependent on the specific circumstances of the national market addressed.

d) Objectives pursued by the selection process

- At a high level, revenue maximization for the Government and economic efficiency are the two objectives generally pursued in selection processes.

- We are of the view that the objective of revenue maximization should never put at risk economic efficiency, and see a need for binding guidance from the EC clearly stating that revenue maximization should be a secondary objective. Spectrum policy should instead aim primarily at maximizing the value of the services provided in end user markets. As an example, high reserve prices or excessive annual fees detract resources for investment and can have a negative impact on prices to end users.

e) The appropriateness of an ex ante competition assessment

- The EC should provide binding guidance listing situations in which an ex-ante competition analysis is not appropriate and no competition remedies should be imposed in an auction. Outside of these situation, NRAs should be allowed to decide whether an ex-ante competition analysis is needed or not.

f) The national authority which is responsible for the ex-ante competition assessment

- This issue should not be covered in the review and each country should be allowed to decide the division of responsibilities among the relevant national institutions.

(continue here if necessary)

g) The need for specific measures (spectrum caps/floors, new entrant spectrum reservation)

- Binding guidance is needed to ensure that competition related rules in spectrum auctions are not used to replace regulatory market analysis and ex-post competition policy, which should remain the default means for imposing asymmetric remedies.

- Spectrum is an input not very different from other inputs, and intervention to impose a certain distribution of the resource among market participants is only granted when there is a situation of clear dominance and the wholesale market for mobile services does not work properly.

- Once the need for a competition remedy is substantiated, NRAs should also justify that spectrum policy is the most efficient means to solve the competition problem.

- NRAs should have room to decide the concrete remedies to impose, subject to general principles, but always after the previous two tests have been passed.

h) Selection timetable

- Except in rare situations in which the aggregation risk is

high, we see that full harmonization of the timing of awards, in the form of a synchronised process, does not add significant value.

- Greater coordination would be useful in the form of general principles defining maximum time lags between award and availability, and minimum time lags between license expiration and re-auctioning.

i) Timing of advanced information to market participants.

- See answer to b)

j) Frequencies covered, packaging of lots

- General principles would be welcome defining a common methodology to decide when a multiband auction is preferable and the appropriate size of lots to minimize aggregation risk.

- Binding guidance is needed to ensure that the size of the lots is not used to create artificial scarcity and maximize revenues.

k) Spectrum valuation and pricing, fees, charges.

- Binding guidance is needed to ensure a consistent approach to the calculation of reserve prices. There should always be sufficient room for the market to determine the price of spectrum, minimizing the probabilities of unsold lots.

l) Payment modalities.

- General principles should be followed with respect to the relative weight of one-off and yearly fees

- Binding guidance would be welcome imposing across Europe a principle of "pay only when available", that would create the maximum incentives for NRAs to clear the band in a timely manner. It should also be note that in general operators are liquidity constrained and have higher financing costs than Governments. In this situation, financing the budget through one off fees that should be paid long before availability are inefficient from a financial point of view and have a negative impact on investment.

m) Enforcement and ex post auction assessment and enforcement.

- We think the current framework already establishes "partial harmonization" in article 10 of the Authorisation Directive, and believe that this has been generally sufficient.

- We note that there is scope for binding guidance and better coordination in the enforcement of license conditions when the licenses or the award process have a supranational component. The handling of breaches of license conditions in the MSS band is a good example and a lesson for the future (to develop).

c) Spectrum assignment conditions for wireless electronic communications (ECS spectrum)

As is the case with regard to the process for granting spectrum usage rights, assignment conditions attached to such rights are set at national level pursuant to national circumstances. Also these conditions (e.g. coverage conditions, duration of the licenses, or renewal conditions and timing) have the potential to impact the competition structure of the markets, market entry, the deployment of mobile networks and the development of the market for mobile services in general. It is therefore necessary to explore how to best define spectrum assignment conditions with a view to enhance consistency and legal predictability in the EU while leaving sufficient flexibility to Member States to adjust according to their specific national needs.

Question 80: Is there a need for more consistent assignment criteria and conditions between Member States, in particular with regard to those criteria and conditions which have the greatest economic significance for investment predictability and business decision-making, for driving competition and for achieving the future connectivity needs in the EU?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples of the impact.

European citizens would greatly benefit from more consistency and reliance on best practices in the setting of license conditions, including mandating a set of common conditions applicable in all countries irrespective of national circumstances.

(continue here if necessary)

Question 81: What spectrum assignment conditions (among those listed in the table below or others) have the greatest economic significance for investment predictability and business decision-making, for driving competition and for promoting the Single Market, in respect of electronic communications?

Limits to neutrality & Re-farming

(continue here if necessary)

Limits to trading, leasing and pooling
License Duration

Question 82: For which of the following assignment conditions (listed in the table below) would you see benefits of greater coordination or harmonisation and what would be the appropriate level of such coordination or harmonisation:

A: General Approximation: setting only common or harmonised general objectives and principles, leaving the definition of exact criteria and solutions to Member States.

B: Partial harmonisation: setting out common or harmonised general objectives and principles, as well as specific solutions for some of the items below (to be indicated) while leaving room for additional national conditions.

C: Full harmonisation: setting out common objectives, principles and specific solutions for specific bands or types of wireless communications, with no room for national exceptions or additional conditions (e.g. definition of identical criteria and conditions for all Member States, creation of a common authorisation format or single common or totally synchronised selection process as used for mobile satellite systems).

Please tick the relevant boxes in the table below. If you consider that none of these assignment parameters would benefit from greater coordination, please explain your response.

	This issue should not be covered by the Review: National measures adopted are sufficient, no need for legal certainty at EU level.	A - General Approximation	B- Partial harmonisation	C - Full harmonisation
Licence duration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Prior notice, timing and conditions of renewal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Possibility to trade or lease assigned spectrum, and related conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Coverage obligations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Necessity of wholesale access conditions (e.g. MVNO)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Limits under technology neutrality principles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Requirements on technical performance characteristics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Extent of services allowed and limits to service neutrality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Possibility to share and pool assigned spectrum or mobile network as a whole	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
In general, any condition covered by the Annex to the Authorisation Directive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<i>'Use it or lose it'</i> clause	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Refarming conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Please explain your response(s).

- a) Determination of need for selection process
- To the extent that the “determination of need for selection process” refers to the choice between a general authorisation regime or an exclusive regime, it should be subject to full harmonisation to foster EU economies of scale.
 - To the extent that the “determination of need for selection process” refers to an existing license, and to the choice between an administrative renewal or a re-auction, it should be subject to partial harmonisation to increase consistency and provide certainty to investors.
 - In our experience some NRAs do not undertake a pre-award process to determine whether a complex award process is necessary. If spectrum can be administratively awarded (demand is less or equal to supply) then a simple assignment procedure is preferable.
- b) Level of transparency to the market regarding the selection process and conditions
- The EC should ensure through binding legal texts that all selection processes are transparent and all interested parties have the chance to make comments.
 - The general provisions in the Framework and Authorisation Directives (article 6 FD and 7 AD) leave room for interpretation and should be further detailed.
- c) Determination of selection process type (auction, beauty contest, first come first served, hybrid model)
- The EC should ensure consistency in the choice of award method, including auction type (SMRA, CCA, ...), by defining general principles and restricting “bad practices” like sealed bids, which should only be allowed in exceptional circumstances.
 - However, full harmonization is not needed as the optimal award method is heavily dependent on the specific circumstances of the national market addressed.
- d) Objectives pursued by the selection process
- At a high level, revenue maximization for the Government and economic efficiency are the two objectives generally pursued in selection processes.
 - We are of the view that the objective of revenue maximization should never put at risk economic efficiency, and see a need for binding guidance from the EC clearly stating that revenue maximization should be a secondary objective. Spectrum policy should instead aim primarily at maximizing the value of the services provided in end user markets. As an example, high reserve prices or excessive annual fees detract resources for investment and can have a negative impact on prices to end users.
- e) The appropriateness of an ex ante competition assessment
- The EC should provide binding guidance listing situations in which an ex-ante competition analysis is not appropriate and no competition remedies should be imposed in an auction. Outside of these situation, NRAs should be allowed to decide whether an ex-ante competition analysis is needed or not.
- f) The national authority which is responsible for the ex-ante competition assessment

- This issue should not be covered in the review and each country should be allowed to decide the division of responsibilities among the relevant national institutions.

g) The need for specific measures (spectrum caps/floors, new entrant spectrum reservation)

- Binding guidance is needed to ensure that competition related rules in spectrum auctions are not used to replace regulatory market analysis and ex-post competition policy, which should remain the default means for imposing asymmetric remedies.

- Spectrum is an input not very different from other inputs, and intervention to impose a certain distribution of the resource among market participants is only granted when there is a situation of clear dominance and the wholesale market for mobile services does not work properly.

- Once the need for a competition remedy is substantiated, NRAs should also justify that spectrum policy is the most efficient means to solve the competition problem.

- NRAs should have room to decide the concrete remedies to impose, subject to general principles, but always after the previous two tests have been passed.

(continue here if necessary)

- h) Selection timetable
 - Except in rare situations in which the aggregation risk is high, we see that full harmonization of the timing of awards, in the form of a synchronised process, does not add significant value.
 - Greater coordination would be useful in the form of general principles defining maximum time lags between award and availability, and minimum time lags between license expiration and re-auctioning.
- i) Timing of advanced information to market participants.
 - See answer to b)
- j) Frequencies covered, packaging of lots
 - General principles would be welcome defining a common methodology to decide when a multiband auction is preferable and the appropriate size of lots to minimize aggregation risk.
 - Binding guidance is needed to ensure that the size of the lots is not used to create artificial scarcity and maximize revenues.
- k) Spectrum valuation and pricing, fees, charges.
 - Binding guidance is needed to ensure a consistent approach to the calculation of reserve prices. There should always be sufficient room for the market to determine the price of spectrum, minimizing the probabilities of unsold lots.
- l) Payment modalities.
 - General principles should be followed with respect to the relative weight of one-off and yearly fees
 - Binding guidance would be welcome imposing across Europe a principle of "pay only when available", that would create the maximum incentives for NRAs to clear the band in a timely manner. It should also be note that in general operators are liquidity constrained and have higher financing costs than Governments. In this situation, financing the budget through one off fees that should be paid long before availability are inefficient from a financial point of view and have a negative impact on investment.
- m) Enforcement and ex post auction assessment and enforcement.
 - We think the current framework already establishes "partial harmonization" in article 10 of the Authorisation Directive, and believe that this has been generally sufficient.
 - We note that there is scope for binding guidance and better coordination in the enforcement of license conditions when the licenses or the award process have a supranational component. The handling of breaches of license conditions in the MSS band is a good example and a lesson for the future (to develop).

d) Pan-EU or regional licences or selection processes, cross-border services

Currently the process for assigning spectrum and the granting of licences both fall within the competence of Member States and are organised and granted at national level. The organisation of such processes or the creation of rights across Member States appear apt to favour the emergence of cross-border services and operators and facilitate entry into new markets, thereby promoting competition and fostering the single market.

Question 83: Are there situations where regional selection processes involving a group of Member States, either combining national or providing pluri-national licences, for example for regions straddling several Member States which share similar characteristics in terms of economic or electronic communications development, could bring more value and a better development of electronic communications?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

In situations where there are benefits from acquiring complementary usage rights in several countries, combined awards reduce aggregation risk for bidders and have a higher chance to result in efficient outcomes.

To avoid conflicts and ensure that all Member States involved properly share the benefits of coordination, and avoid conflicts and delays that ultimately could negatively impact licensees, it is important that MS engage in combined awards voluntarily.

We are aware of at least one example (UK/Ireland joint process) where NRAs have undertaken a joint award process under the existing framework, although this process was in fact two synchronised auctions. In our experience it is national legislation that generally prohibits closer co-ordination and truly transnational processes, if there is demand for such awards.

(continue here if necessary)

Question 84: In which market circumstances would pan-EU spectrum selection processes and/or usage rights contribute to the development of electronic communications services in light of public-policy objectives in respect of coverage, choice, accessibility and take-up of high-performance wireless connectivity? Please give and explain your response.

Bands in which the following two conditions are met would be good candidates for a pan-EU award:

- Harmonization for cellular terrestrial networks is unlikely and therefore the benefits of integration with cellular networks are small
- There are prospects of that spectrum being used to provide ECS services that (1) are new and require an EU footprint to gain critical mass, or (2) would benefit from substantial economies of scale when supplied at EU level, like for example satellite communication services.

(continue here if necessary)

e) More flexible availability and shared access to spectrum

All radio equipment (e.g. both for ECS and non-ECS wireless applications) depends on reliable access to spectrum. In the EU, spectrum usage rights can be based on a non-exclusive general authorisation or on individual authorisations (e.g. spectrum licences). General authorisations are however the rule and individual rights are the exception under Article 5.1 of the Authorisation Directive. In order to ensure that spectrum is exploited to the fullest extent possible, it is necessary to harness more flexible use of spectrum to increase the availability and efficient use of spectrum. Further flexibility can be achieved in particular through: increasing market-based solutions to repurpose spectrum such as tradability and leasing of spectrum as well as shared access to spectrum such as using white spaces, spectrum pooling and infrastructure sharing. This requires engaging mutual responsibility of users over acceptable limits of interference and appropriate mitigation strategies. It is also important to provide legal certainty on applicable rules and conditions of shared access, on enforcement procedures as well as to be transparent about compatibility assumptions and protection rights. This is in particular the case as regards spectrum licensing formats (e.g. licence-exempt spectrum, licensed shared access). The shared use of spectrum should enhance competition from additional users and in particular should not create undue competitive advantages for current or future right-holders or result in unjustified restrictions of competition. In principle, beneficial sharing opportunities (BSO) can be identified, in both licensed and licence-exempt frequency bands, wherever the combined net socio-economic benefit of multiple applications sharing a band is greater than the net socio-economic benefit of a single application, taking into account additional costs resulting from shared use (see [Commission Communication on promoting the shared use of radio spectrum resources in the internal market](#) (COM/2012/0478 final)).

Question 85: Will a more flexible and/or shared access to spectrum be needed to meet the future demand for spectrum?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We believe exclusive access is the preferred licensing regime. However, we also acknowledge the increased demand and technological evolution will generate an opportunity for sharing solutions to emerge, not only between different uses (for example PMSE and mobile), but also between similar uses (for example between two mobile licensees).

In general, the adoption of sharing scenarios in licensed bands should preferably be led by the market, and based on voluntary agreements between licensees, endowed with sufficiently wide property rights, and prospective access seekers. We are sceptical regarding the benefits of opportunistic access and tiered regimes as a long term solution.

NRAs can play a role generating incentives and reducing barriers,. In particular, NRAs could:

- Ensure that all new licences do not incorporate conditions that act as a barrier to sharing. They should be service and technology neutral, and avoid disproportionate ex-ante regulatory clearances or undue administrative burdens that could prevent efficient sharing agreements.
- Ensure that public holders of spectrum rights internalize in their decisions the opportunity cost of spectrum and the potential benefits of sharing, thereby generating incentives to share.
- Ensure that licensees internalize in their deployment decisions the possibility of sharing in neighbouring bands, increasing the resilience of their technologies and networks to interference from out of band emissions from other users, thereby reducing the potential conflicts once sharing is introduced.
- Develop a coherent transitional strategy to account for the fact that existing licenses are not well suited for voluntary sharing agreements. This should be done on a band per band basis, prioritizing bands where the economic rationale for sharing is higher.

Beyond sharing between different uses, the development of 5G, which involves a much higher network capillarity, will change the economics of mobile networks towards a model of higher fixed costs and lower variable costs. The exact figures are uncertain, but there is a case for relaxing limits to spectrum pooling and network sharing between similar users, as a way to promote more efficient investments.

(continue here if necessary)

Question 86: Will shared access to spectrum on the basis of general authorisation be necessary for:

	strongly agree	agree	disagree	strongly disagree	do not know
a) The availability of sufficient wireless backhaul capacity?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) The development of the Internet of Things?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) The development of M2M applications?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If other, please specify and explain your response and provide examples.

Unlicensed/General authorisation can play a role for new technologies and services until they reach critical mass, but after that point exclusive access to spectrum seems more beneficial and efficient. Increasing the amount of unlicensed spectrum should not be the solution to the increasing capacity needs of services that start their lifecycle using unlicensed spectrum. In addition, given that reserving spectrum for unlicensed use created artificial scarcity for licensed users, keeping the volume of spectrum allocated for unlicensed use broadly constant provides at least some economic incentive for efficient use of this limited spectrum supply.

(continue here if necessary)

Question 87: Is there a need to better protect the use of spectrum for applications that rely on shared use of spectrum (such as Wi-Fi or short range devices), including in regard to out of band emissions?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Users of unlicensed bands should have certainty regarding spectrum usage in neighbouring bands, and when the context changes, for example due to change of use or to the introduction of sharing in a neighbouring band, they should be entitled to a transition time (example the introduction of LTE in 2300 MHz in the UK).

However, unlicensed use should not prevent neighbouring bands from being exploited on an exclusive or shared basis, and for exclusive licensees in neighbouring bands embracing new technologies or providing more valuable services.

Looking forward, users of unlicensed bands should have appropriate incentives to incorporate interference mitigation features in their technologies and networks, and ensure resilience against out of band emissions. Those incentives would not exist if unlicensed users can expect interference protection from any possible new use in neighbouring licensed bands, or if the out-of-band emission limits in neighbouring bands are set too low.

(continue here if necessary)

Question 88: Is there a need for a common approach amongst Member States for documenting sharing conditions/rules and for granting shared spectrum access authorisations in the Digital Single Market?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Sharing rules should be coordinated to facilitate economies of scale and to avoid interference problems in border regions.
Looking forward the voluntary nature of agreements should be ensured.
Involuntary sharing, for example in the form of shared spectrum access authorisations, should be introduced with caution and only until current licenses expire.

(continue here if necessary)

Question 89: Could a more flexible use of spectrum be achieved through any of the following:

	strongly agree	agree	disagree	strongly disagree	do not know
a) Tradability and lease of spectrum	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Use of white spaces	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Infrastructure sharing, including spectrum pooling	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Incentive auctions	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If other, please specify and explain your responses. If yes, should any of these measures be further promoted from a regulatory point of view and how?

b) We see scope for licensing White Spaces to mobile operators for SDL. We do not see benefit in opening White Spaces for unlicensed use.

(continue here if necessary)

d) Incentive auctions can be used as a market mechanism to put a price to the compensations to be given to licensees for relinquishing their rights.
The US incentive auction can provide interesting lessons, but we note that it cannot be directly applied in Europe because broadcasters have much lower property rights over spectrum than in the US.

Question 90: So far, mechanisms such as trading and leasing of spectrum have been used only to a limited extent in the EU. Under what market and regulatory circumstances, would these mechanisms be more attractive for spectrum users? Please give your response and provide examples.

The main hurdle is that in most cases it is legally impossible or very difficult to trade spectrum in order to change its use, so most efficient trades are excluded. This arises because property rights are defined in national legislation and this can often mean the rights are effectively non-transferable.

Transactions in the secondary market between similar users (for example between MNOs) are rare, due in our opinion to an expectation of scarcity in the future that refrains potential sellers from disposing of their current spectrum holdings, fearing not to be able to buy in the future in case of need. It should be noted however that this constrain disappears when spectrum rights are sold together with all the assets of the company, as part of an M&A transaction.

(continue here if necessary)

Spectrum refarming refers to the process of changing or redistributing the allowed uses of spectrum for the sake of a more flexible access and an efficient use of spectrum. Specific regulatory requirements already apply in case of changes to or withdrawal of spectrum usage rights so as to protect right holders and competition. The question arises whether additional provisions should be considered to further facilitate spectrum management. For example where rights with long-term or undefined duration are at stake, specific withdrawal or amendment conditions and/or procedures in case of non-use or highly inefficient or non-intensive use of the band could be considered, such as 'use-or-lose it' clauses, with a view to rapidly cope with technological and market developments while adequately protecting right holders. Since refarming determines the availability of spectrum for applying new technologies and offering new services across the EU, the need for a certain level of coordination of such measures should be considered.

Question 91: Should spectrum refarming be further facilitated in the future? If so, is there a need to adopt measures to:

	strongly agree	agree	disagree	strongly disagree	do not know
a) further protect existing right holders	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) further support prospective spectrum users	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) maximise flexibility in spectrum management	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) allow new incentivising methods	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) further protect competition	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) clarify compensation conditions	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) apply <i>'use it or lose it'</i> clauses	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your responses. Please indicate any specific criteria which you would regard as an important component of co-ordinated measures (e.g. in the case of *'use it or lose it'* types of triggering conditions)

The existing framework should enable refarming on a voluntary basis. This may need to be mandated in some instances, such as where an existing user has not paid, or is not paying, the opportunity cost of the spectrum and has little incentive to release it for a more valuable use

In general, refarming opportunities facilitate the upgrading of networks. In this context, extended license durations increase the incentives for refarming of spectrum.

New mechanisms should be introduced to induce existing licensees to relinquish all or part of their existing usage rights in exchange for compensation. Such a move would introduce more valuable uses when the existing licences are not service neutral and there is strong evidence that the current service for which the license is granted does not promote the most efficient use of spectrum.

(continue here if necessary)

These new mechanisms should result in compensations that are as close as possible to the loss the current licensee experiences as a consequence of relinquishing the usage rights. NRAs should, in particular, avoid methods that would result in existing licensees exercising pricing power to extract a windfall gain from potential new users. Compensation conditions need to be set once the correct spectrum charging has been introduced and allowed to "settle". This should reduce the importance of compensation in the overall consideration for incumbents. The current framework already contains sufficient provisions to ensure that refarming does not have a negative impact on competition. NRAs have made extensive use of these provisions in the past, for example, in the context of the refarming of the GSM bands.

