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*

Orange is a worldwide operator for businesses and residential markets (157,000 employees, 263 million customers by 30/09/2015), currently present in 8 EU countries (BE, ES, FR, LU, PL, RO, SK, UK) as a mobile or mobile & fixed networks operator.

**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.

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

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
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 backround 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.

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:

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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.

1) Internal market
The framework has not achieved its internal market goals as can be assessed from the following observations.

From an industrial point of view, the framework has rather failed to support the development of pan-European players. Its negative impacts on the economic health of network activities and on their attractiveness to investors has severely slowed down the expansion of operations across Europe and fragmented the single market:
- Access obligations imposed on former fixed monopolies (carrier selection, unbundling) may have allowed new market entries at national level but have not supported the development of any strong European-wide providers.
- Until 2004, the situation in the mobile network industry owes little to the current framework.

The framework started to have an effect on mobile operators from 2005, after transposition of the Directives in national laws. Before that date, mobile operators were on a path to growth, and large mobile operators were expanding within Europe. After 2005, European policy towards mobile markets have been inspired by the framework objectives of competition intensification.

As a result, European mobile industry revenues and profits first grew more slowly, then started to decline, and have continued to do since then. Due to the decline of revenues and profits, large operators began to reduce their footprint because a significant proportion of their subsidaries stopped being sustainable or no longer offered positive prospects for investment.

These trends are confirmed by the evolution of the the number of subscribers of the four largest mobile operators in Europe (Deutsche Telekom, Orange, Telefonica and Vodafone in aggregate), as declared in their financial reports (i.e. weighted by their participation ratio in the operations they control), and as a proportion of the total number of mobile subscriptions in Europe. The trend towards a growing footprint of large operators in Europe had ended by the end of 2006, and large operators had begun to reduce their footprint in Europe by 2009. The four largest operators served below 50% of European subscribers at the end of 2004. The ratio grew to reach 60% from 2006 to 2009. Then it continously declined and is now below 53%.

These decreasing trends in revenues and footprint weakened the influence of the European mobile industry which led, during the process of allocating 4G spectrum, to late and heterogeneous allocation of 800 MHz in Europe.

- There is one type of electronic communication operator which does show signs of European cross-border expansion, in the form of consolidation: this is cable networks. Cable operators have largely been de facto exempted from most of the framework obligations - in particular those resulting from market analysis. To what extent this explains the ability of cable operators to find a business interest in merging cross-border, when telcos don’t, would need to be further assessed.

From a commercial service point of view, the framework has introduced a
large amount of sector-specific regulation concerning consumer protection and universal service, under a minimum harmonization principle. As a result, considerable fragmentation has occurred, which has created new entry barriers in the Internal Market.

Indeed, the framework – featuring both a very large range of regulatory remedies and a considerable implementation freedom to member states and national regulators – has created a considerable fragmentation which, in addition to its impact on business attractiveness, generates obstacles to the single market in terms of:
- consumer protection rules, where national sector-specific rules have developed as a consequence of the minimum harmonization principle of the Universal Service Directive, as mentioned above;
- spectrum policy: different timetables, different criteria for allocation, different bands of spectrum across the EU;
- wholesale access regulation on fixed networks has developed differently between MSs, to secure the business models of very diverse new entrants: national regulations have generated divergent market structures;
- interconnection regulation: the recommendation on FTR/MTR is applied very differently from one MS to another, which creates financial unbalances between operators from different EU countries.

Clearly, much still needs to be done to bring about a true internal market. In priority this has to go with a combination of reduction of the scope and content of regulatory rules and of full harmonization principle applying to the remaining sector specific regulation.