Question 92: Should the withdrawal or significant modification of rights by public authorities be excluded where the application of service or technology neutrality principles and/or the trading and leasing mechanisms are sufficient to ensure spectrum refarming?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

If the market can provide the optimal network use, through neutrality principles and trading or leasing, there is no need for public intervention. On the contrary, the threat of unjustified withdrawal or modification of rights could actually prevent the market from functioning properly. As a result, when licences are already neutral a market led approach would be preferable. When licenses are not neutral, the withdrawal or significant modification of rights could be considered, preferably through incentivizing methods as explained in the response to question 91 d) and f)

(continue here if necessary)

g) The impact of network technologies developments

The telecoms review offers also an opportunity to assess the regulatory framework's capacity to cope with the electronic communications sector's fast-moving technological environment, and in particular to identify regulatory areas which could require adaptations in order to keep up with the main trends in network technologies, operations and market developments. Against this background, it is necessary to already anticipate these developments taking into consideration relevant time horizon(s) matching the technology's life cycles, from research and development to the roll-out of infrastructure, extending beyond 2020.

One of the most important trends in the network environment over the next decade is likely to be that of fixed-wireless convergence, crystallised by the commercial deployment of 5G networks which should be initiated by 2020. 5G will enable operators to cope with rapidly increasing data traffic, thanks to denser/smaller cells and even greater offloading to, for instance, fixed networks via Wi-Fi links. Furthermore, the benefits of 5G are expected to go beyond traditional ECS and to play a key role in other sectors of the economy, by enabling machine-to-machine communications (M2M) and the Internet of things, as well as connectivity needs for transport management and road safety (in-vehicle emergency calls).

From a user's perspective, fixed-wireless convergence means the seamless delivery of services, e.g. telephony, data, digital content, regardless of whether they are delivered via fixed or mobile networks, including the possibility to switch between the two while a service is active. One implication is that the convergence will not be limited to the commercial provision (e.g. service packages) but will also affect network and service operations.

From a network perspective, denser wireless networks will depend on increasing numbers of fixed back-haul links. Wireless network densification could benefit from available under-utilised radio spectrum at higher frequencies (licensed or licence-exempt) as well as from the deployment of small cells including RLAN and low-power small area wireless access points. This deployment could be specified at EU level and the requirements for use in different local contexts could be limited to general authorisations without additional restrictions from individual planning or other permits.

Question 93: In light of the increasing demand for mobile services in urban areas and the resulting densification of networks, do you foresee any obstacles in the roll-out of the corresponding infrastructure such as access points for small cells?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

Member States should ensure that providers of network infrastructure have rights of access to private and public property that allow them to build and maintain their networks. This power should reflect the essential nature of communications infrastructure in the future economy.

Local Authorities currently impose a relatively large set of obligations to those willing to install small cells, and in particular they generally impose a one-off or yearly fee that varies widely from country to country and from city to city. These fees are in most cases disproportionate and do not reflect the minimal environmental impact generated by small cells or the benefit they generate. We see reasons for the EU to intervene and harmonize the conditions for the deployment of small cells, preferably under a general authorisation regime.

In addition, in circumstances where MS propose to amend rights of access to facilitate the delivery of a broadband USO, rights of access shall be modified for all ECNs, not just the USO provider(s) in order to avoid distorting the scope for competitive development of the infrastructure market.

(continue here if necessary)

Question 94: Should the deployment, connection or operation of unobtrusive small-area wireless access points be possible under a general authorisation regime, without undue restrictions through individual town planning permits or in any other way, whenever such use is in compliance with a harmonised technical characteristics for the design, deployment and operation of such equipment?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

See response to Q93 for justification

(continue here if necessary)

Question 95: Should end-users be entitled to share the access to their Wi-Fi connection with others, as a key prerequisite for the sustainable deployment of denser small cell networks in licence-exempt bands?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

If consumers wish to share their connection, in a competitive market there are opportunities open to them to do so, they just need to find a provider which allows them to do this under its terms and conditions. Conversely, it is perfectly legitimate for providers to restrict sharing by end users, in order to justify the investments required to deliver high speed services. Consider the impact on sharing of end user connections on the viability of service provision in a given geographic location. If a certain penetration of households is required to make deployment of infrastructure viable, then it is legitimate for the infrastructure investor to try and ensure that it gains the maximum possible number of household connections in that area, to both payback this investment and provide funds for future coverage.

If sharing is mandated then the viability of State Aid driven broadband deployment and the delivery of the Universal Service may also be put in doubt, if such sharing were to undermine the economics of deployment in the first place.

It is worth noting that Google, like most telecom operators, in the terms of reference of the Google Fibre service explicitly bans resale of the standard service:

“Except with respect to certain television content authorized by Google Fiber to be viewed outside of your residence, the Services are intended for the personal use of you and other occupants and guests within your residence. You agree not to resell or repackage the Services or otherwise make them available to anyone outside of your residence. If you wish to use the Services to provide Internet service to others outside of your residence, you must enter a separate agreement with Google Fiber that specifically authorizes you to do so.”

(<https://storage.googleapis.com/fiber/legal/terms/2015-08-04-terms-of-service-residential.pdf>)

(continue here if necessary)

Question 96: Should the deployment of commercial/municipal Wi-Fi networks in public premises (e.g. public transportation, hospitals, public administrations) be facilitated and if so, in what way?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

Public premises should be free to deploy wi-fi services in a way that provides a level playing field with commercial providers.

If State enterprises or State investment wishes to go further then it must be compatible with the relevant guidelines under the State Aid rules.

(continue here if necessary)

Question 97: Is there a need for more unlicensed spectrum for M2M applications?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

There is already sufficient unlicensed spectrum for M2M applications to develop. What is needed in the future is more licensed spectrum, under a technology and service neutral principle, and subject to least restrictive technical constraints. This would allow providers of M2M networks much greater investment certainty to deploy a wide area infrastructure.

One of the lessons of TVWS type applications is that they do not scale particularly well, because investors have concerns over the long run access to spectrum assets and/or the impact on network quality of uncontrolled access in an unlicensed environment.

Whilst we believe that unlicensed spectrum has a role to play in allowing an industry/application to develop, for it to prosper it would benefit from licensed spectrum in the long run.

(continue here if necessary)

h) Mobile communication networks

Question 98: Improved mobile communications networks could to a certain extent ensure public protection and disaster relief (PPDR) communications, as well as safety systems for utilities and intelligent transport services (ITS) for road and rail (as reported in a 2014 [study](#)). Would you consider it appropriate to include in the licence conditions for spectrum (or for certain spectrum bands), or otherwise to impose on (certain) mobile network operators, obligations in terms of quality of service, resilience of network infrastructure and hardening to enable such dual use of commercial mobile networks?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

The delivery of PPDR and other safety of life services would impose a substantial cost on operators, which would need to be factored into decisions on whether to bid (and at what price) for licensed spectrum. If the cost is too high then licenses with such obligations would go unsold, which is very inefficient and would lead to artificial scarcity of spectrum for commercial uses.

It would be better to allow licensees to bid to provide PPDR networks in a separate tender, in order to avoid the risk of regulatory failure and spectrum going unsold.

(continue here if necessary)

3.5. Sector-specific regulation for communications services

Over-the-top (OTT) services are increasingly seen by end-users as substitutes for traditional ECS used for interpersonal communications, such as voice telephony and SMS. Such OTT services, however, are not subject to the same regulatory regime. As a consequence, the issue of a level playing field has been raised, with some stakeholders calling for a re-evaluation of the existing provisions, with a view to ensuring that wherever the activities of providers of competing services give rise to similar public-policy concerns, they would have the same obligations and rights (i.e. end-users' protection, interconnection, numbering, etc.). At the same time, the existence of a wider range of choices for end-users may put in question continued utility of certain regulatory obligations. Therefore, it is important to evaluate whether the scope of the regulatory framework should be revised in order to create a level regulatory playing field that modernises the safeguards for end-users, incentivises investment and innovation, and boosts demand for communications services.

Technological and commercial innovations may require a modernisation of the provisions of the applicable regulatory framework, for instance those on end-user protection. In addition, it is important to consider the potential regulatory impacts of the most important trends that will drive the telecommunications sector's transformation over the medium to long term, such as for example the take-up of IP-based services offered by digital service platforms, the development of machine-to-machine (M2M) communications or the challenges for the European emergency number 112 and there is a need to evaluate the relevant framework provisions in that respect.

In addition, the scope and appropriateness of the provisions on 'must carry' and electronic programme guides is assessed in the last part of this section.

3.5.1. Evaluation of the current sector specific regulation for electronic communications services

The first set of questions aim at providing input for the evaluation of the functioning of the current regulatory framework.

The current sector-specific rules for end-user protection as regards the access and use of electronic communications networks and services were last reviewed in 2009 and complement horizontally applicable (i.e. cross-sector) EU consumer protection law. For the purpose of this public consultation these are the most relevant legal instruments:

- Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (Framework Directive) as amended by Directive 2009/140/EC (Better Regulation Directive) (scope of the framework and definitions).
- Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) as amended by Directive 2009/136/EC (Citizens Rights Directive) (provisions on end-users mainly in its chapter IV).
- Certain provisions in other Directives apply also to electronic communications services (such as interconnection and interoperability pursuant to the Access Directive). Directive 2002/58/EC (ePrivacy Directive) as amended by Directive 2009/136/EC (Citizens Rights Directive) also contains certain end-user rights, whose content and substance are not specifically the object of this consultation. However, these rights may be relevant for the questions on the scope of sector-specific regulation for communications services.

The Commission proposal for a Telecoms Single Market Regulation of September 2013 (also known as Connected Continent) contained several end-user protection and empowerment measures. On 30 June 2015, the European Parliament and the Council reached a political agreement on the Regulation. The agreed text covers only a subset of the proposals related to Internet Access Services (IAS) and roaming while other end-users rights contained in the Commission proposal have not been included.

The purpose of the following questions is to evaluate whether the current sector-specific rules, mostly end-user provisions, have proven useful and whether they may have become obsolete, need to be adapted or amended by new provisions.

Question 99: To what extent has the current regulatory framework for electronic communications, as last amended in 2009, contributed to effectively achieving the goal of ensuring a high level of consumer protection in the electronic communications sector across the EU?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response and indicate the provisions which have contributed the most/less to this goal.

We believe that the current regulatory framework contributed to

guarantee consumer protection for the market context it was designed (when basically only traditional telecom services were available), but today is outdated and lacks effectiveness, since it was not conceived for services provided over the Internet. Indeed it has not kept pace with the technological developments and the way that services are consumed and produced today, because it is based on definitions that were made several years ago, which do not fit anymore with the new IP world (where services are provided by platforms). In consequence, this framework is not able to grasp the new realities.

Today many communication services (voice, messaging, video, email, etc) are offered over the top, by players such as WhatsApp, Skype, Netflix, Gmail, etc. alongside traditional services provided by telecom operators. These additional market players have significantly increased competition and choice, but the time when consumers could clearly distinguish electronic communication services (ECS), as produced by telecom operators, from information society services (ISS), produced by Over-The-Top players (OTTs), is over.

From a consumer point of view, communication services provided by telecom operators and OTTs are often fully substitutable and difficult or impossible to differentiate between them. Some examples of this: WhatsApp calls in android OS have the same look&feel -screen that some regular calls have (and due to their penetration almost providing communications with everyone); iMessage (on Apple devices) uses exactly the same interface as SMS (so the user cannot identify whether he is using the iMessage service or the regular SMS service provided by operators). However, the fact that OTTs' communication services are not treated as ECS is causing a considerable legal inconsistency, significantly impacting on competition between service providers as well as affecting user rights.

We believe that, when dealing with consumer protection, the first question to address is whether sector-specific rules are needed or the generic rules on consumer's protection are sufficient.

It is necessary to take into account that, besides the sector-specific obligations mentioned in the consultation there are also generic rules on consumer's rights. Articles 6 and 8 of Directive 2011/83/EC on consumer rights impose numerous obligations on every trader entering into a distance contract with consumers. ECS/OTTs providers are not exempted from the application of this Directive. Obligations imposed by this Directive include: "consumer information for contracts", "formal requirements for off-premises contracts" and "for distance contracts, "right of withdrawal" conditions. Also, Directive 93/13/EEC on unfair terms in consumer contracts is applicable to any contract concluded between a seller or supplier and a consumer, defined in a very similar manner than in the Directive on Consumers Rights. Furthermore, the E-commerce Directive (2000/31/EC) imposes obligations on information society services providers (e.g. information requirements and treatment of contracts), a category that includes OTT.

(continue here if necessary)

So, it could be argued that horizontal regulation is sufficient. In fact, the application of overlapping sector-specific rules is counterproductive, as results in a framework of non-consistent protection standards that consumers can rely on. The issue which we have yet to deal with is the enforceability of the above mentioned legislation to non-European players. Namely, the cross border effective enforcement.

We firmly believe that:

The protection of consumer rights should basically be ensured by means of horizontal provisions.

In particular, there should be equal footing between Telcos and OTTs on the regulation at the service level.

In particular, the e-privacy Directive should be removed. The existence of the new GDPR Regulation should be sufficient to have a solid privacy framework of horizontal rules applicable to OTTs and Telecom Operators.

The problem of enforceability of European rules to non-European players should be addressed following the precedent of the proposed General Data Protection Regulation. Same rules should apply to the same services: non-EU providers, that are providing their services to European citizens, should be subject to the same rules than EU providers in order to achieve a level playing field for all businesses to compete on equal footing avoiding competitive disadvantages.

Building on the above, we propose the application of the country of destination principle (where the user access to the service) to those global players which provide services in more than one Member State. This would break the competitive disadvantage that those local players are facing against US or third countries OTTs; who are providing services in most of the European countries without being submitted to the same restricted obligations imposed by the Regulatory Framework. In this regard, and considering the evolution of the legislation in Europe, it is not reasonable that the European legislation should apply only to those players established in Europe. Therefore, we suggest including the criteria of the "territory to which the services are directed" additionally to the establishment criteria. As an example of this the Online Gambling Law or the VAT Law that have considered this approach. Globalization and technological innovation have contributed substantially to modify the volume and pattern of trade in services and this has to be considered in the regulations.

Finally, we strongly believe that the problem of LPF is much more complex and far reaching than what regards to the so-called communication services, as those cannot be isolated anymore from the whole global digital ecosystem. Now there is a much stronger interaction between different players of the value chain and there are new significant emerging issues that are not even being addressed as new bottlenecks and dominant positions (e.g. Operating Systems dominance, Search Engines, etc.). Same principles should apply to similar competitive concerns across the value chain.

Question 100: Are there any provisions which constitute a particular administrative or operational burden? If so, please explain why and provide a quantitative estimate of additional burden.

Our answer is yes. In fact, in the new Digital environment, we are witnessing that:

- Users are increasingly choosing among services offered by Telecom Operators and OTTs (operating under different regulatory regimes).
- New playing fields are being created that are not necessarily leveled.

Regulatory policies need to be updated in the interest of all. It is vital that rules are applied consistently across the value chain.

Against this background, and as a result of the current regulatory framework, Telecom operators must comply with a broad range of obligations which are not imposed on internet players (OTTs). This is the source of significant regulatory asymmetries between both of them. It is important to remark that all regulated provisions imply to some extent administrative or operational burdens.

Asymmetric burdens permeate our entire regulatory framework. Some of the most relevant, classified into different categories, are:

- General Obligations such as Data management policy (Privacy, Data protection, Retention and Breach Notification); Fees and sector-specific taxes (including Universal Service Obligations and contributions); Legal interception, Network security and integrity, Interoperability/Portability, Authorization requirements, Quality of service, Net Neutrality (for Network Access Providers), Retail price regulation, Access to Emergency services, Specific Consumer Protection provisions, etc.
- Obligations Applicable to SMP Operators such as Transparency, Non-discrimination, Accounting separation, Access to, and use of, specific network facilities (Wholesale services), Price control and cost accounting obligations. Even Functional separation
- Obligations Applicable to other specifically appointed operators such as Universal service obligations (Funding and provision) and Critical Infrastructures obligations

Regarding the costs of the additional burden imposed by regulation it is very difficult to provide a quantitative estimate (see our answer to the previous question 6). In order to assess those costs, it is possible to differentiate: Compliance Costs and Costs of Opportunity (for innovation and market development). When operators develop their services they take as a basic input the need to comply with current or expected regulation, which can result on substantial limitations for commercial freedom and the loss of significant business opportunities. This issue is particularly crucial.

(continue here if necessary)

Question 101: As regards sector-specific end-user rights provisions, have you identified sector-specific end-user rights provisions in the current framework which are not relevant and should in your view be repealed (deleted) because they are wholly or substantially covered by general EU consumer protection law?

- yes
- no
- do not know

If your answer is yes, should also all corresponding sector specific rules on the national level be repealed (deleted)?

- yes
- no
- do not know

Please specify the provision(s) and provide an explanation.

We believe that sector-specific end-user rights provisions in the current framework should be removed since all the relevant provisions, related to end-user-rights, are covered by horizontal regulation. This would allow for a level playing field between Telecom Operators and OTTs. Telefónica firmly believes that a future-proof framework for consumer rights cannot be based on sector-specific regulation.

The current framework is highly imbalanced. In this regard, below are listed some examples of significant provisions (related to the Universal Service Directive and the e-privacy Directive) which are specifically applicable to Telecom Operators offering an ECS service, but not to OTTs

DIRECTIVE 2002/22/EC (Universal Service Directive)

- Article 10 states specific obligations regarding control of expenditure
- Articles 20 to 22, which impose far more prescriptive requirements in relevant areas such as Contract conditions, Transparency or Quality of Service.
- Article 30 where, in addition to portability obligations, it is imposed a very prescriptive obligation on the Duration of contracts.
- Article 34 states the obligation of ensuring that transparent, nondiscriminatory, simple and inexpensive out-of-court procedures are available for dealing with unresolved disputes relating to the contractual conditions and/or performance of contracts.

Therefore, we believe that all those provisions should be repealed to ensure that all services are treated equally.

(continue here if necessary)

DIRECTIVE 2002/58/EC (Directive on privacy and electronic communications)

As regards sector-specific end-user rights provisions, we would like to make a particular reference to the e-Privacy Directive, which applies to European telecom operators and sets out very prescriptive rules about how and when ECS operators can collect and use customer-traffic and location data.

In contrast, the activities developed by OTT providers are covered only by the current (and also by the future) Data Protection Directive, which are far less prescriptive. Current Data Protection Directive does not specifically mention location data, and provides greater flexibility in how and when personal data can be collected and used.

A level playing field between ECS operators and OTTs providing communication services to European citizens is required as far as privacy is a fundamental right of European citizens that has to be ensured irrespective from:

(a) where the operator platform (ECSs and OTTs) provides the services and

(b) where the European citizens are (in Europe or abroad).

An adequate data protection policy should not only ensure European rights, but also facilitate a fair competition between European and non-European companies (in particular on data mining based services).

Considering the above, we believe that the e-Privacy Directive should be repealed to ensure that all services are treated similarly.

Such distortions create barriers to effective competition and to innovative services, as well as leaving consumers confused because standards are not applied consistently to the digital services they use. At the same time, competitiveness of European Digital stakeholders is seriously damaged. In Europe, there should be one set of data-protection rules, consistently applied across the whole Digital Market. In accordance with it, we believe that sector-specific rules (applied on the national and European level) should be repealed.

The issue of data protection is an increasingly concern for Governments and users. The irruption of the new business models carried out by OTTs based on data, together with their dominant position, has made the privacy protection an urgent matter, which have to be coped with. Actually, the agents that mostly deal with data are those subject to a less strict regulation leading to situations where the users feel themselves unprotected and having lost the control of their data.

Finally, Telefónica would like to take the opportunity to point out that, in order to protect effective competition, we have also a horizontal competition law, which is sufficient to solve the same problems that, in a duplicated way, are also being addressed by sector-specific regulation.

Question 102: As regards sector-specific end-user rights provisions, have you identified existing sector-specific end-user rights provisions in the current framework which need to be adapted or amended?

For each provision you mention, please give reasons for its relevance (problems in the application; commercial or technological changes, including those which resolve the initial concern; new challenges for end-users; other, please specify):

Our answer is yes.

We believe that, in principle, sector-specific regulation on communication services (on the national and European level) needs to be repealed (in particular end-user rights provisions). Instead, a horizontal framework should be applied to all digital services, including current categories such as ECS, IAS and ISS.

(continue here if necessary)

Question 103: The regulatory framework has among its policy objectives and regulatory principles ensuring that users, including disabled users, elderly users, and users with special social needs, derive maximum benefit in terms of choice, price and quality (Article 8 of the Framework Directive). With respect to disabled users, the Universal Service Directive contains specific requirements under the universal service obligation (Article 7) and regarding the equivalence in access and choice (Article 23a).

To what extent has the current regulatory framework been effective in achieving the goal of providing equivalent access to persons with disabilities in terms of choice, price and quality?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response and illustrate with examples.

If you identified any shortcomings, how could the effectiveness of the provisions be improved and what would be the related benefits and costs?

We believe that we have already reached a stage where much better solutions could be provided by other players different to operators (e.g. device manufacturers, app developers). Consequently, we believe that the future regime should:

- Primarily, let the market find the way to provide services tailored to certain needs and
- Secondly, allow for focussed and timely public interventions.

In case those public interventions are deemed necessary, the financing of all initiatives designed to improve accessibility of services to disabled people should be borne by the public powers, as a part of the social cohesion policies, which are the responsibility of the Governments. However if any contribution is required from the Sector, it should be requested to all players (including OTTs) in proportion to their incomes and the number of users.

(continue here if necessary)

Question 104: Number portability is part of the numbering resource management and also an important tool to remove barriers to switching. It thereby facilitates end-users' choice and change of providers and stimulates competition. To what extent do the current provisions on number portability as established in Article 30 of the Universal Service Directive allow for their efficient implementation?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your answer and specify any problems you may have encountered (delays, disruption, loss of service, cost for end-users, slamming (telephone service changed without subscriber's consent), burden for operators, etc.).

In general terms, it is possible to say that the volume of ported numbers registered in Europe is quite high (particularly in some countries such as Spain), as revealed by the data included in the Digital Agenda reports, which reflects the high degree of competition reached.

The role of portability, as a key competition enabler, has even been stressed by Policy Makers. As an example of this, the recent "draft ECC Report 238 on 3rd Party access to Number Portability Data (NP Data)", launched for public consultation by the CEPT until last 23 June, stressed the positive impact that Network Portability has made on the mobile market over the last 8-10 years.

Nevertheless, the implementation and operations associated to the portability processes are very complex and expensive for Telecom Operators. Additionally Number Portability mechanisms have sometimes been misused (eg: slamming) at a cost for providers or have not been well defined (eg: cancellation processes). All those problems have been and/or are being solved by the sector.

Telecom operators have already ensured very low barriers for consumers to switch to another provider. But the issue that should be addressed in this moment is the portability of user's "digital life". Number portability has been a very good example of how portability and openness leads to better user experience, therefore the application of similar switching obligations may need further assessment (as a potential solution) in the broader digital world to reverse specific cases of lock-in effects and where switching barriers have resulted in enduring bottlenecks and lack of competition. See our answer to Question 131 below.

(continue here if necessary)

Question 105: To what extent do you consider the scope and requirements established in Article 26 of the Universal Service Directive still relevant in order to ensure an effective access to emergency services?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response, and indicate possible areas for amendments.

Telefónica believes that, as a principle, all the voice services perceived by the users as substitutive to the current PSTN voice service (same look & feel) should be subject to the same obligations regarding the access to emergency services. Indeed players providing those substitutive services should also be able to offer emergency services (to the extent possible), clearly informing users about the limitations that their service could have. Customer awareness is particularly relevant in this situation.

Regarding the inclusion of new requirements related to private corporate network environments (question 134 below); we firmly believe that public networks and services provided by operators should have no responsibility related to the provision of location information inside private networks or the way they handle emergency calls.

Another relevant issue is funding. We believe that emergency access costs should be covered by public funding. Should the burden remain on the sector, all players providing same services (including OTTs) should contribute.

(continue here if necessary)

The objectives of the regulatory framework include ensuring the integrity and security of public communications networks (Article 8, paragraph 4(c) and (f)). Specific rules are provided for in order to ensure that operators take appropriate technical and organisational measures to appropriately manage the risk posed to security of networks and services (Article 13a and Article 13b of the Framework Directive). In view of recent security incidents and revelations concerning spying activities it is therefore necessary to reflect on whether the current rules are still sufficient to achieve the security objectives or whether they need to be reviewed.

Question 106: Do you consider that the rules on integrity and security of networks and services (Articles 13 and 13a of the Framework Directive) have been effective in achieving their objectives?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Current rules are adequate to achieve the objective of ensuring the integrity and security of public communications networks. Therefore, we consider that there is no need either to change Framework Directive provisions or to define additional ones.

In fact, it is important to remark that we are facing a very dynamic field of activity in which the risk and threats continuously change where new security risks continuously emerge. This dynamic is taken in due consideration in the EC Cybersecurity Strategy Plan launched on 2013; for instance, there is a general agreement on the need to include "Digital Service Platforms" (i.e. Internet enablers) within the scope of the proposal for the Directive on Network and Information Security (NIS).

The combination of both Article 13a and the future NIS directive should provide the appropriate level of security considering both electronic communications services and Internet services that are key to deliver a safe IT ecosystem to citizens and companies.

Security incidents and revelations concerning spying activities that impact the secrecy of communications and the privacy of European citizens do not question the effectiveness of Article 13 mechanism addressed to ECS or the future NIS Directive addressed to Digital Service Platforms (Internet Enablers) and Critical Infrastructures. The exceptional breaches to the legal interception procedures of communications motivated by national security incidents should always be kept out of the scope of this regulation, which is aimed to manage the risk posed to the integrity and security of networks and services.

We believe that incident reporting scheme required by Art.13 of Framework Directive provides transparency to society and allow learning from incidents in order to systematically improve the security in the networks and services, contributing to discussions at policy level on strategic measures to improve the security, in particular those incidents that carry out risk and vulnerability assessments in the electronic communications sector.

We also note that notification requirements need to be flexible enough to ensure that it is not counterproductive to the aim of enhancing consumer trust. Reporting should never be an objective itself but rather a way to enhance confidence in the online environment.

Beyond legal obligations, most telecom operators have implemented comprehensive measures and programs to minimize security threats. In addition, telecom operators have a number of self-developed initiatives like the Cyber Emergency Response teams (CERT) and the Forum of Incident Response and Security Teams (FIRST) that contribute to improve the security. This makes additional provisions unnecessary.

However, an improvement on the coordination of existing initiatives is required from stakeholders. It is crucial that Member States continue to rely upon and improve multilateral cooperation mechanisms to face cyber threats and to engage in public-private cooperation activities at various levels with the shared objective to mitigate jointly large-scale cybersecurity incidents which complement the bilateral and regional relations they have with trusted partners.

In conclusion, other than making additional regulatory provisions we suggest to improve existing mechanisms to make them more effective.

(continue here if necessary)

Question 107: Do you consider that there is a need to improve provisions referred to in the previous question to make sure that they are in line with modern technology and security threats?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

As indicated above, the approach of current regulation is adequate. The Directive on Network and Information Security (NIS) currently under discussion is an example of an improvement of provisions required by modern technology and security threats that complements provisions of Article 13a Framework Directive.

A holistic approach is needed. In the digital ecosystem we are engaged in, separating the cybersecurity from the wider concept of security does not add anything. Cyber-crimes and crimes are the same, the only difference is the resources used by the criminals. Therefore, the right approach to the issue should be to align security measures to the digital world, ensuring that security is safeguarded whatever the service or the provider is involved.

Therefore, the private-public coordination should be reinforced to ensure an affective and agile response to cybersecurity threats.

(continue here if necessary)

3.5.2. Review of the sector specific regulation for communications services

a) Future scope of sector-specific regulation for communications services

The EU regulatory framework on electronic communications services and networks emerged in the context of full liberalisation in the 1990s. At that time voice communications were the focus of attention and distinct from online services. The framework contains provisions for the regulation of both networks and electronic communications services. Services such as so-called over-the-top services (OTTs), providing communications (voice, messaging) and/or other services, do not usually fall within the scope of the current EU regulatory framework's rules on ECS or those on network regulation because these services do not themselves include conveyance of signals. Therefore the regulatory regimes which are currently applied to OTTs or comparable services, on the one hand, and electronic communications service and networks, on the other hand, differ considerably. The present section examines whether the scope of the regulatory framework should be adapted in this respect in order to ensure a level-playing field for players to the extent that they provide competing services and the manner in which this could be done.

Question 108: Do you consider that there is still a need for sector-specific regulation of communications services in the EU?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We believe that in principle, and taking into account the current and foreseen market conditions, there will not really be a need in the future for a sector-specific regulation for communication services in the EU. So, it should be repealed. Instead, an updated horizontal framework should apply to all services, including current service categories such as ECS, IAS and ISS. See the answer to question 109 below

(continue here if necessary)

Question 109: As regards the current definition of electronic communications services (ECS):

	strongly agree	agree	disagree	strongly disagree	do not know
a) Do you consider that the current definition of electronic communications services should be reviewed?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) If the current definition of ECS is reviewed, do you consider that the "conveyance of signals" should continue to remain a necessary element of the definition of electronic communications services subject to sector-specific regulation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
c) If the current definition of ECS is reviewed, do you consider that "transmission services in networks used for broadcasting" should continue to be considered as ECS?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Please explain your responses.

Current regulation is based on an ECS definition that was made several years ago (when services were coupled to networks) and which does not fit anymore with the new IP world (where services can be provided by platforms over general purpose networks). As a result of that outdated conception, in the case of Telecom operators still applies a very strong specific regulation based on their qualification as “old type” service providers of electronic communications services (ECS). On the contrary, in the case of OTTs, they are subject to weaker cross sector rules based on their qualification as information society services (ISS).

Nowadays, an increasing number of services provided by the OTTs exist today alongside traditional services provided by telecoms operators. The time when consumers could clearly distinguish electronic communication services, as produced by Telecom operators, from information society services, produced by OTTs, is over. From a consumer point of view many of these services are often fully substitutable. However, given that OTTs’ communication services are not treated as ECS, there is a considerable legal inconsistency.

In summary, there are significant regulatory asymmetries between Telecom operators and OTTs, rooted in an outdated definition of electronic communication services which let OTTs escape from the comprehensive sector-specific obligations that however apply to Telecom operators. Moreover, when traditional telecom operators, providing ECS services, try to extend their services to adjacent OTT markets they face inherited burdens that OTTs don’t have. The current ECS definition not only doesn’t fit with current reality in the communications market but also creates artificial barriers for innovation, preventing that society benefits from a high level of innovation and welfare and sometimes, turning the scale between winners and losers.

Therefore, we believe that it is crucial to modernize regulatory policies regarding digital services in order to:

- Guarantee that European digital consumers have the same rights and level of protection, regardless of the technology underlying the services they choose or the nature or location of the company that provides them.
- Guarantee that all players can compete in the global arena on equal footing. This situation is not balanced today, mainly to the disadvantage of European operators.

In order to solve the current inconsistencies, we believe that it is necessary to adopt a new regulatory approach, based on the recognition that the new digital world is much broader than the traditional communication services one, as it encompasses a plethora of services demanding a coherent framework.

In view of the new features of the ever evolving market, the new regime should reduce the current regulatory burden applicable to ECS providers and, at the same time, allow for a fair level playing field.

Indeed we believe that the best way to achieve this objective is by way of removing the current sector-specific regulation and the reliance on horizontal rules. With that idea in mind, our concrete proposal is that the current ECS definition should be removed.

(continue here if necessary)

The existing criterion of “conveyance of signal” is no longer a meaningful characteristic in the provision of digital services and creates de iure an artificial boundary between services classified as ECS vs. non ECS (regulated vs unregulated), with direct consequences on the sets of rights and obligations for the undertakings providing those services, even when both services are fully functionally substitutable (and competitive) from the point of view of the consumer. Additionally, it is important to remark that the criterion of “remuneration” doesn’t necessarily mean that customers pay money for the service and should consider other types of currency, such as user time or engagement or personal data.

In the consultation the EC identifies two categories of services (IAS and Communication Services running on top of IAS) hinting that a different regulation could be applied to each of them.

In this regard, we believe that:

1. A single set of consistent rules should be applied to all digital services, including Internet Access Service (IAS) and the communication services running on top of it. This set of rules should rely on horizontal consumer protection regulation as much as possible (e.g.: the Consumers Rights Directive)

2. Notwithstanding what is stated in point 1, in our opinion, if sector specific regulation is maintained, we consider that basically no further regulation beyond the adopted in the Telecoms Single Market (TSM) package should be required. As a matter of fact, it is necessary to ensure that the application/evolution of the TSM specific rules related to IAS is consistent with the rules applied to the rest of Digital Services, keeping specific requirements only where clearly necessary.

Anyway, we believe it is questionable why there must be such regulation, which basically affects the net neutrality, given that:

o There is already a regulation on network access (that should be focused on the on the lasting/enduring bottlenecks or Key Network Inputs) enabling competitive conditions for all players, guaranteeing, at the same time, a broad consumer choice. This alone should be sufficient.

o There is a clear asymmetry of treatment between Telecom operators and the rest of digital players regarding digital neutrality. While a stringent Net Neutrality ex ante regulation has been established on Networks, without any market failure evidence, in the case of other platforms (such as O.S, searching engines) where neutrality issues also could arise, the possible problems are not even being addressed.

3. Notwithstanding what is stated in points 1 and 2, in case that, besides what regards to IAS, an additional specific sub set of rules could finally be deemed necessary for some selected services

(number portability or access to emergency services) which could fall under the scope of a new digital communication services definition, we believe that those rules should:

- o Be basically related to the rights and obligations attached to the use of numbers,
- o Equally apply to all players using those numbers (taking into account all the possibilities available in the Digital world).
- o Be thoroughly justified on clear needs,
- o Be proportional,
- o Be reduced to the minimum necessary
- o and the service providers affected by them should not be overly burdened in comparison to other competing providers that do not equally contribute to the public benefit intended with those rules

Finally, and regarding broadcasting services, we refer to our answer to the consultation about the Directive on Audiovisual Media Services (AVMSD)

Question 110: If the current definition of ECS is reviewed, do you consider that the definition of services subject to sector-specific regulation should take into account the question whether a service is:

	strongly agree	agree	disagree	strongly disagree	do not know
a) managed or subject to best-efforts online provision only?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
b) Remunerated through monetary payment (directly or as part of a bundle)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
c) Remunerated by other means (advertising supported, provision of data by users, etc.)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Please explain your responses.

Telefónica believes that the current ECS definition should be removed (see answer to the previous question). The regulatory framework should be consumer-centric and technology-neutral, consistent with the goal of achieving the same horizontal consumer protection rules across the whole range of digital services, independently from the nature of the provider, the way they the services are paid or the method of provision.

(continue here if necessary)

The internet access service (IAS) sets up the end-user's connection to the internet and many communications services as well as a host of other services are provided via this IAS. It could be argued that sector-specific rules only need to apply to the IAS but not to other communications services, and that general consumer protection rules will be sufficient to protect end-users in their communication activities.

Question 111: If sector-specific service regulation is maintained, do you consider that it should be limited to the IAS?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

See our answer to question 109 above. In our opinion, if sector specific regulation is maintained, for digital communication services, we consider that it should basically be confined to the IAS. In this regard, we believe that no further regulation beyond the adopted in the Telecom Single Market (TSM) package should be required. As a matter of fact, it is necessary to ensure that the application/evolution of the TSM specific rules related to IAS is consistent with the rules applied to the rest of Digital Services, keeping specific requirements only where clearly necessary. Apart of this, if an additional specific sub set of rules could finally be deemed necessary for some selected services (eg: number portability or access to emergency services) we believe that those rules should be related to the rights and obligations attached to the use of numbers. In summary, specific regulation for Digital Communication Services would be restricted to the Telecom Single Market (TSM) package, already adopted, and some rules associated to the use of numbers (eg: number portability or access to emergency services).

(continue here if necessary)

Question 112: If a distinction is made between IAS and other communications services, do you agree in principle that the definition of IAS in the draft Telecoms Single Market legislative text could be used for this purpose, namely "*a publicly available electronic communications service that provides access to the internet, and thereby connectivity to virtually all end points of the internet, irrespective of the network technology and terminal equipment used.*"

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We believe that the proposed IAS definition could be adequate with the following modifications: removing the term "electronic communication" (in order to take into account our proposal that the current ECS definition should be removed, see our answer to question 109) and adding the word "digital" before service. With these changes, the definition would read:

a publicly available digital service that provides access to the internet, and thereby connectivity to virtually all end points of the internet, irrespective of the network technology and terminal equipment used

Nevertheless we strongly believe that a single set of consistent rules should be applied to all digital services, including Internet Access Service (IAS) and the so-called communication services. So, there should not be any distinction between IAS and other communication services to that regard.

(continue here if necessary)

Question 113: Which sector-specific (end-user and other) provisions should apply to IAS? Please indicate these provisions (if already present in the current framework) or describe the content of such rights and obligations, and explain your response and the measures you suggest.

See our answer to question 109 above. From our point of view, if some particular rules are finally deemed necessary for the IAS, we believe that no further regulation beyond the adopted in the Telecom Single Market (TSM) package should be required

(continue here if necessary)

Question 114: In relation to IAS, is there a need for any further end-user rights in addition to those included in the provisionally agreed Telecoms Single Market Regulation? In case you strongly agree or agree, what should be the level of harmonisation?

	strongly agree	agree	disagree	strongly disagree	Full harmonisation	Minimum harmonisation
(i) Contractual information (e.g. related to quality parameter other than speed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(ii) Transparency measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iii) Independent price and quality comparison tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iv) Control of consumption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(v) Contract duration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(vi) Measures facilitating switching (receiving operator-led process;						

<p>protection of end-users throughout the switching process, compensation in case of delay and abuse in the switching process)</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>(vii) Measures to guarantee the effectiveness of end-user rights (in particular contract termination and switching) in relation to bundles of services</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>(viii) Measures eliminating restrictions and discrimination based on nationality or place of residence</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a brief explanation for each of your responses.

As a general rule, Telefónica believes that no additional regulation is needed, since general rules on consumer protection, data protection and competition law guarantee consumer protection. If, in specific cases, there is a particular strong need for protection, regulation should only be imposed if it is demonstrated that such protection is not guaranteed by general consumer protection rules, data protection and/or competition law.

Regarding the specific areas questioned:

(i) We do not see the need for the Commission to further specify details to the already very detailed list of information to be provided in the contracts.

Moreover, when QoS in internet access service is an obligation, in the contract between the customer and the provider, it has to be limited to the extent that the access provider is responsible for and can influence the QoS. Regarding an internet connection not all parts of this connection are manageable or under the control of the access provider (e.g. terminal equipment, server of the content provider, content delivery networks used etc.). Speed for example can only be guaranteed within the provider's network. Also in shared media, such as mobile, the speeds recorded by individual users are dependent on the number of simultaneous users in a cell at a given time.

(ii) Telefónica supports that "transparency" constitutes a core principle for consumer choice and competition on the market. Nevertheless we want to stress that it is necessary to find the right balance between "transparency" and "information overload" due to burdensome detailed regulation. The concept of transparency requires a thorough look at the market and an analysis of what is really helpful for the end-user. We advocate leaving the specific definition of transparency requirements to be left to national self-regulation of the industry, under the supervision of national concerned authorities.

(iii) Telefónica is sceptical about those tools, due to the inherent difficulties to provide fair comparisons for the different offers, taking into account their current/future complexity, particularly when services are offered in bundles. On the other side, they could have a distorting effect in the market. It would also raise significant cost for companies.

(iv) We are against new impositions on this area because:

- These solutions are already provided by the market without any need of regulation. In fact, such customer services should be left to the competitive outcomes of the market as a differential factor.
- There is a huge variety of propositions on the market to fulfil the customer's wishes regarding cost-control, such as prepaid offers in the mobile sector which deliver the same services characteristics and quality of service levels as post-paid services, but with the advantage of full cost control by the end-user.
- It has also to be considered that these systems might not work on an overall basis because this would generate enormous complexity to

the system set-up.

(v)Regulating termination periods means a heavy intervention to the electronic communications market competition and those provisions also limit the ability of providers to design different products and services. In fact there is currently a wide variety of tariff models on the market to attract the customer.

(vi)In terms of switching of providers we would like to emphasize that a balance has to be found between what could be necessary to ease competition and what is not proportional to achieve that goal.

(vii)See points (v) and (vi) above

(viii)We do not agree with sector specific regulation of communication services, but if it was deemed necessary, we believe it should not deal with issues such as restrictions and discrimination based on nationality or place of residence.

Finally, harmonisation is required for cross-border consistency.

However, it should be kept to what is essential and not impose disproportionate costs for the industry.

(continue here if necessary)

Question 115: Do you think that traditional electronic communications services (such as voice or video telephony, SMS/text messages, e-mails operated by telecoms providers, other services) can be functionally substituted by OTT services or platforms with communication elements (e.g. internet telephony services, web messaging services, webmail services, social media platforms, other)?

	strongly agree	agree	disagree	strongly disagree	do not know
Voice telephony	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Video telephony	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sms/text messages	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e-mails provided by telecom operators	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other traditional telecommunications services	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain each of your responses and provide examples of such OTT services.

From our point of view, traditional Telecom services and OTT are fully substitutable. From a user's perspective, it is often irrelevant if a connection to the Internet is established through copper / fibre networks, cable networks, WiFi networks, LTE networks, UMTS networks or via satellite. Substitutability applies also to specific services. For instance, consumers may switch to OTT services (as Skype) for traditional voice services, or they may substitute parts of their calls by messages (SMS or substitute services by OTTs such as WhatsApp) as is currently happening as the consumers' habits are changing. OTTs can even arbitrate PSTN services offered by operators. As an example of this it is possible to mention the international termination service provided by Viber, based on the conversion of PSTN originated calls into VoIP calls, which are later terminated via the Viber App (instead of being terminated as regular PSTN calls). Definitely, OTT services are having an increasingly significant impact on the services offered by operators

To illustrate the point, according to a recent study produced by The Boston Consulting Group (Five Priorities for Achieving Europe's Digital Single Market, The Boston Consulting Group, October 2015). URL: https://etno.eu/datas/publications/studies/FINAL_BCG-Five-Priorities-Europes-Digital-Single-Market-Oct-2015.pdf

“the volume of Internet-based voice services in Europe is growing at more than 20 percent a year and is expected to lead to a 21 billion revenue loss for European telcos, or 7 percent of their total, by 2018. OTT messaging is growing even faster - more than 30 percent a year - and is projected to result in a 10 billion revenue loss for telcos by 2018 in eight European countries alone (Germany, France, the UK, Italy, Spain, the Netherlands, Belgium and Portugal).Part of the growth in OTT voice and messaging stems from consumers substituting these services for traditional telephone calls and text messages and part of the growth represents additional usage. Services such as Whatsapp voice calling and FaceTime audio are expected to accelerate both substitution and new usage”.