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2) Promotion of competition
Concerning the promotion of competition, the framework has favoured one form of competition (the main objective being to reduce consumer bills) to the detriment of other forms of competition. Unfortunately, the choice has been to support regulation-dependent competition at the expense of sustainable, regulation-independent competition. The implementation of the framework has put too much emphasis on supporting the ability of new entrants to compete on price against incumbent operators without having to invest to operate in the market, instead of supporting investment-based competition, which leads to permanently decreasing unit prices thanks to integration of technical progress. In other words, the framework and its enforcement has considered the requirement to invest as a barrier to market entry, rather than a legitimate condition to operate in the market. This has negatively impacted the EU, which has failed to attract the large quantity of capital needed as well as real investors able to stimulate competition through investment in networks.
Ultimately, sustainable competition vis-à-vis former fixed telecom monopolies has emerged and developed independently of the framework and to some extent despite the framework: the development of cable operators which now dominates many local markets and compete head-on today with fixed telecom incumbents has been hindered by the regulatory support to access seekers which have benefited from the unbundling of the copper local loop available at regulated prices. The massive development of Internet-based voice, messaging and video services has put extra pressure on the prices of services provided by traditional telecom operators, completely independently of the framework. Cable, internet platforms and mobile are the genuine sources of sustainable competition on telcos: none of them owe anything to the sophisticated administrative mechanisms built into the framework to promote competition.

3) Interests of European citizens
Whether the framework has effectively promoted the interest of European citizens is uncertain.

The framework has contributed to more formal consumer protection and encouraged the wider availability of low price packages: various reports from public authorities have systematically praised countries where average revenues per users were low and criticised those where average revenue per users was higher. But at the same time the EU allocates a smaller part of its resources and much fewer resources per capita to electronic communications networks than do 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. But it also implies lower-grade network infrastructures, able to provide less capacity, less speed, delays in the roll-out of efficient technologies, higher marginal costs, and in the end a 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.

And the interests of European citizens are broader than the interests of European people as consumers. In this respect the framework has not supported European social welfare when looking at the interests of Europe as a producer of digital goods. 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 investment 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 (Internet platforms, services, or devices), to the detriment of European innovation. This has had negative consequences on the industrial development of European digital industries and thus on 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.
**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.

The precise figure of the direct financial cost of regulation will be given in the answer to the next question. But this is by no means the only negative consequence of overly prescriptive and intrusive regulation.

Such regulation forces operators to be more weighty and less agile, makes decision-making processes long and complex, generates permanent excess costs in all company decisions, whether in technical, marketing, sales, or IT aspects. It has a systemic impact on innovation processes, on how innovation is valued, integrated and rewarded within the organisation and in the management of operators.

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

(continue here if necessary)
**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.

For its whole footprint, Orange has estimated the regulatory impacts on its annual results by applying the difference, in terms of regulated prices per year, to the volumes of the beginning of the period. This includes especially the impact of MTR, FTR, LLU, and roaming regulation.

For recent years, the impacts were the following (source: Orange public financial reports):

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<th>Year</th>
<th>Regulatory Impact on revenues</th>
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<td>2012</td>
<td>-916</td>
<td>-318</td>
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<td>2013</td>
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<td>2014</td>
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**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.
Many areas merit simplification and elimination of the regulatory burden:

- **Service regulation;** as further developed in the section on services, the current framework, with specific rules on services provided by telcos, is no longer justified and has created a distortion of regulation and competition with competing services that are de jure outside the scope of the framework. The obsolete concept of Electronic Communication Service should disappear from the framework and the scope of service regulation within the future framework should be limited to Internet Access Services (IAS) and to the use of numbers of the numbering plan by digital services. These sector-specific provisions should only cover provisions not already addressed in the cross-sector Consumer Rights Directive. Moreover, all sector-specific service regulation, whether it concerns IAS or the use of numbers by digital service, should be fully harmonised, for instance through a Regulation. All other services provided by electronic communication providers should no longer be subject to sector-specific rules and should instead be subject to the same general laws applicable to all digital services.

- **Access network regulation;** as we explain in the section on access below, the current system has been designed to cope with one single network (the incumbent’s) 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 which the telco sector is now facing, involving infrastructure-based competition with other networks (cable operators) and the need to build new networks. The framework should be substantially modernised and simplified to become more investment-friendly. It should be limited to fixed access infrastructures. Where applicable (that is when the number of effective competitors owning or co-owning fixed access infrastructure is fewer than three) it should primarily consist of an obligation to share the fixed access infrastructures on fair and reasonable terms. Stricter conditions may only be imposed in case of significant market power after market analysis but should remain investment-friendly and therefore lighter than the regulatory obligations currently enforced under the existing framework.

- The use of the market analysis procedure and of SMP basis for MRT/FTR regulation has been proven to be both burdensome for all stakeholders (including NRAs) and to lead to significant economic and legal disruption. A simpler and focused European instrument dedicated to regulating voice Termination Rates should be used instead.

- The "Universal Service Obligation" regime must be rethought in terms of scope and financial mechanism.
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:

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<td>a) Market analysis and access regulation</td>
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<td>e) Network and service security</td>
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Please explain your responses.

a) Market analysis and access regulation

Fixed and mobile networks are becoming more and more complementary in order to satisfy the growing connectivity needs of end-users, requiring competing undertakings to provide convergent fixed/mobile offers to their customers. As the number of mobile network operators is larger than the number of fixed infrastructures, this implies that access to fixed infrastructures will still be required. However, it is necessary to substantially modify the form and the substance of the current access regulation. Sector-specific SMP regulation is today the norm, but has reached its limits, as further detailed in the section on network regulation. In the new framework, regulation should depend on a geographical analysis at local level of competition between undertakings owning or co-owning fixed access infrastructures. When a form of regulation is required by the framework objectives i.e. when fewer than 3 significant undertakings own or co-own a fixed access infrastructure
(including of course cable), such regulation should take the form of an obligation to share this infrastructure on fair and reasonable terms. Fixed physical access infrastructure in this context should be seen as scarce sector-specific resources, like numbers or spectrum, and subject to regulation as such. Stricter obligations, such as transparency and non-discrimination, economic or technical replicability, may be added through a market analysis process in case of dominance in some specific areas. In each case, remedies should be imposed only if the costs of their implementation may not be higher than the expected benefits.

b) Universal service and end-users’ protection

The scope of sector-specific service regulation as defined in the Universal Service Directive and in the e-Privacy Directive should be restricted to Internet Access Service and to regulation of the use of numbers of the numbering plan (except for IoT and M2M which should be free of sector specific consumer regulation). As further explained in the relevant section of the consultation, Orange considers that there is no longer any justification to have a dedicated framework for electronic communication services. Services provided by electronic communications should be subject to the same general law as services provided by other providers of digital services. The general organization of future service regulation is available at that link http://www.orange.com/en/news/2015/decembre/Orange-proposes-a-new-organisation-of-regulation-fit-for-the-Internet-age and can be summarized as follows:

- Sector-specific rules should remain applicable to Electronic communication networks (on spectrum, access or interconnexion);
- As a matter of principle, horizontal laws should apply to digital services, internet access services and usage of numbering resources or format from the public numbering plan. Horizontal laws would apply to all services whether they are provided against remuneration or not. They would include provisions on general obligations such as transparency, and some specific obligations per functionality, such as for communication functionality the obligation to respect confidentiality of content.
- However, taking into account the specific characteristics of internet access services and numbering usage, sector-specific rules will still apply where justified; such as neutrality or specific requirements in terms of speed for internet access services or portability, emergency calls for services using numbering resources.