Moreover, according to the last Consumer Panel published by the CNMC (Spanish NRA), in Spain, the rise of Internet telephony/messaging has had a remarkable impact on traditional services, especially on SMS. Almost 9 out of 10 Internet users actually use OTT applications to send messages, mainly Whatsapp (84.6%), followed by Facebook Messenger (25.2%) and Skype (8.1%). Almost half of internet users actually use applications to call via Internet. WhatsApp is again the main application, used by the 33.8%, followed by Skype, with a 14.6%. Importantly, 72.6% out of those who use telephony applications on a daily basis no longer send SMS and 47% have reduced their consumption of mobile calls to the half. Besides, 21.8% declare that it has ceased to consume fixed telephony.

(continue here if necessary)

Question 116: Should **all** communications services (mainly provided over the IAS) which are functionally substitutable to existing ECS fall under a new common definition for such communications services (which would be different from that of IAS and from the current definition of ECS)?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We believe that a wider approach is necessary. In the future, the currently so-called communication services will not exist as such, as they will be diluted in a new digital environment. It means that a new consistent regulation for the whole digital world is required and regulators should abandon the narrow “communication services” approach and re-focus in a new much broader direction. See our answer to question 117 below

We believe that all the services which are functionally substitutable should fall under the same set of rules. In this regard, it is worth commenting that the BEREC Report on OTTs, recently launched for public consultation, attempts to develop a characterization of today’s services based on the ECS concept. In our opinion, this classification fails to reflect the current market situation or the consumer perspective, as the current definition of ECS does not fit for a digital environment, where the boundaries between OTT and ECS services have become blurred. That is why we propose that the ECS definition should be repealed (see our answer to question 109 above).

(continue here if necessary)

Question 117: What should be the essential elements of a functional definition of communications services? Please explain your response.

We believe that a wider approach is necessary. In the future, the currently so-called communication services will not exist as such, as they will be diluted in a new digital environment. It means that a new consistent regulation for the whole digital world is required and regulators should abandon the narrow "communication services" approach and re-focus in a new much broader direction.

Notwithstanding the above, if a functional definition of communication services is finally deemed necessary, we consider that it should take into account the following elements:

- We should better refer to a "Digital Communication services" instead of just to communications services which could lead us again to a more traditional scope
- The definition should clarify which are the end points of that communications. As a general principle we believe that the rationale for regulating P2P communications does not apply to the vast majority of services where the machines are involved (as communications between persons are very different to communications between machines or between persons and machines), so the definition should be limited to P2P communications.
- In the definition it should be specified the level of coordination addressed ("real" such as voice, "near real" such as instant messaging or even "asynchronous" such as email)
- The definition should clarify that all remuneration mechanisms are included (money, data, etc.).

As stated in question 109 above, we believe that, in case an additional specific sub set of rules could finally be deemed necessary for some selected services (number portability or access to emergency services) which could fall under the scope of a new communication services definition, we believe that those rules should:

- o Be basically related to the rights and obligations attached to the use of numbers,
- o Equally apply to all players using those numbers (taking into account all the possibilities available in the Digital world).
- o Be thoroughly justified on clear needs,
- o Be proportional,
- o Be reduced to the minimum necessary
- o and the service providers affected by them should not be overly burdened in comparison to other competing providers that do not equally contribute to the public benefit intended with those rules

(continue here if necessary)

Question 118: Which types of communications services, possibly including services currently not subject to sector-specific rules, should be encompassed by such a definition? Please explain your response.

See the answer to the previous question 117. We believe that the new definition should encompass digital communication services which allow the exchange of information between persons, offered by any kind of provider of digital services. It should also comprise the services currently provided by OTTs and which are not subject to the regulatory framework currently in force.

The achievement of a level playing field will enable companies to compete on equal footing and provide differentiated offers to customers, resulting in a wide range of offers to better suit customer needs and provide them with the best service possible.

(continue here if necessary)

Question 119: Should a definition of communications services include (several answers possible):

- one-to-one communications between persons
- interactive communications between several persons (e.g. via social media)
- communications between persons and machines (e.g. confirmation received by emails or SMS)
- communications between machines (e.g. M2M, IoT, eCalls)?

Please explain your response.

See our answer to question 117 above. We believe that the rationale for regulating P2P communications does not apply to the vast majority of services where the machines are involved (as communications between persons are very different to communications between machines or between persons and machines), so the definition should be limited to P2P communications.

(continue here if necessary)

Question 120: Which sector-specific provisions (end-user and other, such as requirements for reasonable interconnection, or on integrity and security) should apply to communications services as newly defined in the light of your responses to the previous questions? Please indicate these provisions (in the current framework) or describe the content of such future rights and obligations, and explain your response.

See our answer to the previous question 117.

Additionally, it is necessary to take into account that, different from what former communications services were in the 90's, current new digital communication services based on IP technology (WhatsApp Calls, Viber, Skype, VoLTE provided by mobile operators, VoIP provided by NGN operators, etc...) are decoupled from networks so there is no need of any wholesale obligation like interconnection (of services) in order to reach users in different networks because users can always use any service of their choice using the Internet access. That being the case, we expect that in the future this decoupling trend will be generalized meaning that for example a Telefonica user will not be uniquely tied to Telefonica communication services.

Looking at current most successful communications application implementations, it is clear that Interconnection is no longer a precondition to enter communications markets and indeed it is currently more an option than an obligation. While some solutions need the cooperation of other players to interconnect their services to provide global coverage (like operator VoIP, SMS, or e-mails) other like Hangouts, Messenger, Snapchat, or WhatsApp do not need this cooperation or the interconnection with other similar service providers nor want it. Actually, some of the new providers are basing their success in the lock in effects that their commercial decisions of not being interconnected are giving to them (WhatsApp has 900 Million of users, 90% of the population using smart phones in some countries). These are examples of different strategies, innovations and evolutions of different providers regarding the interconnection of communication services.

Actually, there are some new digital communication players that have taken the middle way like Skype or Viber, providing interoperability with some solutions (mostly with Telco traditional voice users - voice tied to network-) but being voluntary isolated from others (cannot call from Skype to Viber or WhatsApp to Skype).

It is relevant that, those OTTs that have decided to implement interconnections are having less success between users than those that decided to wall their garden. The interconnection value as traditionally known and accepted does not constitute any longer a remedy to allow for new entrants in the market.

In the full IP world, users will be tied to a single connectivity provider but not to single communications service provider and interconnection then should be rather an ex-post remedy than an ex-ante obligation. This lever will only apply if and when there is a demonstrated consumer harm that need to be repaired as a consequence of the lack of interconnection (eg: in cases where there are strong network effects).

(continue here if necessary)

Question 121: In light of the broad choice of communications services which have become available, is it still justified that providers of communications services as newly defined would be potentially subject to the exceptional ex-ante regulatory regime based on markets and significant market power identified in accordance with competition principles?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Telefonica believes that the fact that users are all connected to the unique network that Internet is (a.k.a the network of networks) makes the ex-ante regulation devoted for communications services tied to the network totally obsolete as long as access to networks is granted. Actually, it can become a barrier for innovation whether applied to only part of the players as if it extends to all communications providers. Only when a market failure is detected, ex-post regulation for services should be considered and, in such a case, carefully applied in order to avoid unintended consequences. Telefónica believes that ex-ante regulation of communication services based on markets and significant market power is not justified and should not be applied.

(continue here if necessary)

Question 122: Do the markets for termination of calls to numbers allocated in accordance with a numbering plan have characteristics (e.g. application of wholesale termination charges rather than peer exchange or bill & keep) that are likely to continue to justify ex ante regulation in the period up to and beyond 2020?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Traditionally, it was widely accepted that applying ex-ante regulation was needed because communication services were tied to networks and there were no other means to reach a user in a specific network than interconnecting to such networks (and automatically to the communication services tied to such networks) and negotiating an interconnection agreement with termination rates. Such tied services provided a SMP to operators in terms of reachability just because of having customers attached to its networks. Termination rates, cost orientation, obligations of interconnection, etc. were the remedies that such tied to network services needed.

However, since new communication services can be provided decoupled from networks, users are not tied to networks any longer but tied to applications. The "one network - one market" paradigm is outdated. It means that traditional remedies and ex-ante regulation should evolve and a new perspective should be applied.

The new digital communication services are using number ranges to identify users no matter what the access network they are attached to is nor who was awarded with such number ranges. So when a customer of WhatsApp calls any other customer using its MSISDN, if such customer is also user of WhatsApp, the call can be terminated without the cooperation of the operator whose customer is being called. Therefore, no former ways of interconnection are needed nor traditional termination rates play here a role. The bottleneck of "voice call termination" doesn't exist anymore.

Furthermore, traditional use and the former information associated to the number (type of network, country, etc.) are now increasingly outdated by the evolution of the communication services.

Additionally, the way new digital communications services are provided and the business models behind them make very difficult to delimit what market is being addressed, i.e. people using Facebook will tend to use Messenger to connect to someone else while if surfing with Chrome browser may tend to use Hangouts. So it would be difficult to isolate dominance situations in communication markets just by the fact of having a lot of users registered.

The consequence of this new paradigm is that no ex-ante regulation (apart from access regulation) should be applied. Interconnection has become only an option to build up communication services that most of the new providers are not using.

The fact that some communication players (like operators providing VoLTE or NGN VoIP) are constrained by tough ex-ante regulation with former remedies may end-up with some winners/looser decided not by regular competition processes but by external forces.

Only if market failures are detected, ex-post regulation may require interconnection or any other remedies which in any case, should be carefully analysed.

(continue here if necessary)

Question 123: Should providers of communications services as newly defined benefit from a general authorisation, without any attendant notification formalities, as is the case for information society service providers under the eCommerce Directive?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

As explained in our answer to question 117, we believe that regulators should abandon the narrow “communication services” approach and re-focus in a new much broader direction. In any case, we strongly believe that the same legal framework (general authorization / notification or whatever) should apply to all service providers, irrespective of the technology they use, their origin or nature or the way the services are remunerated.

(continue here if necessary)

Question 124: Should all services covered by a new definition of communications services benefit from rights currently attached to the status of ECS provider (e.g. access to numbering resources for their own services, interoperability and interconnection)?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

As explained in our answer to question 117, we believe that regulators should abandon the narrow “communication services” approach and re-focus in a new much broader direction. In any case, it should be noted that the mentioned rights entail also inseparable obligations. E.g. interoperability and interconnection could be considered as a right, but also as an obligation aimed at removing network effects. It is also the same in the case of numbers, as the right to use them entails a series of obligations. Taking that into account, we believe that all the players who are ready to fulfil those obligations should also be granted the attached rights.

(continue here if necessary)

Question 125: In relation to **communications services other than IAS**, is there a need for any further end-user rights? In case you strongly agree or agree, what should be the level of harmonisation?

	strongly agree	agree	disagree	strongly disagree	Full harmonisation	Minimum harmonisation
(i) Contractual information (e.g. related to quality parameter other than speed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(ii) Transparency measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iii) Independent price and quality comparison tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iv) Control of consumption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(v) Contract duration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(vi) Measures facilitating switching (receiving operator-led process;						

<p>protection of end-users throughout the switching process, compensation in case of delay and abuse in the switching process)</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>(vii) Measures to guarantee the effectiveness of end-user rights (in particular contract termination and switching) in relation to bundles of services</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>(viii) Measures eliminating restrictions and discrimination based on nationality or place of residence</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a brief explanation for each of your responses.

As explained in our answer to question 117, we believe that regulators should abandon the narrow “communication services” approach and re-focus in a new much broader direction. Additionally, as explained in our answer to question 114, as a general rule, Telefónica believes that no specific regulation is needed for digital communication services, since general rules of consumer protection, data protection and competition law guarantee consumer protection. If, in specific cases, there is a strong need for protection, regulation should only be imposed if it is demonstrated that such protection is not guaranteed by general consumer protection rules, data protection and/or competition law.

(continue here if necessary)

Question 126: Does the particular nature or importance of voice services for end-users still require specific rules?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We believe that, in principle, no specific rules should be required for voice services, taking into account the current/expected technical-commercial scenarios where those services are being/will be provided.

In case a specific sub set of rules could finally be deemed necessary for the referred voice services (eg: access to emergency services and other harmonized numbers), they should be attached to the use of numbers.

(continue here if necessary)

Question 127: Are there any other communications services showing specific features or risks related to their usage which would require or justify specific end-user protection or other rules?

We do not foresee the need of specific rules for any other communication service. In fact, as explained in our answer to question 117, we believe that regulators should abandon the narrow “communication services” approach and re- focus in a new much broader direction.

(continue here if necessary)

Question 128: Should any obligations related to access to emergency services (112) or to quality of service requirements apply to all providers of communications services in the same way, irrespective of whether they are provided as managed services or subject to best-effort (Internet access services)?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Telefónica believes that the considerations to set up the obligations on the access and availability to emergency services (112) should be discussed apart from the debate of quality of service regulation. Concerning the obligations related to the access to emergency services (112), Telefónica believes that the same obligations (if applicable) should affect any provider of digital communications services (Telecom operator and OTT) that delivers similar (substitutable from the point of view of users) digital communication services. In particular, the obligations (if applicable) should address not only the provision of emergency services to end users but also the contribution to finance the cost of 112 platforms and calls.

Regarding the issue of quality of service, we consider that no obligations should be included in the new framework related to it. Quality of service should become a commercial differentiator of the competing service providers rather than an obligation. Only in case of market failures or a relevant degradation of the quality levels are detected, this issue might be addressed, carefully balancing the remedies considered.

(continue here if necessary)

b) Adaptation of provisions to new challenges

Question 129: Do you consider that there are new or emerging sector-specific end-user protection issues (resulting inter alia from technological or commercial developments) which need to be addressed?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. If your response is positive, please indicate the areas where you see a need for enhanced sector-specific end-user protection and whether such issues should be addressed at EU or at Member States level.

Telefónica believes that there are no new or emerging sector-specific end-user protection issues which need to be addressed with the sector specific regulation applicable to the so-called “communication services”. Nevertheless, we firmly believe that, as stated in the answer to question 99 above, the problem of consumer protection is much more complex and far reaching than what regards to the “communication services”, as those cannot be isolated anymore from the whole global digital ecosystem. Now there is a much stronger interaction between different players of the value chain and there are new significant emerging issues that need to be addressed in the future as new bottlenecks and dominant positions (e.g. Operating Systems, Search Engines, data as a currency etc.). Same principles should apply to similar competitive concerns across the value chain.

(continue here if necessary)

It has been argued that a longer contract duration in certain geographic areas (e.g. challenging rural areas, as discussed in section 3.3.2 (c) above), where there is no strong business case for investments in very high capacity broadband networks, would diminish the risk for first-moving providers and thereby increase the likelihood of such investments. This might in particular be the case where a network investor in a challenging area proceeds on the basis of commitments by a sufficient number of end-users to give reasonable prospects of a return on investment (demand aggregation).

Question 130: Do you consider that derogations should be possible, in challenging areas, from the generally applicable maximum contract duration (currently 24 months pursuant to Article 30 USD) in order to diminish the risk of providers who are the first movers investing in very high capacity networks in such areas?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response; in particular describe how such areas could be defined and how any such derogation could be implemented.

We believe that the first priority would be to improve the prospects of investing in all the areas, in order to maximize the coverage on a commercial basis. See our answer to previous question 57.

That said, it seems clear that for challenging areas, or very costly connections, a longer contract duration could help. Nevertheless, Telefónica believes that sector specific rules related to contract duration are not required anymore and it should be a Telco provider's right to require a minimum contract duration.

It should be taken into account that:

- The degree of competition in the market is very high and increasing. Customers are offered a broad range of possibilities for choice.
- Obligations on user rights should be imposed consistently irrespective of the nature of the service providers (be them Telcos or OTTs).
- At the end, those rules go against consumer's interest. As stated in the answer to question 114v, Regulation on termination periods could limit the ability of service providers to design and offer different products and services. Indeed, those obligations potentially prevent the development of new business models where, associated to longer commitments, consumers could have significant advantages.

(continue here if necessary)

Question 131: Should the scope of the number portability regime be adapted to new technology and market developments and apply also to elements other than telephone numbers which may be obstacles to the switching of providers of communications services, for instance to allow moving content stored by end-users with communications service providers?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. Would your answer be affected by the question whether the scope of application of any such obligations would extend beyond providers of electronic communications services as currently defined, e.g. also to providers of online inter personal communications services, or to online service providers do not provide communications services (e.g. cloud-based services, online intermediaries)?

Telefónica believes that, in the new digital world new possibilities to generate closed ecosystems are emerging, which could raise competition concerns that should be addressed.

Some big players in the digital markets are enjoying dominant positions in several (usually vertically integrated) markets, becoming gatekeepers (by concentrating extraordinarily big amounts of users data in one operator or by vertically integrating and/or bundling search engines, browser, apps, OS, etc.). By controlling enduring essential bottlenecks, some internet players are able to foreclose access to end-users and to difficult users' switching; so the regulation of those platforms should be analyzed.

Competition concerns linked to global dominant Internet platforms have to be scrutinized in much more detail. In particular, there is a need to undergo a closer review of the digital bottlenecks to check if new regulation should be adopted and if identify eventual abusive behaviors under competition law take place, as well as to evolve the application of competition law to digital markets since some players that control closed systems or enjoy strong network effects are impeding effective competition.

Portability should not be enforced on wide basis. It is rather a solution to reverse specific situations of lock-in effects and where switching barriers have resulted in enduring bottlenecks and lack of competition.

It should be applied only to the Relevant Asset (data, content, identifier or any other feature) managed by a platform without which customers would be unwilling to switch. In the case of mobile network, this asset would be the phone number assigned to the customer, and not the data on service usage (number of calls, their time-start, time-finish, duration, cost ...).

(continue here if necessary)

Question 132: Is there a need to adapt the current rules on change of provider (switching) in view of the increasing importance of bundled offers consisting of (i) several communications services or (ii) a combination of communications services and other services?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

If yes, what amendments should be envisaged? Please specify.

We strongly believe that the numbering resources used today by operators are already subject to sufficient portability obligations, and no extension of them is required. In fact, the experience we have in Spain is that convergent bundled products are already being widely offered and the existing models of number portability are properly working for this. In addition, should a problem be identified in any of the countries with the procedures currently used, it should be solved at the national level according to the particularities of the portability models implemented in that country. In conclusion, we believe that there is no need to adapt the current ex ante regulation on this matter.

As stated in the answer to the question above, we believe that policy makers should now turn to look at other possible digital bottlenecks to check if there may be situations where portability of other resources different from numbers (such as Apps, Data) should be required to enable effective customer choice through switching. This applied in a reasonable and balanced way and always after a cost-benefit analysis.

(continue here if necessary)

Question 133: The current sector-specific end-user provisions are based on the principle of minimum harmonisation. This approach provides Member States more flexibility and allows them to maintain or adopt more protective measures. But it also leads to a fragmented level of end-user protection across the EU and additional complications for the cross-border provision of services. The Consumer Rights Directive of 2011[1] therefore adopted a full harmonisation approach. Should any (maintained, amended or new) sector-specific end-user provisions aim at:

- minimum harmonisation
- full harmonisation
- minimum harmonisation at a very high level
- do not know

Please explain your response.

Harmonization is required for cross-border consistency and to build trust on consumers who use services offered in different EU member states. However, it should be kept to what is essential and not impose disproportionate costs for the industry.

Nevertheless, Telefónica believes that harmonization is not the real problem. The key issue is the enforcement of the rules to non-European players. We consider that there is already a broad scope of rules regulating consumer's rights, but the problem comes when applying them to different players.

A particular example could be the contract rules for on-line purchasing. Nowadays in EU there are sufficient specific mandatory rules to protect consumers' rights. All these rules apply to all the European agents who deal with consumers within the EU. Likewise these rules cover all the purchases made on-line, regardless of the nature of the acquired good. Therefore, it is not necessary to create more consumer protection rules. The real need is to arbitrate mechanisms that force and control the application of these rules to all the agents who operate in the European market (including the companies whose headquarters are located out of the EU). For these reasons, the aim must be to apply the existing regulation or any new regulation of platforms to all the agents who operate in the European market, regardless of where their headquarters are based. Likewise, the above mentioned rules must cover all purchases, no matter the nature of the good or services that are being dealt with (digital content, provision of telecommunications services, equipment, etc) and regardless if the acquisition of the product is free of charge from the consumers' perspective (i.e, either executed in exchange for money, or paid by other means (such as delivery of information, consent for the use of personal information, etc)).

(continue here if necessary)

c) European emergency number 112 and harmonised numbers for harmonised services of social value (116 numbers)

Continuous technological change and market developments, in particular regarding voice over Internet Protocol (VoIP) based on digital service platforms associated with a broadening range of connected devices, are raising an increasing number of technical and regulatory challenges on the possibility for EU citizens to access the 112 emergency number in the future. The annual reports on the implementation of 112 provisions have constantly shown a dissatisfactory state of play, such as low awareness of the 112 number, caller location accuracy levels that reach the emergency services well below the current technological possibilities offered by next generation access and Global Navigation Satellite Systems and access for disabled end-users heavily relying on 112 SMS.

Question 134: In your view, is it important to ensure access to 112 from all connected devices at the end-user's disposal and from any newly defined communications services, including in a private corporate network environment?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We believe that this obligation should be considered on a case by case basis, after a cost-benefit analysis, and based on the concept of proportionality.

(continue here if necessary)

Question 135: Would it be appropriate, having regard to the division of responsibility in the Union regarding civil protection, for the EU electronic communications framework to regulate not only the means of connection to emergency services, but also the performance criteria of those services (e.g. the data processing capabilities and minimum performance levels of the Public Safety Answering Points)?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Telefónica does not support regulating at European level the performance of emergency services. It would imply questioning the different national solutions already implemented at national level, and the investments made to implement them.

Telefónica would consider much more appropriate to provide non-binding guidelines to address this issue. In that way each country, based on national solutions already implemented, would be able to determine the preferred solutions for improved accuracy and reliability and the times of implementations. That way backward compatibility with national solutions would be preserved.

(continue here if necessary)

116 is a range of easy-to-remember and free-of-charge phone numbers to assist citizens in need throughout Europe. Based on the Commission decision on reserving the national numbering range beginning with '116' for harmonised numbers for harmonised services of social value (2007/116/EC) and its subsequent amendments, the European Commission has reserved five short numbers with a single format 116 + 3 digits for helplines that should be accessible to everyone in Europe. The decision was based on the provisions of the regulatory framework on the harmonisation of numbers to promote pan-European services. In 2009, the co-legislators reinforced the 116 provisions by introducing requirements on Member States with regards to promotion and access, enshrined in Article 27a of the Universal Service Directive.

On its website, the Commission regularly publishes a report on the state of implementation of 116 numbers. So far only two of the five short numbers have been well taken up (116000 missing children hotline is operational in 27, and 116 111 child helpline in 23 Member States).

In 2011 and 2012, the Commission carried out a Eurobarometer surveys to assess the level of awareness in the Member States. The survey showed the widespread absence of awareness of these services. The survey showed strong support expressed by citizens across the European Union for such services, but also the absence of awareness of these numbers.

Question 136: In your opinion have the provisions related to harmonised numbers for harmonised services of social value proven to have EU-level added value, and should they be maintained at the EU level?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We have repeatedly observed that public interest and take-up of “harmonized numbers for harmonized services of social value” is very limited. This is because the need for such numbers was/is very limited too. Therefore, we do not see the need to maintain them.

(continue here if necessary)

We believe that it is not a matter of public awareness. The problem is that the need for these numbers is very limited and also will remain limited in the future. So, we see no reasons for investing in publishing and maintaining these numbers.

d) Future needs for machine-to-machine communications (M2M)

M2M refers to the automated transmission of data between mechanical or electronic devices equipped with sensors and metering capabilities. It represents one of the fastest growing segments of the telecom market with a widening range of large-scale applications, e.g. in the areas of automotive, health, smart cities, etc. Its rapid uptake is likely to raise critical issues in the area of numbering, and in particular the risk of national mobile number exhaustion, the extra-territorial use of national numbers, the diversity of national numbering regulatory requirements, or the lock-in of SIM cards with the connectivity provider.

Question 137: Under the current framework, only undertakings providing electronic communications networks or services may be granted rights of use for numbers under the general authorisation. These numbers are however not available to other undertakings using on (very) large scale electronic communications services as an ancillary component to their products and services (e.g. connected objects). Is the scope of assignees of rights of use of numbers still relevant?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Telefónica agrees that the scope of assignees of rights of use for m2m numbers is still relevant.

M2M applications require networks offering ubiquitous coverage, long range connectivity and flexible scalability. Numbering/Addressing for M2M devices is a key issue. For the long Term Internet Protocol version 6 (IPv6) addressing has the potential to become the solution for addressing M2M devices but, for the Short-Medium Term, E.164 numbers seems to be the preferred option as it leverages on the existing capabilities (billing, routing, authentication etc.) of fixed and mobile networks. Nevertheless these numbers are used as addresses, for technical reasons, and are unknown to the subscribers of the services.

Telefónica considers that revising the rights of use would not be desirable. We believe that it is difficult to envisage a setting where non-operators would be able to fulfil the legal and regulatory requirements associated to the use of public numbers. Rules for sustainable, efficient, global and interoperable use of public numbers have been defined over the years between the operators and international and national administrations, and any kind of changes of these rules should be carefully considered.

Should the referred undertakings need numbers, they can always enter into negotiations with the existing operators, or, even, become operators themselves, subject to rights and obligations applicable under the regulatory framework.

(continue here if necessary)

Question 138: Should the electronic communications framework address in a coherent manner other aspects of identification and authentication of M2M networks, i.e. not only numbering but also IP addressing and cognitive identifiers?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Telefónica disagrees. We believe that IP resources (used for M2M and for many other services) are properly managed by international organizations which are well prepared to accommodate the emerging needs in terms of new policies. Telefónica supports this current set up and believes that no further intervention is required unless it can be proven that the industry is failing to address the market needs.

(continue here if necessary)

Question 139: In the face of the above issues, are national numbering plans a suitable way of administering numbers for Machine-to-machine (M2M) communications services of pan-European or global scale?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. If your response is negative, would you consider a European attribution system for M2M communications to have adequate geographic scope?

Telefónica believes that numbering resources for m2m services are not scarce and do not constitute a bottleneck. At national level, regulators have defined specific M2M number ranges where required. Taking advantage of the possibility to use the full 15 digits of the E.164 Recommendation, those number ranges allow for a great capacity. As an example, in the case of Spain, the code 59 is destined for M2M services with a capacity of 100 billion numbers.

It is important to take into account that M2M services are marketed following business models different to those applied for traditional services. While the latter are basically sold under a Business to consumer (B2C) model, where roaming is just an added facility, in the case of m2m services, they are basically sold under a Business to Business to Consumer (B2B2C) model. It means that the businesses recipient of the M2M numbers could sell their final products to customers on pan regional basis. In such cases, the so-called permanent roaming could be required over the lifetime of the service. In fact, permanent roaming is the prevailing practice for the provision of cross-border M2M-services and is a key engine for the development of pan-European M2M-market, as it provides well-tested and scalable solutions for cross border service provision.

Regarding the issue of European attribution systems for m2m communications, we believe that it is not a good solution. M2M-market is global by nature and introducing European numbering scheme would not cater to the needs of this market. Considering the good availability of national and international number resources, we see little value in such new European numbering scheme. In contrary such scheme could even disrupt scalability to the detriment of European consumers and businesses. The evolution of the E.164 numbering is under the responsibility of the ITU-T which is responsible for the recommendations on public numbering plans and identifiers. We see no need to create parallel European numbering spaces.

(continue here if necessary)

M2M applications are likely to drive demand for embedded SIM cards (eSIM) provisionable over-the-air (i.e. reprogrammable in order to authenticate the device with a different connectivity provider without physical change of the SIM) and eSIMs could also be used in end-user terminal equipment (handsets, tablets). The use of eSIMs may have implications on switching electronic communications service provider and the related rules.

Question 140: Will there be demand for SIM cards to be more easily provisionable over the air, for both M2M communications and end-users' own devices?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We believe that currently there is not demand for this kind of solution. Actually, users are familiar with physical SIM cards that allow them to easily change them from terminals to update their information and which give them the possibility to purchase additional SIM cards to use local service abroad. At least for individual consumers, the development of SIM cards provisionable over the air does not add anything to the consumer. Moreover, this kind of SIM cards could make more difficult for users to carry on these operations, depending on the developed processes.

However, in M2M devices the use of SIM provisionable over the air could have advantages because in some cases the M2M are too small to have an exchangeable physical SIM or are difficult to access (e.g. embedded devices in cars) or impractical (e.g. electricity meters) so likely there is demand from the industry.

Small wearable devices may require also in the future SIM cards provisionable over the air but we do not expect a significant demand in the medium term.

(continue here if necessary)

Question 141: Should over-the-air provisioning of SIM cards be promoted by regulation?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. If your response is positive, please indicate in which circumstances and by what means this should be promoted.

We believe that it is not necessary to resort to regulation to promote over-the-air provisioning of SIM cards. The industry should develop an interoperable over-the-air provisioning solution for SIM cards that can be used by all telecom service providers and SIM card manufacturers. The standard that is being developed at the GSMA association is, in our view, a promising solution to fulfil this need. Competition authorities should be aware about the possible rise of other closed proprietary solutions that could be promoted by some players using their dominance in adjacent markets. These solutions could dramatically limit the competition in the market and harm users.

(continue here if necessary)

e) Scope of 'must carry' and Electronic Programme Guide provisions[1]

If broadcast content is considered relevant inter alia for pluralism, freedom of speech or cultural diversity, 'must carry' obligations ensuring the transmission of specified TV and radio channels can be imposed on providers of broadcast networks (e.g. cable TV or terrestrial TV networks).[2] Similar obligations cannot be imposed on platforms which provide TV services over the open Internet (such as e.g. Netflix, Magine). Furthermore, traditional TV and radio channels represent a declining share of audiovisual consumption patterns and relevant content can also be presented in videos, audio- and text files provided over the Internet and viewed on devices other than a TV set (e.g. smartphones, laptops, PCs).

Member States can also influence the scope and determine the order of TV channel listings in electronic programme guides in TV sets (electronic programme guides, EPG). Some stakeholders have suggested to extend these navigation facilities, e.g. to a general 'findability' facility which would make it easier for end users to find any particular item of relevant content via Internet access.

[1] Similar issues have been raised in the context of media regulation, see the [consultation document](#) pp 18-29. Further information on the consultation is provided [here](#)

[2] The obligations may include the transmission of services specifically designed to enable appropriate access by disabled users.

Question 142: Regarding digital content considered relevant for general interest objectives such as pluralism, freedom of speech or cultural diversity typically provided by public services broadcasters, but also by some designated private broadcasters and potentially by other sources, please indicate whether you have experienced (several answers possible):

- cases where availability of such content could be (or risks to be) prevented or restricted
- cases where finding such content could be (or risks to be) made unreasonably burdensome for viewers
- cases where finding and enjoying such content could be (or risks to be) unreasonably burdensome for disabled viewers
- cases where such content is only available in a form which is modified or compromised by a third party beyond the control and without the consent of the broadcaster/source

Please explain your response and provide concrete examples

Telefonica by means of its Movistar IPTV service makes its best efforts to make these contents easily available and easy to find for its subscribers.

(continue here if necessary)

Question 143: Is there a need to adapt or change the provisions on:

	yes	no
'Must carry'	<input checked="" type="radio"/>	<input type="radio"/>
Electronic Programme Guides (EPG)	<input checked="" type="radio"/>	<input type="radio"/>

Please explain your response.

As far as must carry obligations are concerned, we would like to point out that we cannot accept this obligation limitless, as there is a technical limited capacity that needs to be managed. Any obligation should be limited to include channels that are in possession of a license (given by the Member State), which means that the channel will comply with the provisions of the Directive as a guarantee of its programming. In this regard, as we would operate as a supplementary coverage that obligation should be with no compensation on our part. At the present time, this obligation represents the cost of incorporating the channel into the platform, and this should be considered appropriate. However, we suggest exploring the feasibility of the creation of an access payment for channels in order to be part of the platform, like the one that is paid for accessing the DTT platform. Regarding electronic programme guides (EPGs), as they are menu-based systems that provide users of television with continuously updated menus displaying broadcast programming or scheduling information for current and upcoming programming, we need to highlight the difficulty that IPTV providers find as these guides cannot be fully updated when channels make any change in their programming without notice. In practice, IPTV platforms, certain brands of smart TVs and other devices are dependent on the performance of the businesses that prepare this EPG. As there is no obligation for channels to inform to the aggregators of any change, they are not fully updated and this should be reviewed.

(continue here if necessary)

3.6. The universal service regime

With the opening of the telecommunications market to competition there was a need to provide safeguards for those circumstances where competitive market forces alone would not satisfactorily meet the needs of end-users, in particular the case where they lived in areas which were difficult or costly to serve, or who had low incomes or disabilities.

The three basic characteristics of the current universal service concept relate to availability, affordability and accessibility, while minimising market distortions. The scope of universal service as determined at EU level includes: (i) access at a fixed location comprising: a connection to a public communications network enabling voice and data communications services at data rates sufficient to permit functional internet access, and access to publicly available telephone services (PATS); (ii) a comprehensive directory; (iii) comprehensive directory enquiry service; (iv) availability of public payphones. Furthermore, Articles 7 and 9 of the Universal Service Directive contain additional elements which may be a part of the universal service obligation(s), namely measures for disabled users and affordability of tariffs.

The current rules do not explicitly mandate the provision of a broadband connection within the scope of universal service at EU level. However, Member States have the flexibility to do so in light of their national circumstances. So far, a few Member States (Belgium, Croatia, Finland, Malta, Spain, Sweden and, only for disabled end-users, Latvia) have decided to include broadband connections within the scope of universal service (from 144kbps up to 1 and 4 Mbps).

The universal service regime provides for the following means to finance the universal service obligations: (a) a public fund, (b) a fund to which providers of electronic communications networks and services are required to contribute, or (c) a combination of both.

The EU has developed other policy tools outside the universal service regime in order to address the needs of users, in particular as regards the deployment of broadband and access to digital services. For instance the Directive 2014/61/EU on measures to reduce the cost of deploying high-speed electronic communications networks; promotion of and usage of public funding from Structural Funds or from the Connecting Europe Facility; promotion of stability of prices for regulated wholesale access to SMP copper networks, and pricing flexibility for non-discriminatory regulated access to SMP NGA networks; advocacy of broadband coverage requirements in less densely populated areas as part of the spectrum assignment conditions; and adoption of the EU state aid rules to support the deployment of broadband networks in areas where there is a market failure.

3.6.1. Evaluation of the current rules on universal service

The first set of questions aim at providing input for the evaluation of the functioning of the current regulatory framework.

Question 144: To what extent has the current universal service regime, both as defined at EU level and implemented at national level, been effective in ensuring:

	significantly	moderately	little	not at all	do not know
a) the availability	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) affordability	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) and accessibility of electronic communications services to all EU citizens?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your response.

The reality of today's electronic communications market, with several competitors and various technologies, is radically different to the market of the 90s, when universal service obligations for fixed telephony were introduced following the repeal of the monopolies over single copper-pair networks. As a result, the regulation of the universal service then imposed is now no longer appropriate for the real situation of the market, and much less so in the competitive scenario for 2015-2020.

Moreover, the universal service has contributed in a limited way to increase the affordability and the accessibility because the implementation has produced artificially high prices that could be avoided using alternative implementations that favour competition. If universal service should have been left to free competition with no price impositions for the basic telephone service, in practice, this service had been provided with lower prices.

Fixing a maximum price for US services make them unprofitable in many geographic areas and resulting in no operators having sufficient incentives to deploy network in those areas. The maximum price and the consequent availability of service are directly linked and cannot be considered by policymakers in isolation. The trade-off between price and availability is better made dynamically through the competitive process.

Today's competitive environment is already able to meet market demand for basic e-communications services at affordable prices for almost all citizens.

Telefónica recognizes that it is still the case, for a relatively small number of customers (disabled customers, those on low income and those living in very isolated areas) access to services can be in some cases problematic. Consequently, we propose, some policy guidance focused on avoiding such "social exclusion" addressed by direct government funding mechanisms.

(continue here if necessary)

Question 145: From your experience, is the current universal service regime, both as defined at EU level and implemented at national level, efficient taking into account administrative and regulatory costs and the (positive and negative) effects produced?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response, and indicate if you have suggestions for improvement.

The current Universal Service system, based on the regulatory framework put in place at the time of de-regulation of the telecommunications market in 1998, establishes “minimum” universal service obligations, as well as the rules for calculation of their cost, and contemplates mechanisms for their financing and compensation. However, in practice, only a few European countries have implemented these financing and compensation systems. Most have relied on the former incumbent to fund the provision of universal services from its own income, at the expense of other investments and innovations. Almost a decade after the complete liberalisation of the market, this represents a distortion of competition, as a single operator has to assume public service responsibilities in a context of liberalisation, without any compensation whatsoever.

Therefore, continuing to apply this model would mean maintaining the same problems of financing and distorted competition. Furthermore, with many Member States contemplating increasing the universal service requirements on “functional internet access”, current funding arrangements will become unsustainable, even if US funding is shared amongst all market participants.

In addition, the universal service system was originally based on certain subsidies between users and services. The operator provided a service to specific users at a loss, and needed to obtain greater profit from other services or customers to recoup these losses.

This system worked adequately during the monopoly age, but the arrival of competition has eroded its financial rationale. The artificially higher prices paid by those customers or services that were subsidising the USO made them more attractive for competitors and removed sources of funding for incumbent operators, either because prices came down to competitive levels or because customers moved to cheaper competitors.

Moreover, the regulation of the universal service slows down innovation and investment, because it acts as a disincentive for the deployment of new high speed networks by operators who fear that, if successful, they will be obliged to provide broadband connections at such higher speeds within the scope of the universal service. This was the Draft Recommendation Proposal that the European Commission made on 2013 which was fortunately not approved at least by the Council.

(continue here if necessary)

Finally, we must not forget that the cost of the universal telecommunication service is borne by the sector and not the public purse. Apart from being discriminatory with regard to other sectors that finance their social provisions by charging these to State funding, this drains funds away from an innovative and key sector for economic and social growth just when huge investments need to be undertaken. Furthermore, it is often the case that only those providers of services captured by ex ante regulation are required to contribute to universal services funding. OTTs, for example, are now a significant provider of services to consumers, but make no contribution to universal services funding (or in many cases, general taxation).

Given all the above, we can conclude that the current universal service is not efficient because it produces higher prices and inefficient investments. If there are social and/or territorial needs that cannot be satisfied by the market, like coverage in high cost areas, customers with low income or customers with special needs, there are other instruments that are better suited to meeting these needs and which would be more economically efficient and result in less distortions to competition than a USO, for example State Aid or direct financial support instruments (European and/or National public funding programs). Finally, we would like to point out that while we all (the telcos industry) share the objective of achieving broadband for all stated in the EU 2020 strategy and we are strongly committed to contribute to this goal, we believe that due to its shortcomings (e.g. inefficient and ineffective cost sharing and financing mechanism) and to the very nature of this policy instrument, USO is not the right tool to achieve broadband for all.

Question 146: Has the universal service regime been an efficient policy tool to ensure that end-users are safeguarded from the risk of social exclusion?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

As we have stated above, the universal service system was originally based on certain subsidies between users and services. The operator provided a service to specific users at a loss, and needed to obtain greater profit from other services or customers to recoup these losses. And therefore, we believe the present universal service regime is inefficient and produces market distortion so it is not an efficient policy to ensure that end-users are safeguarded from the risk of social exclusion.

Telefónica believes that today's competitive environment, radically different to the market of the 90s, is already able to meet market demand for basic e-communications services at affordable prices for almost all citizens.

For those minorities who cannot access to those "safety net" services and in order to avoid such social exclusion we recommend the States, within their social cohesion policies, to assume the responsibility of enabling low income families to have access to those safety net services, as they do with other services such as education or health, without unloading these unjustified charge on telco companies.

To this end, the Government will have to redesign the social income support (such as the current "abono social" ("Social subsidy" in English) in Spain) and adopt a series of mechanisms that directly subsidise low-income users, so that the user can utilise this to partially pay their chosen operator invoices.

These alternative social policies can produce better results in terms of efficiency and enhance transparency for consumers. It is important to keep in mind that direct funding by governments ensures that there is a focus on minimising expenditure and maximising efficiency. Any fund should be targeted on specific outcomes and should only be sized to match those objectives. Applying the current universal service regime is unlikely to provide good incentives for efficiency.

(continue here if necessary)

Question 147: Is the current universal service regime coherent with other provisions and underlying principles of the EU telecom regulatory framework and other EU policies (such as state aid)?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

Since the US regime was envisaged, Member States have begun to adopt a range of State Aid measures to improve geographical availability of broadband services. State Aid mechanisms require competitive access to be offered on the deployed infrastructure, but do not stipulate pricing or the consumer offer, this is left to the market.

On the other hand, the US regime assumes monopolistic service provision and stipulates a maximum price and minimum service to consumers.

These inconsistent approaches, when deployed in tandem generate a situation where some citizens living in the same country would enjoy higher speed connections than others just because they live in an area eligible for state aids funding mechanism.

It is of note that, if it is proportionate to deploy state aid to increase broadband availability then, by definition, it is disproportionate for MS to expect the industry to fund a broadband universal service commitment.

In summary, it would be preferable to further strengthen the role of public funding to meet national and/or local requirements. The use of public funding ensures a more coherent approach than sector funding. Telefónica believes that a better balance of costs and benefits is ensured when public resources are used. The interaction of universal services (objectives) and state aid funding (means to achieve this) can therefore be addressed consistently.

(continue here if necessary)

Question 148: To what extent have the current rules regarding universal service obligations contributed to EU policy objectives and the interest of the citizens of the EU, in particular citizens at risk of economic and social exclusion?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

To prevent any deterioration of the competitiveness of the European telecoms industry, we agree with the European Commission (statement made by the Commission in its Draft recommendation/ 2013) that any additional burden on the sector should only be envisaged after a forward-looking assessment of whether “basic-broadband” cannot be ensured by the market nor by other public policy instruments including national broadband plans and funds provided by the European Union.

As we have said in the previous response to achieve the DAE objectives, public funding compliant with the EU competition and state aid rules are increasingly be necessary to complement commercial investments in areas where private operators do not plan to invest because of low return of investment. State aids have become an essential tool for European politicians to reach their ambitious Digital Agenda objectives and will likely play a continuously increasing role in achieving those Digital Agenda targets.

However, the Universal Service was designed to be strictly limited to what is needed to provide a safety net ensuring that a minimum set of services is available at an affordable price. And therefore, it is not the right legal instrument to reach Digital Agenda Targets. The legitimate goal to be reached through the Universal service is that safety net of services to avoid such social exclusion.