Provisions already covered in the Consumer Rights Directive should be removed from the Universal Service Directive, which should only retain truly sector-specific provisions for the benefit of all end-users. This evolution would mean that generic - non sector-specific - consumer protection measures would apply to consumers only, in line with the evolution of the provision of telecom services to businesses. Business customers are protected in most Member States by cross-sector rules on fair B2B contracts (Orange would support a European harmonisation of national laws protecting fair B2B contracts, but this issue is outside the scope of the framework review).
Concerning universal service obligations: as further developed in the section on this topic, the current system is already obsolete regarding most obligations. While the principle of a Universal Service Obligation may be retained in the Framework, it should apply to Member States rather than to specific operators, and the current mechanism of designation and of sector-specific financing should be completely abandoned. All objectives such as improved broadband coverage, development of e-skills, protection of disabled users or rolling out high-speed networks are of public interest and would be achieved using more efficient tools based primarily on efficient market mechanisms, and accompanied in case of market failure by focused and timely public interventions.

(c) Management of scarce resources (numbering, spectrum access)
A European regulatory framework is key for spectrum management as a complement at Regional level to ITU international rules. The same principle applies for numbering. Moreover in both cases, greater harmonization of rules and regulations within Europe would be very much welcome.

d) Authorisation
An EU framework for authorisation can still be of significant importance and benefit for European industry and consumers. Firstly, it protects the regime of general authorisation all over Europe. Secondly, it can help to support fair and efficient procedures and criteria to allocate scarce resources such as spectrum.

e) Network and service security
Network and service security are very important, but they are not specific to electronic communications providers. These issues should be tackled in one common law on security applicable to all critical assets of the value chain.
**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**?

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Please explain your responses.

Promoting competition has been a legitimate transitional objective when moving from an initial monopoly situation to liberalised markets. However, Europe could have chosen a better, more sustainable model of competition. As detailed in the section dedicated to the promotion of competition in the answer to Question 4, sustainable competition has developed independently of the regulatory framework, in addition to the service-based competition supported by regulatory intervention, and markets globally have exceeded the level of static competitive intensity which is desirable to reach the optimal balance between welfare, investment and prices. The priorities of the future framework should be to keep the market open, to uphold competition and to incentivise investment in order to achieve widespread adoption of high-performance connectivity. In other words, the “promotion” of competition is not relevant anymore, while its “support” still is.

The development of the internal market is and should remain an important political objective. Setting up European rules harmonising criteria for the management by national authorities of scarce resources specific to the sector such as numbering or spectrum and also fixed access infrastructures, is also very important.

But this objective has to be assessed together with network realities taking into account that the success of operations like reaching the end user with fibre or setting up new, smaller, antennas is increasingly determined by local considerations.

More importantly, the internal market should consist of business opportunities, not of regulatory obligations. It should be a space for free initiatives from market players, not of design and central planning from the authorities.

(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:

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Access regulation based on market analysis has not always been implemented or focused in a consistent way. For instance:
- The Commission recommendation on MTR/FTR is not applied consistently in the EU,
- There are inconsistencies between provisions of the Commission recommendations on NGA and on non-discrimination and cost methodologies, for instance on the price regulation principles to be applied to NGA wholesale access prices.
- In some countries, access obligations have been too long to be defined and too long to be enforced.

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

Provisions of the framework concerning authorisation and management of scarce spectrum resources are generally consistent with the objectives of the framework, but are insufficient and too weak at present to ultimately generate a consistent outcome.

However, Orange is doubtful that the initiatives relative to harmonized European" numbering space “contributed coherently to the policy objectives of developing the internal market, promoting competition and promoting the interests of EU citizens”. It is Orange’s view that these numbering spaces are largely ignored by the public and have generated confusion.

Network and service security rules are not consistently applied across the entire value chain: only electronic communications providers being under the scope of those rules. For this reason these rules do not contribute positively to the objectives of internal market and citizens’ interests.

As far as other areas are concerned, there has been a pronounced lack of coherence with the objectives in terms of:
- Support to innovation: industry cooperation is usually seen as suspicious, which may 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 sector-specific provisions on the same matter.
**Question 11:** To what extent is the regulatory framework for electronic communications **coherent with other EU policies**, in particular:

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<tr>
<td>a) Competition policy and state aid</td>
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<td>b) Data protection and privacy</td>
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<tr>
<td>c) Audiovisual policy</td>
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<td>d) Rules applicable to online service providers under the e-Commerce Directive</td>
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<td>e) Other EU policies</td>
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Please explain your responses and indicate if you have identified specific areas for improvement.

**Competition policy** is the only European policy consistent with the Framework, but yet with many overlaps and contradictions. The framework is not consistent with other EU policies.

**Competition policy and state aid:**
The framework itself is relatively consistent with European Competition Law, which is not a surprise as it was inspired by competition law. A positive consequence is for instance that, under the State Aid guidelines for broadband, prices of subsidised networks should not be below regulated prices of privately owned networks. However, the superposition of framework regulation and of competition law tends to have a combinatorial effect on the number of constraints imposed on telecom operators, which is extremely negative for legal and regulatory certainty and for investment incentives.

In addition, competition policy may block positive forms of cooperation which are required to develop innovative end-to-end interoperable services, in contradiction with the Framework policy to support interconnection of networks and interoperability of services. Interconnection regulation should be seen primarily from the economic...
angle of positive and efficient cooperation in the provision of complementary services between market players.

Data protection and privacy:
To achieve coherence and a 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. This is not the case today, due to the coexistence of the sector-specific e-Privacy Directive and the cross-sector Data Protection Directive (before the adoption of the draft General Data Protection Regulation), rules are overlapping and inconsistent. Moreover, public policy objectives embedded in the e-Privacy directive (such as the confidentiality of the content of communications) are not protected when consumers use services which are not subject to the framework.

Audiovisual: N/A

Rules for on-line services under the e-Commerce directive:
With the widespread diffusion of Internet Access Service, from an end-user and a public policy point of view, services are now largely substitutable, whether they are provided under the rules for online services under the e-commerce directive or services provided under the rules of the electronic communications framework. However, the two sets of rules are highly divergent, as the former are largely unregulated and the former are very strictly regulated. Such inconsistency undermines consumer protection, public interests and fair competition.

Other EU policies

Security
It is currently covered by the Framework directive but other relevant players in the same value chain should be governed by similar rules; this is under debate with the draft directive on NIS, the outcome of which in terms of scope currently remains unclear. A consistent security policy would require that all elements of the digital value chain should be subject to the same rules. The security of a global chain equals the security of its weakest element. For this reason, focusing security obligations on one element of the chain, electronic communications, and ignoring the rest of the chain is dangerous.

Innovation:
The regulatory framework should also support the R&D, innovation, standardisation and technological leadership strategies of the EU, given that the outcome of these policies depends on their success in the market. In particular the framework should encourage, support and secure the strong cooperation between market players which is necessary in order to launch end-to-end open and interoperable innovative services, beyond the R&D and standardisation phases. Concerning complementary services, cooperation between market players can secure positive outcomes for consumers even if they involve commercial strategies. Regulation could have a role to play in securing good forms of
cooperation between firms.

Investments:
Political objectives should also be the basis for any European policy whether in terms of competition or sectorial aspects. For instance a “connected digital single market” has been designated number 2 top priority of the Commission. This should now be translated into reality within the various European policies. Investment in high-speed broadband networks, which are essential to achieve this goal, should become a top priority objective for both competition and sector-specific rules.

(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:

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<tr>
<td>a) Market analysis and access regulation</td>
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<td>b) Universal service and end-users’ protection</td>
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<td>c) Management of scarce resources (such as numbering, spectrum access)</td>
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<tr>
<td>d) Authorisation</td>
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<td>e) Network and service security</td>
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<td>f) Other areas</td>
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Please explain your responses.