(continue here if necessary)

3.6.2. Review of the universal service rules

a) Universal service regime

Question 149: Will a universal service regime still be needed in the future to ensure that a minimum set of electronic communications services are made available to all users at an affordable price at a fixed location?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

The traditional regulatory approach to universal service should be fundamentally re-thought. The traditional approach to universal service, where traditional operators are obliged to deploy networks and offer access to some services at affordable price should be replaced by a different approach. Today the reality of electronic communications markets is radically different to the market of the 90s, when universal service obligations for fixed telephony were introduced. US is an instrument that has several shortcomings, mainly:

- it places on the private sector the burden of a social goal
- the mechanism used to finance / share the cost is problematic, inefficient and uncertain

There are other instruments that are better suited than universal service to meeting these needs (minimum set of services are made available to all users at an affordable price at a fixed location). A set of targeted instruments relying on efficiently used public funding should replace the traditional approach where operators are obliged to the provision of some services. This would be a more economically efficient approach and result in fewer distortions to competition than the traditional US obligations.

In this line of reasoning, Telefónica proposes a fundamental rethink of the USO concept, suggesting an alternative approach that tries to meet social needs with horizontal policies. If there are some social and/or territorial needs that cannot be satisfied by the market, like coverage in high cost areas, customers with low income or customers with special needs, there are other instruments that are better suited to meeting these needs and which would be more economically efficient and result in less distortions to competition than a USO, for example State Aid or direct financial support instruments (European and/or National public funding).

In conclusion, universal service obligation should be eliminated, but in case the European Commission decides that it should continue existing we consider that the US obligation should be extended to all players operating in the market. Universal service policy should not be specific oriented for the operator that is considered to have the obligation.

(continue here if necessary)

Question 150: Does universal service have a role in future in the sectorial context of electronic communications in order to provide a safety net for disabled end-users, as opposed to being left to general law?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response, in particular what should be the elements which should be considered.

Providing a safety net for disabled end users should be most effectively addressed by direct government intervention. The States, within their social cohesion policies, will have to assume responsibility for enabling equivalent access to disabled users as they do with other services such as education (i.e. kindergartens direct aid for low-income people) or health, without unloading these onto the companies in the sector.

(continue here if necessary)

b) Scope of universal service

Technological and market evolution has brought networks to move to internet protocol technology, and consumers to choose between a range of competing voice service providers. 36% of Europeans use voice over IP applications from a connected device to make cheaper or free phone calls (see "[Special Eurobarometer 414](#)").

At the same time, mobile telephony services are widely available and the tendency for fixed-to-mobile substitution is increasing. While there are still some localised problems with mobile "not spots" even for basic 2G services such as voice telephony, widespread availability and reasonable affordability of mobile telephony significantly reduce the need for a separate access to PATS at a fixed location.

Question 151: Do you consider the current universal service scope adequate in the light of latest as well as expected future market, technological and social developments?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Today, thanks to competition and new technologies, prices have come down considerably and voice network coverage has already been universalized. In particular, the spread and ever lower costs of mobile services have led to mobile phones replacing landlines, especially among lower income citizens and countries. Voice services have almost been universalized and therefore the Commission should thus remove voice service obligation. Regarding the Universal Service Obligation of providing a Broadband connection at a fixed location to support “functional internet access” we firmly believe that the universal service regime is not the right instrument. Where broadband coverage cannot be achieved on a commercial basis, EU and national policy instruments and public financing should be utilised. As we have said before it is necessary to phase out the present Universal Service Obligations because it is an inefficient mechanism to meet the social needs and the scope is not adequate. There are other instruments that are better suited to meeting these needs and which would be more economically efficient and result in less distortions to competition than a USO, for example State Aid or direct financial support instruments. The new mechanisms will be adapted to the market, technological and social developments and should allow covering the social needs using as much as possible market products alone. The present the universal service includes services like public payphones, comprehensive directories or fixed telephony services that should not be maintained considering the technology and market evolution.

(continue here if necessary)

Question 152: In the light of recent and expected future technological and market developments, is the requirement for the provision of telephony services at a fixed location necessary?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

What reassurances are needed that for example VoIP or mobile telephony can provide reliability, quality and security on par with such services? Please explain your response.

Today's competitive environment is already able to meet market demand for basic e-communications services at affordable prices for almost all citizens.

In particular, market mechanisms alone, without the drive of a USO have made the provision of voice services through mobile phones ubiquitous and affordable for the vast majority of population. The spread and ever lower costs of mobile services have led to mobile phones replacing landlines driven by customer choice, especially among lower income citizens.

Given the high levels of mobile penetration in Europe, it is difficult to argue that citizens are excluded from voice services. Mobile has clearly achieved this objective for voice services as evidenced by a mobile average penetration rate of 124% in Europe (Digital Agenda Scored Board 2013).

(continue here if necessary)

The market trends over the last years show an increasing shift of EU consumers from fixed voice telephony to mobile-only. It can be expected that the anticipated full fixed-mobile network convergence facilitated by the advent of 5G mobile networks by 2020 will further amplify that trend.

In this context, it could be worth exploring whether the provision of access to a network connection should be delivered at a fixed location (i.e. the end-user's primary location or residence) as under the current Universal Service Directive, or whether it could be more relevant to focus on individual end-users. The universal service objective could in such a case shift to provide connectivity to a network at all locations.

Question 153: In light of future market and technology developments and user expectations, would you consider that the provision of connection to a network under the universal service should be targeted towards providing connectivity to end-users anywhere rather than to households/at primary location?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response, also by reference to alternative tools such as coverage requirements in spectrum licences. What could be the possible implications in terms of likely designated universal service operators, the costs, the impact on private investments and on other regulatory measures?

We would agree with the idea that most users of universal services will use in the future connectivity based on mobile networks. However it does not mean that will be always the case as to have a 100% coverage of mobile networks is not always economically efficient and other alternatives (example satellite) should be also considered. A cost benefit analysis from a social welfare point of view should determine the relevant level of coverage which should be considered appropriate within the definition of universal service.

(continue here if necessary)

Recent surveys show a declining usage of some of the services under the current universal service obligations, in particular with regard to public payphones, directory enquiry services and phone directories (see "E-Communications and Telecom Single Market Household Survey" (2014),; for phone directories see "[E-Communications Household Survey Report](#)" (2010), Special Eurobarometer 335). At the same time, it can be observed that many Member States have relaxed their universal service obligations related to these services. Some Member States have never imposed universal service obligations in this respect. In general, comprehensive directories and comprehensive directory services are often deemed to be satisfactorily delivered by the market without the need for a public intervention, while public payphones are often considered of declining significance due to widespread availability of comparable services such as mobile telephony, for example.

Question 154: Given the latest and expected future market and regulatory developments related to provision of the following services, is it justified to maintain them in the scope of universal service?

	strongly agree	agree	disagree	strongly disagree	do not know
a) public payphones	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
b) comprehensive directories	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
c) comprehensive directory enquiry services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Please explain your response.

Public payphones have ceased to be a service in use due to the appearance of alternative services such as mobile phones or call shops, which are more comfortable, cheaper, offer more and better features and meet most market demands.

Regarding directories we can say that there are now competitive services at prices affordable to everyone and, therefore maintaining them within the scope of Universal Service Obligations is increasingly unjustified. In any case, technological progress has made other mechanisms that are more efficient and more environmentally friendly than paper directories viable for the purpose of providing this service, such as information numbers and websites. The principle of technological neutrality must also be applied in this service.

ETNO presented last 11 September a consumer survey on the digital habits and expectations of Europeans in nine major EU markets.

The conclusions regarding public payphones and directories are:

- Directories are not the main source of contacts for consumers in most countries - physical directories in particular are used by a minority of consumers.

- Consumers report payphones could have a value in case of emergencies: however, a very small minority actually uses payphones, indicating the possibility of emotional attachment to public payphones with little practical use.

(continue here if necessary)

Article 7 of the Universal Service Directive on specific accessibility and affordability measures for disabled end-users related to network connection and PATS gives a clear preference to similar (not mandatory) measures being taken under Article 23a of the Universal Service Directive, where requirements enabling access and choice for disabled end-users can be imposed on a much wider scope of undertakings (all undertakings providing electronic communications services as opposed to only those with a universal service obligation).

Question 155: Would it be reasonable to require mandatory measures for disabled end-users to be imposed on all undertakings providing electronic communications services (strengthening Article 23a of the Universal Service Directive) as opposed to only those with a universal service obligation (Article 7 of the Universal Service Directive)?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

It should not be mandatory for any operator.
Requiring this as mandatory for all undertakings eliminates a parameter of competition among them, which is certainly against the interest of these users.
If mandatory, funding should come from public sources.
As the financing of the universal service obligation must be a State issue, it should be integrated into the General State Budget. In case, this obligation relies on the sector, we consider that it should be shared between all the businesses participating in the sector with no exemption based on the volume of sales or service revenues. Therefore, this situation should be aligned with the rest of taxes that apply to all the players, like the regulators tax.

(continue here if necessary)

In order to boost digital inclusion and reduce the digital divide, the question arises whether to extend or to focus the scope of universal service obligations to provision of very high-speed broadband networks to public areas and places of specific public interest such as for example schools, universities, libraries, education centres, digital community centres, research hubs and health care centres, provided private and other public investments will not deliver. Such places are at the forefront of the development of the digital society, enabling the development of digital skills and boosting research and education in general.

Most of these could also function as public internet access centres (PIAC), which can offer internet access to the public, on a full-time or part-time basis (ITU [definition](#)). Such centres could help to familiarise citizens who have few digital skills and competences or little exposure to online services and applications with the benefits of connectivity. Positive effects could thus be expected in building skills, interest, and demand among less digitally aware segments of the population, as well as in giving citizens access to high-capacity connectivity on an occasional or (in the case of schools in particular) on a systematic basis.

Question 156: Should universal service play a role in future to help realising public interest objectives (such as very high-capacity connectivity for schools, public buildings such as libraries, and university/research hubs)?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. If yes, what kind of solutions would be the most suitable (i.e. hotspots, fixed internet access)? And should such internet services in PIAC be offered free of charge to all users?

The provision of specific services to help realising public interest objectives should be carried out, in those areas where there is enough competition, by market forces. However, for those unprofitable areas Governments should implement public funding policies, using State Aids or Structural and Cohesion European Funds and therefore, falling outside the current model of the universal service (this cases fall down under the "territorial cohesion policy"). In fact, today, member states are already applying those instruments to provide broadband connections to public schools in isolated areas.

(continue here if necessary)

c) Provision of broadband connectivity and access to Internet service to all end-users

Access to the Internet through a broadband connection has become an essential service over which a number of specific services are being used by a majority of consumers. On average, 75% of Europeans use Internet, either via fixed or wireless means. New developing services, such as digital media content, cloud computing, Internet of Things, eHealth or eGovernment are becoming crucial for EU citizens and businesses to actively participate in the digital society. It can be reasonably expected that in future, the role of broadband as an enabler of access to services becomes even more prominent.

By 2014, basic broadband has been made available to all in the EU, when considering all major technologies (xDSL, Cable, Fibre to the Premises, WiMax, HSPA, LTE and Satellite). Fixed and fixed-wireless terrestrial technologies covered 96.9% of EU homes in 2014. However, coverage in rural areas is substantially lower for fixed technologies (89.6%) ([See Digital Agenda Scoreboard](#)).

Broadband take-up has increased considerably in past years. 78.3% of EU households had a broadband connection in 2014, however the number of connected households in rural areas is substantially lower. Fixed broadband penetration (by households) rose to 69.9% and mobile broadband was used by 72% per 100 inhabitants.

In view of rapid deployment of 4G in recent years, and further deployment of fixed networks in parallel (in rural and sparsely populated areas facilitated by available public funding or through territorial coverage requirements in spectrum licences or national legislation), it is likely that the 30 Mbps DAE broadband target will largely be met by 2020 through a combination of fixed and mobile technologies.

However, even assuming a very broad deployment of 4G, some areas, including extremely low density areas and places with very difficult geographical conditions (such as mountain valleys, islands, or other peripheral areas) are likely to remain not covered with networks providing 30 Mbps connectivity.

Question 157: Do you see reasons for or against explicitly including access to a broadband network connection allowing functional Internet access within the scope of universal service at EU level?

- For including
- Against including
- both

Please explain your response, in particular what would be the possible implications for the economy and society.

We believe that due to its shortcomings (e.g. inefficient and ineffective cost sharing and financing mechanism) and to the very nature of this policy instrument, USO is not the right tool to achieve broadband for all.

The needs that cannot be satisfied by the market, like coverage in high cost areas, customers with low income or customers with special needs, could be fulfilled using other instruments that are better suited to meeting these needs and which would be more economically efficient and result in less distortions to competition than a USO, for example State Aid or direct financial support instruments.

Broadband should not be included as part of the universal service as the Digital Agenda Strategy (European and national level) is in place and it is included into its objectives to be met 2020. The Framework Directive will probably enter into force by that date, so that there is no point in extending it since it would be built on old realities. Just in cases, in which the Digital Agenda plans are not met, this situation should be addressed with specific measures like Public Aids Programs specifically designed for that purpose. There will be certain countries, where because of their peculiarities broadband objectives may not be fulfilled by that year, for which the European Commission should evaluate the feasibility of including the universal service obligations in that Member State, being the the only situation in which this obligation should be applied.

(continue here if necessary)

Question 158: If included in the universal service, how should the broadband connection be defined in a manner that would allow sufficient flexibility to cope with different Member State situations? Or should it be defined in a way that enables end-users to use certain categories of services (i) used by the majority of end-users or (ii) considered as essential for the participation in the digital economy and society?

- By requiring a minimum download/upload speed
- By enabling the use of certain services
- By speed AND service use
- Other parameters

Please explain your response.

As stated in the previous question, we believe that due to its shortcomings and to the very nature of this policy instrument, US is not the right tool to achieve broadband for all, no matter how the broadband connection is defined.

However, if EC decided to include it, it should be defined in the terms marked above.

Special consideration and analysis should be given to the Universal Service Obligation regarding Broadband connection at a fixed location to support “functional internet access”. Broadband availability connections should be defined in terms of very basic needs of citizens, as a “safety net”.

We think that broadband availability connections should be defined in terms of matching the basic demand of citizens (safety net), and considering carefully the costs associated, and not in terms of specific speeds.

In this sense, we should not forget that the aim of Universal Service is the provision of those services, and only those services, needed to avoid “social exclusion”, as the concept was originally defined in the EU regulatory framework.

Those “safety net” services should be limited to services such as access to e-mail services, web browsing, e-banking, e-administration, e-commerce...

It is important to differentiate the aims to be covered by the European Digital Agenda, that can include objectives such providing access speeds of 30 mbps, and the aims of the Universal Service that, as it has been explained before are different.

(continue here if necessary)

Moreover, we believe that when analysing those digital society services which are essential to avoid digital social exclusion special attention should be given to those services as e-health or e-education services which could require extremely high speeds connection. Those services should be covered by other public policies (as explained above) because they go beyond what is the real purpose of the Universal Service. In this sense, the USO must remain a social safety net, and not be confused with other political objectives such as “of mobile and fixed networks to meet the objectives of the Digital Agenda. The implementation of the USO should not lead to unreasonable burden on the sector, especially at a time where operators have to invest in the next generation’s high-speed networks.

On the other hand, any type of assessment based on the average speed used by a majority (such as the concepts discussed in 2013) or applying a percentage over those BB connections speeds used by this majority should be avoided. The main criteria would be whether it supports services necessary to avoid social exclusion.

Any reasoning based on speeds used by the majority, does not cater for the real cost of providing the service and in particular the cost of the remaining small percentage of population. This small “last” percentage, is the segment that has the highest cost to be provided with broadband connections.

In relation to the references in the DSM Communication about high-speed connectivity to public schools and universities, we believe that including this type of connectivity in the US scope, would only imply an increase of the current uncertainties, lack of transparency and funding problems that the current US regime has.

In most areas, there is enough competition and the service will be provided by market forces. However, in case there is some problem for some unprofitable areas Governments should implement targeted public funding policies. In fact, today, Member States are already applying those instruments to provide broadband connections to public schools in isolated areas.

Question 159: If broadband connection were to be included in the universal service regime and defined "by services used", what would be such 'essential' minimum online Internet services? (more than one answer is possible)

- Sending/receiving E-mails
- Voice communication over the internet
- Access to information (online news; information about goods and services)
- General Web browsing
- cloud services
- E-Government
- Internet banking
- E-health
- E-learning
- E-Commerce/ online shopping
- Social Networking
- Maps and transport
- Streaming music/internet radio
- Streaming video/video on demand
- Other Multimedia
- Gaming
- Assistive tools for persons with disabilities
- Other

Please explain your response.

As stated in a previous question, we believe that due to its shortcomings and to the very nature of this policy instrument, US is not the right tool to achieve broadband for all, no matter how the broadband connection is defined.

However, if EC decided to include it, it should be defined in the terms marked above.

Broadband availability connections should be defined in terms of very basic needs of citizens, as a "safety net". This limits the kind of services that should be included in the scope of the US. The provision of the above services should be carried out using a reasonable bandwidth that could fulfil basic needs (e.g. video for E-learning should use standard definition). See above question.

(continue here if necessary)

Question 160: Can it be ensured that broadband under universal service obligations is provided in a cost-effective manner causing the least market distortions, on a forward looking basis?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Telefónica believes that the present regulatory approach to universal service is inefficient and does not take properly into consideration the reality of today's electronic communications market. Telefónica proposes a fundamental rethink of the USO concept, suggesting an alternative approach that tries to meet social needs with horizontal policies. If there are some social and/or territorial needs that cannot be satisfied by the market, like coverage in high cost areas, customers with low income or customers with special needs, there are other instruments that are better suited to meeting these needs and which would be more economically efficient and result in less distortions to competition than a USO, for example State Aid or direct financial support instruments.

(continue here if necessary)

Question 161: Is the inclusion of broadband in universal service likely to have a disruptive impact on commercial broadband investment plans and usage of other policy tools to drive broadband deployment?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. If your response is positive, what could be the appropriate protective mechanisms against such crowding out effects?

The inclusion of broadband in universal service under the current regime could be highly disruptive as it could disturb the competitive environment and crowd out private investments.

As it has been explained before we propose an alternative approach that meets social needs with horizontal policies. If there are some social and/or territorial needs that cannot be satisfied by the market, like coverage in high cost areas, customers with low income or customers with special needs, there are other instruments that are better suited to meeting these needs and which would be more economically efficient and result in less distortions to competition than a USO, for example State Aid or direct financial support instruments.

(continue here if necessary)

Question 162: Considering the disruptive effects that universal service obligations may have on the market, should other public policy tools (state aid, demand promotion measures) be used to foster broadband deployment, either as an alternative or as a complement to universal service obligations?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

A set of actions, each with their own independent objectives although complementary between each other:

a. RURAL AND ISOLATED AREAS: Actions that help to make broadband access possible in those remote and rural areas where private investment does not reach as they are uneconomic: These actions would form part of the territorial cohesion policy, which is also the responsibility of the Governments:

- Regional aid programmes can play a useful role in extending broadband coverage to areas where infrastructure roll-out is not commercially viable. The most efficient instrument to provide broadband connections to specific areas are the use of competitive tender procedures to determine the most cost-effective operator to provide those services on a on a technological neutral basis.

- Public Funding, however, should not displace commercial investment and should be allocated by an open, transparent and non-discriminatory competitive tender on a technologically neutral basis.

- The technology chosen for the provision of the universal service should be the most efficient to provide the broadband service in each area. For example, mobile technologies can offer the most cost effective solution.

- The case of using State aid to extend coverage of standard broadband to the final underserved or currently not served is clearly much more efficient that using aid in areas already served.

b. SOCIAL EXCLUSION OF SOME USER GROUPS: Actions aimed at avoiding the social exclusion of certain low-income groups, i.e. making broadband services accessible for users with low incomes or special social needs. These actions would form part of the social cohesion policy, which is the responsibility of the Governments. If the question is affordability of services for those at the margin, then this issue is most effectively addressed by direct government intervention: Through the provision of "direct subsidies" such as "Telecom vouchers" to those concerned: A "telecommunication voucher" allows the user to pay the operator they choose. Users entitled to social vouchers would contract the operator of their choice under commercial terms. This mechanism is applicable to any low-income user regardless of whether they live in urban or rural areas. In case of urban areas in which several technologies compete to offer the same broadband services, this procedure would enable low-income users to be able to choose either an ADSL landline or other alternatives such as broadband via the mobile.

(continue here if necessary)

f) Financing of universal service

Increasing broadband connectivity provides benefits not only to the electronic communications sector, but also to online service and content providers as well as users and the society as a whole, as broadband is an enabling technology that facilitates the use of a wide range of online services by citizens and businesses.

A possible inclusion of broadband services within the scope of universal service is likely to increase the cost of providing the universal service. At the same time, the inclusion of broadband would certainly expand the number and range of beneficiaries of a universal service – all providers of online content, applications and services potentially benefit from the business opportunity presented by ubiquitous very high-capacity connectivity. The same is true of individual end-users, who are increasingly "prosumers", generating large amounts of online material available to a wide audience.

Taking into account the need to close the digital divide, one question to be addressed is whether a future funding mechanism should be administered, as now, at national level, or should be administered at EU level in order to permit contributions to be distributed across Member States.

Question 163: What is the most appropriate and equitable way of financing the universal service, in particular in light of a possibility to include broadband into universal service scope, taking into account all those who benefit from its provision?

- public funding
- electronic communications sector
- providers of online content, applications and services
- all end-users (e.g. by an extra charge on their monthly invoice)
- a combination of public funding and industry funding
- other sectors

Please explain your response.