The current review of the electronic communications framework is taking place in parallel with the EC’s exploratory consultation on potential regulation of on-line platforms. Therefore the following answers have been formulated without taking into account the outcome of the process.
concerning any potential future EU regulation of on-line platforms.

a) Market analysis and access regulation
Orange’s position on this subject is summarized in the answer to question 8 of this chapter and detailed in the answers to the access regulation chapter of this consultation. In a nutshell, access regulation should be limited by law to fixed access infrastructure, including of course cable. Access to fixed networks should be analysed geographically at local level and required if in a given area there are fewer than three significant competing undertakings owning or co-owning a fixed infrastructure. Access obligation should first be seen as a symmetric requirement for the infrastructure owner or owners to offer a form of sharing of the scarce resource which is the fixed access physical infrastructures. The SMP regime should only be a complement to a symmetric sharing obligation, adding stricter terms to this access obligation. See our answer to question 8 and the chapter on access regulation. Regulation should be designed in a more investment-friendly, technologically neutral and simplified way. Remedies should be imposed only if the costs of their implementation may not be higher than the expected benefits.

b) Universal service and end-user protection
In the new framework, universal service and end-user protection should be ensured through:
- Sector-specific provisions of a revised universal service directive applying to Internet Access Service providers
- The confirmation and harmonization of the sector-specific rules covering the use of conventional telephone numbers (including routing towards emergency numbers, the pricing rules applying to specific numbers, roaming, portability). These rules should be fully harmonized in Europe. They should apply to all services using a telephone number format. They should not cover IoT.
- The generic consumer protection provisions included in the Consumer Rights Directive.
As far as possible, the review could also be used to introduce relevant digital consumer protection provisions into the Consumer Rights Directive.
Universal and affordable Internet Access Service for all Europeans is a very legitimate political objective which should remain in the framework as an obligation for Member States to achieve. But the current mechanism of USO allocation to particular undertakings is obsolete and should be deleted from the framework. This is explained in more detail in the answer to question 8.

c) Scarce resources
Sector-specific European regulation will be required for resources such as numbering, spectrum and also fixed access infrastructures. In the area of numbering, the EU-led initiatives should take into account the specificities of the various national numbering plans. These numbering or dialing plans generally result from a series of changes which may not always authorise harmonization as these plans continue to have their own
constraints. See also the chapters on spectrum and numbers for more details.

d) Authorisation
Rules for authorisation should remain as simple and technology-neutral as possible. Harmonised European rules are necessary to guarantee a regime of general authorization.

e) Security
On network and service security, there is added value in having some common EU rules, since within the digital value chain, several types of players interact with services that do not stop at 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 welcome.

f) Others
In terms of support to European innovation; industry cooperation – necessary in order to launch time-to-market innovative services based on open platforms – should be better considered in the European framework.

(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.

Normally, the additional value resulting from the implementation of the EU regulatory framework should have been harmonization. Unfortunately, this is not what has been observed in practice.

In general there is a high degree of risk that a regulatory framework based on directives, under the minimum harmonization principle, and then transposed into national laws, will not deliver a high degree of harmonisation. This is one of the issues presented by the current framework; the same rules are not applied the same way across the EU on access, on service and on spectrum allocation.

There are two complementary steps to harmonise:
- The first step is to reduce the scope of regulation as far as possible, since less regulation provides less potential for fragmentation,
- The second step is that all legislative texts from the framework should be adopted under the full harmonization principle, rather than under the current minimum harmonization principle which is a key source of fragmentation. If their content makes it appropriate Regulations should be preferred to Directives.

In addition, the framework has led to a high degree of complexity when implemented; the market analysis process can be lengthy and inefficient, for instance for the MTR / FTR regulation.

Finally, the framework was designed at a time when the internet and competition were in their infancies. It has become obsolete for a large proportion of its rationale, its scope, its objectives and its process. It needs to be rethought to tackle current and future market evolutions.

(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:

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<tr>
<td>a) Should any policy objective be withdrawn or amended?</td>
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<td>b) Should any additional policy objective be included?</td>
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Since the Framework’s adoption back in 2002, the electronic communication markets have evolved drastically, with many new challenges faced by the sector:
- The new framework should have as its main objective support for the contribution which the electronic communications markets and industry can make to European economic development and social welfare.
- This primary objective should firstly be achieved via the ability of European economic communications markets to provide high quality connectivity to European consumers and businesses through sustained investment so as to meet the ever growing demand for digital services.
- While it may have been legitimate when the framework was designed to promote competition as part of the transition from monopoly situations, the level of competition in the EU has now reached a threshold that no longer calls for specific actions aimed at stimulating new entrants; therefore the framework should now uphold or sustain rather than promote competition.
- The concept of ladder of investment which was supported by NRAs in the transitory period from monopoly to competition, but overlooked the question of the investment by access providers, has no relevance in the future framework.

In addition, one of the objectives of the framework should also be 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.

Those objectives should be common to the various authorities active in the sector (national regulators, European Commission, BEREC).

(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.

The EU political objective is to build a connected digital market able
always to provide consumers and businesses with connectivity of the highest quality and to favour large-scale adoption, in order to meet the requirements of an ever-growing demand for high speed data connectivity. To this end, the top priority for the new framework should be to support the ability of the industry to make sustained investments in successive network technologies which will provide more efficient connectivity with higher capacity, increased speed and quality, at a lower unit price. See also answers to Q11 and Q14.

Some have argued against including as an objective of the framework the ability to invest in connectivity to match the growth in digital services, based on the idea that investment should be a means to end, an input rather than an outcome. However, debating whether investment should be considered as an input or an outcome of the virtuous circle linking continuous growth in demand, improvement of technology and incorporation of technological improvement could be seen as byzantine, because all elements of this circle are related one to the other. Furthermore, this criticism of investment as an objective also signals a lack of understanding of the fundamentally dynamic nature of digital markets where static market equilibrium for a given technology, as recognised by classical economic theory, is just not a fair representation of market reality.

That is why although it is a well-known motto that in theory and in general, investment is a means to an end and should not be an objective in itself, here and now, it is legitimate for the EU to make investment in networks an objective:
- 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
- this requires a substantial amount of investment in new networks
- and this dynamic is the process by which telecoms can improve European productivity and support European growth.

It is all the more essential to put investments at the forefront of European telecommunications policy at a time when the EU is experiencing a massive and growing deficit in telecom investment per capita when compared to the USA, as demonstrated in the document available here: http://www.orange.com/fr/content/download/32216/955794/version/2/file/telecom_investment_comparison_US_vs_EU.pdf and summarized below:
- US are leaders in both investment levels and investment intensity measured by investment per capita : investment in telecommunications services in the EU is in the range of 120 / 125 USD per inhabitant in the most recent years, whereas it reaches 240 / 250 USD per inhabitant in the US. (to be noted: we also investigated investment to GDP ratio, which shows consistent results with investment per capita ratio. We chose to focus on per capita ratio, as Europe and the US enjoy a similar level of economic development, making the ratio to GDP redundant with per capita measures);
- There is a persistent investment intensity gap in favour of the US, and this gap tends to increase in the recent period: investment intensity in the US was 50% higher than in the EU27 in 2003, and it was twice the level of the EU in 2013 (measures of investment in intensity are based on Capital Expenditures - CAPEX - of private operators);
- The advance of the US in terms of NGA deployment (mainly 4G networks), may be considered an outcome of the investment gap with the European Union.

(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 for fixed networks is an obstacle to investment in fixed lines, as has already been outlined in the answer to previous questions:
- as a general principle, access obligation tends to favor non-investors at the expense of investors,
- multiple access products impose strong technical and financial constraints on the incumbent operator while providing a disproportionate competitive advantage to alternative operators
- it prevents the incumbent operator from enjoying a competitive advantage from its investment, therefore eliminating investment incentives
- it weakens infrastructure competition between the cable operator and the incumbent telecom operator, as well as potential benefits in terms of investments, by distorting this competition as the cable operator is unregulated whereas the telecom operator is regulated
- it deprives the investor from the ability to price his product efficiently to recover investment costs through actual or potential price regulation.
- by limiting the possibilities of risk-sharing access prices and providing unclear and possibly inappropriate specification of the Economic Replicability Test, regulation can result in incorrect allocation of the investment risk between the access provider and access seekers, at the expense of the former and to the benefit 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.