In addition to all the reasons explained in previous questions to justify the use of public funding we believe the following should be considered:

- Virtually all European States are capable of absorbing the funding aimed to extend basic broadband connections. Even more, it would ensure its coherence with the rest of the social policies applied to services of general interest, such as highways, education or health. Even more, it would ensure its coherence with the rest of the social policy.
- As it is the governments themselves that provide the funding to be used for expanding broadband, they will have incentives to reduce the net cost of providing the services as much as possible, thus reducing public expenditure and maximising public economic welfare.
- This system of funding would be in line with the funding that applies to other sectors of the activity in which the costs of certain decisions taken by the Administration are funded through taxes or surcharges on customers.

(continue here if necessary)

Question 164: As regards individual contributions by relevant undertakings, how should they be calculated?

- fixed fee per contributor
- volume-based fee
- transaction-based fee
- market share
- revenue share
- other

Please explain your response.

We believe public funding should be used. However if any contribution is required from the Sector we believe it should be based on volume income and players participating in the ecosystems that use electronic communication systems as base of their businesses should contribute including players like OTTs and communication service providers.

(continue here if necessary)

Question 165: As regards individual contributions by relevant undertakings:

	strongly agree	agree	disagree	strongly disagree	do not know
a) Should there be any minimum/maximum contribution?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
b) Should certain small market players/certain groups of end-users be excluded from contributions in order to safeguard against undue financial burden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Please explain your response.

We believe public funding should be used. However if any contribution is required from the Sector all players should contribute taking as a base theirs incomes and the number of users.

(continue here if necessary)

Question 166: In view of helping to close the digital divide across the EU, could a new universal service funding mechanism set at EU level and made up of contributions from across Member States be considered an appropriate tool to facilitate sharing of the costs involved?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. Does your response depend on the source of the contributions (public general budget; electronic communications sector; providers of content, applications and services; all end-users)?

As we said before we do not believe a universal funding mechanism based on industry contributions. Other mechanisms should be set up like State Aids or other direct financial support instruments (European and/or National public funding).

In case that a mixed funding system (public and private contributions) is established, the levels of the industry cap/contribution should be kept as low as possible as to ensure efficiency in the setting of targets and also to guarantee that complementary public funding is drawn upon whenever available.

In case if the present system based on USO is maintained we believe it is better to handle it at national level. To do it at European level would be more complex and could produce even more inefficiencies than the present system.

Moreover, in case that industry funding is maintained, a Key Issue is how the broadband service provider is designated and how costs are determined.

Nowadays, this is raising serious concerns due to the legal uncertainty of current practices.

Therefore it is necessary to improve the current system in the following areas:

NRAs should set the net cost of the USO prior designation of the service provider. But the NRA should not considered major deviations on the Net Cost raised by the operator/s selected

Address the uncertainties regarding net cost determination and the trigger for sharing the cost, such as the “unfair burden assessment” and the issue of ‘non-tangible’ benefits to implement efficient systems of cost recovery.

How to assess a “reasonable request” under Article 4.1 of the Directive and how to apply extra construction charges for costly set-up costs. This can apply, for example, to cases where requests for broadband connections occur in areas of high cost but are perfectly affordable by the final user.

(continue here if necessary)

3.7. Institutional set-up and governance

Whilst the lack of consistency in the regulatory approach taken at national level is not solely attributable to the regulatory set-up in the EU, it has become apparent over the past years, that it is – to a degree at least – the result of the institutional set-up (see Study on [How to Build a Ubiquitous EU Digital Society](#)) and the way the various institutional players (i.e. mainly the NRAs, the Body of European Regulators, i.e. BEREC, and the European Commission) interact and can influence the regulatory outcome (see Annex IV for more background).

Diverging regulatory conditions in the individual national markets can have a profound effect on cross-border trade and, thus, on the development of a Single Market in electronic communications and may significantly distort competition across the EU. Significant divergences by the individual institutional actors in the pursuit of existing regulatory principles and regarding how the objectives of the regulatory framework are implemented across the EU can create considerable obstacles to cross-border trade and market entry; Therefore, whilst consistency across the EU is not a primary goal in itself, it is necessary to address concrete obstacles arising from divergence. For example, on the fixed side, only a few operators are offering pan-European services to multi-national corporations (see Annex III for more background).

In addition, in particular the benefits of wireless innovation can only be realised if Member States and the European Commission cooperate efficiently and effectively, based on a spectrum governance framework that is aimed at ensuring economies of scale for wireless equipment and coherent spectrum usage conditions throughout the Digital Single Market for users.

3.7.1. Evaluation of the current institutional set up and governance structure

The first set of questions aim at providing input for the evaluation of the functioning of the current regulatory framework.

Question 167: Are the current rules regarding the political independence of the NRAs, as set out following the 2009 review in Article 3(3a) of the Framework Directive, complete and clear enough and have they been effective in attaining the objective of ensuring that in the exercise of its tasks, a national regulatory authority is protected against external intervention or political pressure liable to jeopardise its independent assessment of matters coming before it?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response. If possible, please specify what improvements, if any, could be envisaged to reinforce the political independence of the NRAs

We believe the provisions of the framework directive are complete and clear enough to guarantee the independence of NRAs. We also believe that, while preserving their independence, NRAs should act in a way that is consistent with the EU broader political vision.

Adequate NRA funding and appropriate resources are key to maintain their independence. In general, although varying across EU markets, funding and available resources seems to be adequate in relation to their current duties and responsibilities.

(continue here if necessary)

Question 168: In your view, has the current EU consultation process under Article 7/7a of the Framework Directive been effective in achieving a consistent application of the EU rules for market regulation in the electronic communications sector?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

Coherent regulation is crucial in electronic communications markets, providing the cornerstone of a true European internal market. However, we must understand that this internal market is at the same time many different sub-markets as well, with their own particular characteristics and dynamics. Coherence in regulatory intervention therefore in reality means ensuring that regulation is applied proportionately and addresses the specific regulatory and competition issues that arise at a particular place and at a particular time. However tempting it may be, consistency must not be confused with a 'one-size-fits-all' approach to regulation.

The Article 7/7a procedure as well as the Regulatory Framework are considerably complex to achieve a full and consistent EU harmonisation for market regulation, leading to substantial regulatory uncertainty. The more complex the framework and process are, the more room for divergence and less harmonisation among Member States when implementing EU laws. In order to improve consistency in the application of EU rules, there is a need for simplification overall. .

Another source of inconsistency observed in the application of the EU rules is not that much related to the art 7 procedures, but stems from the different nature of the objectives within the regulatory framework. These could be balanced in many different ways, especially if they apply to 28 different local market realities that coexist across Europe. Nevertheless, full EU harmonisation should not be achieved by means of empowering one regulator over the others in the overall market analysis process. A balanced full EU harmonisation should be achieved by means of a very simple and transparent process where all regulators and stakeholders could interact in an appropriate way.

(continue here if necessary)

Question 169: To what extent has BEREC efficiently achieved its main objective, i.e. contributing to the development and better functioning of the internal market for electronic communications networks and services by aiming to ensure a consistent application of the EU regulatory framework for electronic communications?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

In order to keep achieving their objectives, BEREC's independence from other regulators should be safeguarded. BEREC's technical work and expertise has been valuable in the recent years to contribute to the development and better functioning of the internal market as well as to improve a consistent application of EU regulation. Nevertheless, timely industry involvement in BEREC guidance remains critical for operators due to more and more complex regulatory provisions such as TSM Regulation on Roaming and Net Neutrality. In order to improve efficiency, BEREC's should further increase transparency and more regularly engage with industry stakeholders, especially as they deliver very specific technical guidelines where operator's know-how and input are key.

(continue here if necessary)

Question 170: To what extent have the current rules on resolving disputes between undertakings by the NRAs, as set out in Articles 20 and 21 of the Framework Directive, been efficient in their outcome?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

We believe that the current review represents an opportunity to move from a heavy handed ex-ante regulatory regime to a lighter and more responsive ex-post regulatory oversight, more based on commercial negotiations for access agreements. To ensure the latter, the ex-post regulatory oversight by the NRA should provide for an effective remedy in case of abusive behavior. Under this approach the role of commercial negotiations and the role of the NRA as an adjudicator of eventual disputes should be clarified.

To prevent 'agency shopping' and a 'second round of negotiation' with the Regulator, successfully concluded commercial contracts should be deemed compliant with regulatory requirements. Only under exceptional circumstances concluded contracts negotiated under commercial terms should be susceptible for an ex-post scrutiny of the Regulator. In case of failed negotiations complaints with the Regulator should be sufficiently substantiated, i.e. by demonstrating that no serious negotiations were undertaken by the access operator, that negotiations were unreasonably delayed or that the conditions offered were clearly abusive. Under such circumstances, the NRA has to investigate the case and has to come to a decision within 3 months after the filing of such a complaint.

Apart from the filing of a complaint by an access seeker under the conditions described, the Regulator can open an ex-post regulatory proceeding at any time ex-officio when the Regulator has sufficient evidence of an abusive behavior .

In the new Digital Age where markets are getting increasingly complex, fraud and arbitrage will become major concerns for operators and regulators. Therefore, an effective and timely manner dispute resolution is deemed necessary to protect all good faith parties involved in the provision of network and communications services.

(continue here if necessary)

Question 171: In your view, to what extent is there a sufficient degree of coherence in the application of the regulatory framework by the various institutional players (NRAs, BEREC, the European Commission) to ensure the fulfilment of the policy objectives established in Article 8 of the Framework Directive?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response (in doing so, please set out in which areas increased consistency would bring improved outcomes and would help fostering the single market for electronic communications).

If coherence is understood as the degree of EU harmonisation, a distinction should be made between network and communication services. The latter, being ECS or ISS, are deemed to be European or even global services, therefore EU harmonisation of certain regulatory issues, such as consumer protection is welcomed. On the other hand, network services are intrinsically local and a EU harmonisation is not reasonable as they are seriously impacted by their local market specificities. As an example, there is little point in having a "one size fits all" wholesale product at EU level, as it will add new layers of regulation i.e. of wholesale products, extraordinarily increasing costs and complexities for the management of wholesale services.

Additionally, institutional complexity overall has been one of the major hurdles of the existing regulatory framework. It would be helpful to radically simplify the institutional setting, eliminating this complex system leading to cumbersome and lengthy proceedings with unpredictable outcome and poor certainty. Increased transparency at all levels with all stakeholders should be highly desired.

(continue here if necessary)

Question 172: In your opinion, would a common EU approach (i.e. a more prescriptive EU framework which would further foster regulatory harmonization) add value in addressing the differences in the regulatory approach chosen by NRAs for individual markets in similar circumstances?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response. When doing so please set out what you consider to be the main variables, whether there are any justifications for such differences, where you see areas with less consistency and how you consider the EU governance process may influence the outcome.

Harmonisation is desirable at the level of principles avoiding as much as possible too prescriptive legislation in order to take into account the rapid pace of change in the ICT sector and the need for future-proof and predictable regulation.

Overall, instead of a more prescriptive EU framework, a further push to harmonisation of regulatory conditions should be based on a new regulatory paradigm where an increased transparency with all stakeholders plays a central role. We would welcome a simplification of regulations governing the EU electronic communications sector at the EU level as this should bring clarity and predictability for stakeholders.

(continue here if necessary)

Question 173: Do you consider that there are areas, in which the current requirement to undergo an EU consultation process pursuant to Article 7 of the Framework Directive does no longer add value with regards to furthering the Single Market for electronic communications?

- yes
- no
- do not know

Please explain your response.

(continue here if necessary)

Question 174: To what extent has the Radio Spectrum Policy Group (RSPG) efficiently achieved its role of assisting and advising the Commission on radio spectrum policy issues, on coordination of policy approaches, on the preparation of RSPPs and on harmonised conditions with regard to the availability and efficient use of spectrum?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response and provide areas for improvement as appropriate.

It is very important that the expertise that exists in the Member States informs policymakers at a European level to ensure harmonising measures take account of national market conditions and legacy issues. As such, the RSPG has done good work within its current scope.

Public consultations on draft policy opinions are effective tools to incorporate the views of industry stakeholders into the development and the refinement of the radio spectrum regulatory framework. However, the scope should be further enhanced to enable RSPG to improve European harmonisation of spectrum award procedures, the timing of availability and licensing conditions for mobile broadband radio applications in the EU.

(continue here if necessary)

Question 175: To what extent has the current governance for spectrum efficiently and effectively contributed to the provision of electronic communication services across the EU?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

Europe would benefit from better coordination between the institutions responsible for Spectrum Policy, Telecommunications Regulation and Competition Policy. Too often spectrum auction rules are used to bypass regulatory market analysis and impose remedies without having to go through article 7 processes, reducing the legal guarantees for operators. Also too often Regulators use spectrum policy to micromanage the number of operators in a market or the distribution of spectrum, only to find that the benefits of economies of scale find their way through mergers, which undo the market structure predetermined by auction rules. This generates adjustment costs and delays that ultimately affect end users.

A major challenge for European mobile operators is regulatory fragmentation in the EU28 in the area of spectrum policy and regulation. The current situation hampers investments in wireless infrastructure and deprives European mobile network operators from the necessary scale advantages. Europe suffers from diverging and complex auction formats, assignment procedures and licensing conditions.

Technical harmonisation measures developed via CEPT Mandates and through the RSCOM have delivered important benefits, such as the development of mobile networks in the EU. The current governance model has delivered effectively on its mandate on harmonisation, cross-border co-ordination and has provided, through the RSPP, a rough roadmap for spectrum to be made available for use in Member States. However, there is scope to do more to harmonise the conditions of use of such spectrum through binding EU legislation, as well as creating a more stringent timeline for the availability of frequency bands in Europe.

(continue here if necessary)

3.7.2. Overall institutional set-up and the role of BEREC

a) The role of BEREC and its set-up

The EU regulatory framework has been designed with flexibility in mind in order to allow national regulatory authorities to take account of national circumstances. However, the Commission has repeatedly pointed out (in particular, the Commission Staff Working Document "[A Digital Single Market Strategy for Europe - Analysis and Evidence](#)" of 6 May 2015) that many differences in the national regulatory approaches cannot be sufficiently explained by varying national circumstances.

The Body of European Regulators for Electronic Communications (BEREC) was established by [Regulation \(EC\) No 1211/2009](#), as part of the review of the telecoms framework. According to its mandate, BEREC shall contribute to the development and better functioning of the internal market for electronic communications networks and services. It should do so by aiming to ensure a consistent application of the EU regulatory framework.

The experience so far suggests that the procedural and institutional set-up currently in place appears to be ill equipped to ensure a more consistent approach in similar circumstances. In particular, with regards to imposing remedies, the balance between achieving harmonisation in a flexible framework appears to be tilted in favour of flexibility neglecting needs for consistency.

For example, whilst remedies are imposed on operators by NRAs at the national level, the Commission and BEREC almost exclusively input through non-binding instruments in order to attempt to achieve EU-wide regulatory consistency on this level. In the past, this "soft law" approach has led to significant differences in some areas, clearly proving to be an obstacle for the development of a Single Market.

The question arises whether BEREC has achieved and, in its current two-tier governance structure, can achieve its main objective of ensuring consistency amongst its members in the application of best practice telecoms regulation. BEREC, as one of the key stakeholders at European level, has been faced with some criticism. According to the study on "[How to Build a Ubiquitous EU Digital Society](#)", in its current governance structure, BEREC is primarily motivated by a desire for self-determination, and that it delivers verdicts based on a 'lowest common denominator', or prioritises flexibility over consistency in the Single Market.

Besides, in July 2012, the European Parliament, the Council and the European Commission endorsed a Joint Statement on decentralised agencies, which included a range of principles within the so-called Common Approach. The Common Approach aims at making EU agencies more coherent, effective and accountable and addresses a number of key issues: the role and position of the agencies in the EU's institutional landscape, the creation, structure and operation of these agencies, funding, budgetary, supervision and management issues, etc. The Common Approach is meant to serve as political blueprint for guiding both the establishment and review of EU agencies.

Question 176: Do you consider that the current institutional set-up at EU level should be revised in order better to ensure legal certainty and accountability?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. In doing so, please consider the Common Approach on decentralised agencies and indicate whether in your view there are examples of institutional arrangements in other sectors which could serve as a model for the electronic communications sector.

Please express also your views as to how to ensure that BEREC has greater medium-term strategic direction and can devise positions which pursue the common EU interest, going beyond a lowest common denominator approach.

The role of BEREC should be reconsidered in order to shift its perspective towards an advisory body that provides the timely technical guidance that is needed to ensure consistency in the implementation at the national level of the provisions adopted by the EC (i.e guidelines on roaming or NN for the implementation of the TSM provisions).

The revision of the framework should lead to a clear formulation of the objectives in order to avoid a situation where BEREC would have too much discretion in their interpretation.

Due to the specifics of the telecom market (speed of technical evolution, local differences in terms of competitive dynamics and network architectures) we do not think that there are relevant examples of institutional arrangements in other sectors which could serve as a model for the electronic communications sector.

(continue here if necessary)

Question 177: Do you consider that establishing an EU Agency with regulatory decision-making powers within a clear framework of rules could positively contribute to achieving regulatory harmonisation in the EU telecoms single market in any of the following areas:

	strongly agree	agree	disagree	strongly disagree	do not know
a) market regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
b) spectrum management in the EU	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
c) end user protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
d) other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your response and specify if other.

We believe that no other regulatory body is needed.

(continue here if necessary)

Question 178: Should BEREC be given more executive tasks or binding powers in specific areas, for example numbering or addressing?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. In particular, please specify the tasks or powers you would consider appropriate to confer on BEREC.

In general, the role of BEREC should not be based on binding powers or executive tasks but more on its capacity to provide technical guidance that facilitates harmonized implementation of EU regulation. In the particular case of numbering and addressing, the current management model is working adequately and there is no need to modify and involve BEREC in these activities already well established and properly functioning.

(continue here if necessary)

Question 179: As regards the enforcement of EU communications sector-specific end-user rights, should the enforcement of EU communications sector-specific end-user rights at national level fall within the core competence of the independent national regulatory authorities for communications?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Although Telefónica Group agrees on the principle of strong consumer protection, we do not consider necessary to increase NRAs competences. Moreover NRAs have overlapping powers in this area with other competent bodies in some member states leading to situations of over regulation of the telco sector. Consumer protection should as much as possible be dealt with by non sectoral regulation and transferred to horizontal rules.

(continue here if necessary)

Question 180: As regards the enforcement of EU communications sector-specific end-user rights, should other national authorities (also) be competent for the enforcement of EU communications sector-specific end-user rights?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and specify which authorities and for which provisions.

Only one body at national level should be competent to enforce consumer protection measures, independently of their eventual sector specific nature.

(continue here if necessary)

Question 181: As regards the enforcement of EU communications sector-specific end-user rights, does the degree of harmonisation of the EU communications sector-specific end-user rights (maximum/minimum harmonisation) play a role in your reply to the previous questions?

- yes, it is the most important factor
- yes, it is one of several factors considered
- no

Please explain your response.

Harmonizing consumer protection can generally foster the creation of a real European Single Market, e.g. through reducing red tape and fragmentation of national consumer protection regulations.

(continue here if necessary)

Question 182: As regards the enforcement of EU communications sector-specific end-user rights, should the authority or authorities in charge of enforcement of EU communications sector-specific end-user rights at national level be able to cooperate among themselves to enforce EU communications sector-specific end-user rights cross-border in the EU (e.g. when consumers and providers are located in two different Member States, or when the same practices are encountered in several Member States)?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

To avoid eventual problems of lack of consistency enforcement of end user rights on a cross border basis, end user rights should not be sector-specific. Besides, any additional institutional layer creating additional complexity should be avoided.

(continue here if necessary)

Question 183: Have you identified any provision related to BEREC and the BEREC Office which in your opinion should be revised in terms of i) set-up (structure, composition, etc.), ii) mandate (objectives, roles, tasks, evaluation, etc.), iii) deliverables (powers, type of acts, content, timely delivery, etc.) and iv) functioning (procedures, working methods, internal rules, etc.)?

- yes
- no
- do not know

Please explain your response.

The role of BEREC should not be based on binding powers or executive tasks but more on its capacity to provide timely technical guidance that facilitates harmonized implementation of EU regulation. On this basis we do not see the need for substantial changes in BEREC, especially any changes that would enlarge its current set up, mandate and deliverables.

If any, more transparency and industry engagement should be required to BEREC as their technical guidance most times relies on issues where operators have extremely valuable know how and can closely collaborate and get involved. Stakeholders are however consulted in very short timeframes which prevent more quality in the contributions.

(continue here if necessary)

Question 184: Have you identified any provision in the regulatory framework (including the BEREC Regulation), which in your opinion should be revised in order to ensure that individual NRAs more systematically follow BEREC's opinions and guidance?

- yes
- no
- do not know

Please explain your response. If your answer is yes, please specify which provisions would benefit from a revision.

(continue here if necessary)

b) NRAs' independence, powers and accountability

The 2009 review of the regulatory framework aimed at strengthening the independence of the national regulatory authorities. In addition to independence from the regulated companies, safeguards aiming at ensuring political independence of the regulatory authorities were introduced.

Question 185: Have you identified any provision in the regulatory framework, which in your opinion should be revised as regards NRAs' independence and powers?

- yes
- no
- do not know

Please explain your response.

(continue here if necessary)

Question 186: Should the NRAs have a role in mapping areas of investment deficit, or infrastructure presence (including for State Aid purposes)?

- yes
- no
- do not know

Please explain your response.

(continue here if necessary)

Question 187: Should the provisions established in Article 3 of the Framework Directive be revised in order to adequately ensure that NRAs enjoy budgetary autonomy and adequate human and financial resources to carry out the tasks assigned to them?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Adequate NRA funding and appropriate resources are key to maintain their independence. In general, although varying across EU markets, funding and available resources seems to be adequate in relation to their current duties and responsibilities.

(continue here if necessary)

Question 188: Do the current rules on the accountability of the NRAs (i.e. Article 3(3a) of the Framework Directive on "supervision in accordance with national constitutional law" and Article 4 on the exercise of effective judicial control) strike the right balance between independence and accountability of NRAs?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response, and develop, if applicable, in which direction should this balance be altered, such as for example, by prescribing in more detail the scope of judicial review (minimum, maximum control), or how can the NRA accountability be reinforced while guaranteeing independence.

(continue here if necessary)

According to the EU Guidelines for the application of state aid rules in relation to the rapid deployment of broadband networks (January 2013), NRAs should have certain responsibilities with regard to the implementation of state aid decisions in the broadband markets. The Guidelines urge Member States to reserve an important role for the NRAs in the design and assessment of national projects. For instance, NRAs should be consulted as regards the identification of target areas, on access price and conditions and resolution of disputes. It calls on Member States to create appropriate legal bases for such involvement.

Question 189: Taking into account the current EU Guidelines on state aid, should any provision of the current regulatory framework for electronic communications be revised in order to improve the outcome of these processes?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

(continue here if necessary)

c) Market regulation: EU regulatory consultation process and harmonisation of regulatory conditions

There are two particular areas, market regulation and the management of scarce resources, in relation to which it is particularly appropriate to assess whether an increased consistency could contribute to further integration en route to a true Single Market. With regard to both areas, there may be various sub-themes, which could benefit more broadly from an institutional set-up that was geared more thoroughly towards ensuring consistency. For example, issues surrounding the independence and funding of NRAs, the constitutional set-up of BEREC, the design of the EU consolidation process under Article 7, the conditions applicable pursuant to the general authorisation regime or the rights of use for radio frequencies, the Commission's powers to adopt harmonisation measures under Article 19, standardisation, rights of way, numbering, spectrum management, naming and addressing to name but a few.

Concerning market regulation, one area, in relation to which a more consistent approach is particularly important, is the choice and design of access remedies. Unfortunately, it is especially in this area where there is the most notable divergence across the EU. Whilst competition still predominantly takes place at the national level, EU-wide consistency in designing access remedies is increasingly considered important, in particular by pan-European operators, in order to create a level playing field so as to provide opportunities for entry and competition across national markets whilst ensuring efficient investments and innovation, all in order to ensure the best outcomes for consumers and citizens in terms of product offerings, price, choice and value across an EU-wide Single Market. In addition to access remedies, fragmentation of other regulatory conditions (e.g. authorisation conditions) may also represent an obstacle to market entry and cross-border provision of services. The negative impact a fragmentation of conditions has on the provision of connectivity services has been widely reported by the BEREC consultation on the cross-border obstacles to business services and by various studies.

Question 190: Do you think that the current roles and responsibilities of the individual actors in the consultation process, in particular BEREC and the Commission, should be amended?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

Current roles and responsibilities of BEREC-Commission-NRA in the consultation processes remain balanced and do not need further amendments as of today. A balanced and well distributed of roles and duties among them is fundamental to achieve a solid, future proof and consistent result. This 3 axis approach guarantees an adequate equilibrium to take on board all perspectives to the EU decision making process.

(continue here if necessary)

Question 191: Do you consider that there are any ways in which the current EU consultation process could be streamlined in order to reduce the burden for all actors involved?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response (When doing so please set out what you consider to be the most burdensome parts of the current EU consultation process for the stakeholders involved and how the burden could be reduced).

We strongly agree that streamlining the consultation process will bring major benefits. Nevertheless, the streamlining process main objective should be to simplify regulation and to significantly reduce “time to market” of decisions as currently consultation processes are extremely lengthy for the Digital Age. In any case, the streamlining process should not be in detriment of dialogue, broad consensus or industry engagement.

Additionally, we also strongly support Commission’s view to have further EU integration and increased consistency approach in order to achieve a true Single Market. In order to achieve these objectives and make them solid and future proof, policy makers should foster the following actions in their daily activities:

- Simplification of current regulatory framework.
- Continuous dialogue among policy makers and industry players.
- More transparency and further use of public consultation with industry players.
- Decisions taken by broad consensus among policy makers and industry.
- Smart regulatory planning Have clear strategy, objectives and achieve a satisfactory and quick implementation
- Increased speed in decision making, avoid lengthy periods in the Digital Age

(continue here if necessary)

Question 192: Are there any current conditions attached to the general authorisation for the provision of electronic communications services and networks (as listed in the Annex of the Authorisation Directive and/or specified at national level) which should be revised in order not to hinder the cross-border provision of electronic communications services and networks?

- yes
 no
 do not know

Please justify your response by indicating, if applicable, which kind of services are most affected.

The following conditions should be removed from the Authorisation Directive Annex as potentially will hinder cross-border provision of electronic communications services and networks if they are finally maintained:

- A1. "Administrative charges in accordance with Article 12 of this Directive". All electronic communications services and networks are subject to administrative charges but these vary significantly across EU Member States and could distort cross border provision. Reducing just to the strictly necessary administrative charges will diminish this barrier to cross border services. Additionally, some services provided by OTT's are equivalent to communication services but are not subject to the same administrative charges. This situation should be solved.

- A8. "Consumer protection rules specific to the electronic communications sector, including conditions in conformity with Directive 2002/22/EC (Universal Service Directive), and conditions on accessibility for users with disabilities in accordance with Article 7 of that Directive". This obligation should be removed to horizontal legislation as all communication services in order to apply to all equivalent services same rules.

- B1. "Obligation to provide a service or to use a type of technology for which the rights of use for the frequency has been granted, including, where appropriate, coverage and quality requirements". Foster across EU technical neutrality on frequency bands will reduce administrative burdens and will help to achieve economies of scale in Europe..

- B7. "Any commitments which the undertaking obtaining the usage right has made in the course of a competitive or comparative selection procedure". This potential obligation is too broad to be kept in the annex and potentially will drive to divergences across EU, hindering the provision of cross border services and networks.

- C4. "Obligation to provide public directory subscriber information for the purposes of Articles 5 and 25 of Directive 2002/22/EC (Universal Service Directive)". This obligation is obsolete and should be removed from the annex due to technological progress as requested in the section devoted to Universal Service Directive.

- C8. "Any commitments which the undertaking obtaining the usage right has made in the course of a competitive or comparative selection procedure". This potential obligation is too broad to be kept in the annex and potentially will drive to divergences across EU, hindering the provision of cross border services and networks.

(continue here if necessary)

Question 193: According to the national provisions as well as your experience, should national notification requirements under the general authorisation regime be revised in order to allow that they are fulfilled in practice by operators non-established in the country of provision of the service?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response if possible by indicating also which kind of obstacles, if any, occur.

National notification requirements should be streamlined and significantly reduced as red tape and bureaucracy a heavy burden. An enhanced notification process should reduce industry red tape and costs as well as to improve Administration coordination processes. Nevertheless, the process should secure that non-established players in the country should be subject to the same rights and obligations (sameservice same rules principle).

(continue here if necessary)

Question 194: Under the general authorisation regime, an undertaking which intends to provide electronic communications networks and or services may be required to submit a notification whose content is limited to what is necessary for the identification of the provider. Based on your experience, would it generate added value if notification requirements were standardised at EU level (in a standard template) and if the notification on such a standard template was centralised at BEREC or equivalent level, without this being a prerequisite for commencement of activity?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

A standard template will not improve significantly the current situation nor achieve major benefits for the industry. A centralized process could increase bureaucracy without great added value generated.

(continue here if necessary)

Question 195: To what extent have you experienced changes of financial and competitive conditions attached to rights of use having a significant impact on the structure of the market and/or the financial sustainability of the provision of services?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response by indicating, if applicable, specific examples of changes of market conditions and of related impacts.

Some Member States have employed rights of use, especially for spectrum, to shape the market and organise competition (effectively circumventing the process of market analysis in some countries). This is done either by reserving some specific resources for new players at preferential conditions and/or by imposing specific obligations relating to MVNO access to mobile networks. In addition, Member States also use the allocation of spectrum resources as a budgetary tool; meaning the timing and financial conditions attached to license allocations or license renewals are not always in the best interest of the digital economy.

(continue here if necessary)

Question 196: Are there regulatory obligations (including general conditions attached to the general authorisation or to rights of use as well as specific obligations imposed on operators) that would benefit from technical harmonisation at EU level, in order to reduce red tape in general, costs of cross-border provision and more generally to exploit economies of scale?

- yes
- no
- do not know

Please explain your response by indicating, if applicable, also which kind of regulatory obligations and/or services would benefit most from such harmonisation and, if available, any quantification of these benefits.

There are no major benefits of further harmonizing the EU general authorization regime at a technical level. Nevertheless, harmonizing at EU level rights of use related to spectrum could have positive impact, especially on the technical side to achieve economies of scale. On the economic side, it's not obvious that a harmonization of assignment procedures could benefit per se as these should take into account local circumstances.

(continue here if necessary)

3.7.3. Efficient and effective Spectrum Governance in a Digital Single Market

With regard to the management of radio spectrum, as one of the most important scarce resources for the digital economy, the existing governance structures focus on the harmonisation of basic technical parameters, because the benefits of wireless innovation rely on the making available on the market and putting into service in the Union of radio equipment (governed by Directives 1999/5/EC and 2014/53/EU) and the use of such equipment throughout the Digital Single Market based on common allocation of spectrum by Member States and the technical harmonisation of the usage parameters under the Radio Spectrum Decision 676/2002/EC. However, with the exception of spectrum made available on a licence-exempt basis via a general authorisation (e.g. Wi-Fi, or other short range devices) spectrum users may not benefit from harmonised usage conditions, based on sufficient consistency of the timing of effective assignment or of associated conditions.

It is therefore necessary to investigate whether the current governance model in this area falls short of ensuring consistent assignment conditions throughout the Union as well as whether the current processes to making harmonise spectrum available throughout the Digital Single Market present a potential barrier for home-grown wireless innovation to reach the market in Europe. A common approach to best practices in spectrum management and governance would reduce the administrative burden at national level and at the same time increase the predictability sought by investors, while taking into account the principles of subsidiarity and proportionality and national ownership of the relevant assets.

Maximising spectrum-based economic benefits via economies of scale means more revenue for Member States – directly in fees and indirectly by increased added economic value; revenues, which would remain exclusively with Member States. A common and transparent fast-track procedure for undertaking technical compatibility and sharing studies might equally reduce the administrative burden at national level, and at the same time would also reduce the resources needed for stakeholders to gain access to spectrum for new applications or technologies.

a) Evaluation of the functioning of the current regulatory regime and processes.

Question 197: To what extent is the current applicable regime to define technical harmonisation parameters based on Commission Mandates to CEPT:

	significantly	moderately	little	not at all	do not know
a) Satisfactorily transparent in regard to the way the necessary technical studies are conducted?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Efficient and timely in responding to technology developments and/or market demand?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Effective in terms of providing legal certainty to operators throughout the EU?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Successful to spur the benefits of wireless innovation in the EU?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your response.

Telefonica believes that the current process is both timely and efficient, allowing those that wish to participate in the process the ability to do so.

(continue here if necessary)

Question 198: How significant for your organisation are the resources needed to follow and contribute to the CEPT procedures in response to a Commission Mandate?

- very high
- high
- moderate
- do not know

Please explain your response, including how satisfactory you find the CEPT process in general from your organisation's point of view.

(continue here if necessary)

Question 199: For SMEs, how do you view the current CEPT technical spectrum harmonisation process ? (several answers possible)

- efficient
- supportive of SME innovations
- a comparative advantage for the EU
- supportive to disruptive or innovative applications
- opaque
- cumbersome
- difficult to access for SMEs
- unsupportive to disruptive or innovative applications

Please explain your response and provide suggestions for improvement if any.

(continue here if necessary)

Question 200: Are specific measures necessary to ensure access of small and medium sized enterprises to harmonised spectrum?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

(continue here if necessary)

Question 201: Given the current upstream involvement of CEPT, ETSI and other stakeholders in the preparation of technical studies for future spectrum harmonisation measures, to what extent is it possible to protect commercial secrets of an innovative wireless application, when aiming at harmonised spectrum access in the EU?

- significantly
- moderately
- little
- not at all
- do not know

Please explain your response.

(continue here if necessary)

Question 202: Do you see a need to accelerate or streamline the Radio Spectrum Committee/CEPT process, with a view to coping with rapid market and technological changes and improving "time to market" for wireless innovations in the EU?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response. If yes, please provide suggestions.

The current process provides a transparent pipeline of future spectrum for IMT, which in our view keeps pace with innovation by vendors in our sector. We do not believe that the harmonization process presents a bottleneck.

(continue here if necessary)

b) Modernised Spectrum Governance for a Digital Single Market

Question 203: In order to serve the future wireless connectivity needs of the EU, would a common EU approach to governing spectrum access as a strategic resource in the Digital Single Market be necessary, while taking into account the principles of subsidiarity and proportionality and the character of spectrum as a national asset?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

Telefonica believes that a common approach to spectrum availability is required and that more can be done to ensure that the licence terms under which that spectrum is made available are common across the Member States. However, we do not see a strong case to go beyond this.

(continue here if necessary)

Question 204: Do you see the need for more transparency in the preparatory steps before the Commission takes binding technical harmonisation decisions to ensure legal certainty for spectrum access in the EU, i.e before and after the Commission issues a Mandate to CEPT?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

(continue here if necessary)

Question 205: Do you agree that a common and transparent fast-track procedure for undertaking technical compatibility and sharing studies would be a benefit for both administrations and stakeholders?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

Faster procedures are always welcome, but we do not believe that the current set-up can realistically be substantially accelerated without jeopardizing transparency and risking inefficient outcomes.

(continue here if necessary)

Question 206: Would you see the benefits of supporting the current contribution-driven process with the services of independent full-time technical experts that could be called upon to perform technical studies as input to preparatory steps needed before the Commission can take binding technical harmonisation decisions?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

We welcome the prospect of the EC commissioning independent studies as a way to enrich and balance the debates in CEPT. However, we would be concerned about the risk of a separate workflow isolated from CEPT, based on the work of independent consultants. In our view CEPT should remain the primary technical body assisting the RSC.

(continue here if necessary)

Question 207: Given the overall lack of vacant spectrum and the increasing need for all users to use spectrum efficiently, do you agree that NRA's responsible for spectrum management should monitor the actual usage of bands listed in their inventory of existing use?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

Usage monitoring should be limited to bands that depart from the principles of service and technology neutrality. Licenses in ECS bands are in general service and technology neutral, competition in downstream markets is strong and licensees already have all incentives to use the band in the most effective way.

(continue here if necessary)

Question 208: Can the Radio Spectrum Decision process, including the preparatory steps in CEPT, be accelerated and/or simplified, with a view to cope with the rapid market and technological changes?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

See answer to Q 205.

(continue here if necessary)

Question 209: Should Member States take a common approach when designing spectrum assignment procedures and conditions, with the aim to deliver the required regulatory predictability and consistency in the internal market while reflecting local market specificities?

- yes
- no
- do not know

if yes, how?

- On the basis of EU-level guidance (e.g. Commission recommendations, Commission implementing decisions, RSPG Guidelines, BEREC common positions, other)
- On the basis of peer-review discussions (e.g. between Member States authorities or NRAs grouped at EU level)
- Other

Please explain your response and provide examples.

Telefonica would favour EU-level guidance in relation to licence conditions, but we believe that assignment procedures are better dealt with by Member States. We would favour some form of peer review process in relation to assignment procedures.

(continue here if necessary)

Question 210: What would be the most important features of an EU-level body, which could support and develop in particular peer-review based guidance on assignment procedures and conditions, in order to promote network coverage and wireless connectivity in the Digital Single Market?

- based on EU advisory group entrusted with some implementing competences (e.g. RSPG enhanced)
- based on EU-level governance procedures and financed by the Union budget (e.g. like the BEREC office)
- based on EU-level cooperation of national competent authorities (e.g. like BEREC)
- based on intergovernmental cooperation of national competent authorities inside and/or also outside the EU (e.g. like CEPT)
- other

Please explain your response and provide examples. Hybrid responses are also possible.

The institutional set-up should be the one that most efficiently delivers the functional objectives set for it in the legislation.

(continue here if necessary)

Question 211: Do you see the need for binding guidance on certain aspects of assignment procedures and conditions to increase regulatory predictability and legal certainty for spectrum rights holders?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

Telefonica believes that there should be binding guidance with regard to at least licence conditions (rather than assignment procedures). At present the Annex to the Authorisation Directive provides a list of possible conditions that leaves too much scope for variance between Member States. We would welcome recommendations which constrain the scope and extent of licence conditions and identify what would be objectively justified and proportionate.

With regard to licence procedures, we can see a lot of merit in full harmonization of (1) Level of transparency to the market regarding the selection process and conditions ; (2) Objectives pursued by the selection process; (3) The appropriateness of an ex ante competition assessment; and (4) "pay only when available" with regard to monies paid for spectrum.

(continue here if necessary)

Question 212: In view to the harmonisation or coordination of assignment conditions and/or procedural aspects, would you consider appropriate that the Commission exercise its power under Article 19 of the Framework Directive to issue recommendations?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

If agree, what would be the most appropriate EU level body to advise the Commission in this area, any of the existing ones (BEREC, RSPG, COCOM) or others newly created?

- RSPG
- BEREC
- COCOM
- Other

Please explain your response.

(continue here if necessary)

Question 213: Do you consider that regarding certain key assignment parameters, a mechanism similar to that set by Article 4 of the Radio Spectrum Decision should be available, whereby common rules would be set in implementing measures by the Commission assisted by a committee of Member States representatives?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

We believe that the RSC should be able to harmonise (at least), licence duration (minimum term), notice period and conditions for notice to be served, payment terms and whether trading should be allowed, or not.

(continue here if necessary)

Question 214: Should such powers also cover the question whether the assignment of a given band should be conducted on a national, regional or EU-wide basis?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response.

We believe that supranational assignment procedures are sufficiently important that they require the involvement of the Council and Parliament

(continue here if necessary)

Question 215: Do you consider that, in addition to general EU-level guidance or rules on assignment, individual national authorities would benefit from consultations with the Commission and with their peers on all aspects of spectrum assignment procedures being prepared by them, and that this would favour the development of more efficient and convergent spectrum assignment proceedings across the EU?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

If you agree, when would be the best moment for such consultations?

- in advance of the public consultation
- in parallel to the public consultation
- shortly before launch of the procedure

Please explain your response.

We consider it is important that the views of prospective licensees are taken into account in the consultations. At the same time, there should be room for the NRA to take into account the views of their peers and the Commission, and modify the assignment rules accordingly.

(continue here if necessary)

Question 216: Given the potential cross-border implications of spectrum refarming decisions in Member States, do you consider that the outcomes of cross-border coordination efforts between Member States, such as those facilitated via the "good office" service of the Radio Spectrum Policy Group, should guarantee equitable access to harmonised radio spectrum among the relevant Member States and can be enforceable under Union law?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and provide examples.

(continue here if necessary)

c) Scope for co- and self-regulation

When reviewing the regulatory framework for electronic communications, it is important to examine whether there are areas which could benefit from self-regulation and co-regulation (see [Principles for better self-regulation and co-regulation](#)).

Question 217: Do you see a need to establish a greater role for co-regulation and self-regulation in areas of the current regulatory framework?

- strongly agree
- agree
- disagree
- strongly disagree
- do not know

Please explain your response and indicate the areas concerned.

We believe that self-regulation grounded on clear principles should play a greater role in the digital world, consistently with the constant innovation to which it is subject. In fact, we consider that it is the most effective, proportional, flexible and future proof approach for some areas (eg: user rights).

(continue here if necessary)

Question 218: Do you have any further comments or suggestions on the future scope and/or content of possible rules in the sector? Please explain your response.

In the field of Access to Network

- Urgent Modification of the Recommendation of Relevant Markets. In order to foster a quick deregulation of the markets no longer included in the European Commission's list of markets susceptible of ex-ante regulation. In the last review, some markets (particularly former market 2) were removed from the list. Nevertheless no provisions were made in order to promote their de-regulation. On the contrary NRAs were empowered to maintain it.
- Modify the Recommendation of Costing and Non-Discrimination (RCND). It should substantially be modified in order to convert it into a valid instrument to encourage investment in new networks.
- Notification of Measures to the EC in accordance to Art. 7 provisions. The EC should apply a clear pro-investment approach when dealing with Art. 7 procedures.

In the field of Spectrum:

- Speed up availability of new harmonized bands for current ECS, using the established procedures under the existing framework (Mandates to ECC and RSC Decisions).
- Harmonize conditions for new licences in bands available for ECS services, through Decisions approved on a band-per-band basis.
- A Recommendation with EU wide guidelines (soft law) should be published to ensure coherence in the analysis of spectrum holdings for competition policy purposes, to be used in particular in the design of auction rules.

(continue here if necessary)

Useful links

DAE glossary (<https://ec.europa.eu/digital-agenda/en/glossary>)

Connectivity needs consultation

(<https://ec.europa.eu/digital-agenda/en/news/public-consultation-needs-internet-speed-and-quality-beyond-20>

Background Documents

Annex I (/eusurvey/files/67c9df42-f4d6-4b7a-b9a7-c8f00fd49eff)

Annex II (/eusurvey/files/48b06e67-e76d-4171-bc2c-58fb2bd5804c)

Annex III (/eusurvey/files/4c8ef988-6e2c-4f3b-bf4d-e1d8294c39f4)

Annex IV (/eusurvey/files/3381b4f9-30a7-4ed9-8753-df791d50f326)

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