The Digital Single Market is a unique opportunity to promote the contribution of the sector to the economic development of Europe, overcome the weaknesses of our regulatory framework and improve the European investment climate.

Private investment will provide the majority of network coverage and planned FTTH coverage could potentially be further extended if conditions were more favorable to a better return on investment; improving profitability is indeed a pre-condition to attract funding and extend coverage.

This requires appropriate regulation and indeed a re-balancing of the Framework so as to better incentivise investments. The objectives of the framework should be revised accordingly. The regime of access regulation should be simplified, primarily focused on the obligation to share fixed access infrastructure when fewer than three significant undertakings own or co-own an infrastructure. This regulatory obligation should remain investment-friendly, notably by supporting co-investment or risk-sharing forms of access, and rejecting direct price regulation such as strict cost orientation (see detailed answers to the sections on network regulation). It is also important to have predictable and stable rules in order to secure investment.

Furthermore, actions directed towards the demand side to stimulate take-up would also improve the business case for the rollout of new networks. This could take the form of some form of tax incentive or vouchers for subscription during a limited period of time.

Profitable areas for private operators will expand overtime as FTTH costs will diminish and demand will increase. However, some areas will remain unprofitable. Coverage in these areas will have to be supported by timely direct public subsidies. This requires a clear coordination between private and public investors to avoid private investments being crowding out by public investments.

(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, artificially supporting unsustainable entry on the mobile markets, in particular in the spectrum allocation processes, and leading to low mobile revenues, negatively impacts investments in mobile networks.

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

Regulators are currently given too many objectives without indication of priority which are not anymore in line with the challenges of today. Moreover national legislators have also added specific objectives to that list. This gives significant discretion for regulators and considerable confusion for market players, which is not conducive to investment.

Today the priority objective in terms of physical indicator should be the availability and the adoption of world-class and permanently evolving connectivity services. All other objectives should be subsidiary to this one.

From an economic perspective, the regulatory framework should aim at maximising the contribution of Electronic Communications markets and industry to the European economic development and social welfare, rather than to simply generating a short term consumer surplus.

This can also mean supporting European competitiveness and the ability of the sector to provide end-to-end open, interoperable and 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:

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<tr>
<td>a) Competition in the provision of electronic communications networks, electronic communications services and associated facilities and services?</td>
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<td>b) The development of the internal market?</td>
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<td>c) The interests of the citizens of the European Union?</td>
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Please explain your responses.
a) Competition

The current regulatory regime has promoted a specific form of competition by supporting the entry of non-investors at the expense of competition based on investment. It has led to a reduction in European customers’ telecom bills, implying lower revenues for the telecom industry, fewer resources allocated to telecom infrastructure, slower infrastructure investment and, in the end, less capacity available to customers.

Expectations of a necessary financial return from investing to broaden coverage and improve the network performance, have been reduced due to the decrease in revenues and margin and the prospect of not recovering capital costs. In the long term, this means that fast and continuous progress in quality, coverage, performance and even in prices is compromised (see for instance “Europe needs a pro-investment mobile regulatory framework” Idate study for Ericsson and Qualcomm, November 2015).

The impact of such a policy on the value for money received by customers is ambiguous: lower bills but in return for less advanced services than in other regions of the world.

b) Internal market

In practice, access regulation has mainly imposed carrier selection, Fixed Termination Rate regulation, bistream and unbundling on fixed incumbent operators, and MTR regulation on mobile operators. These policies did not help to support the internal market:

- no successful and sustainable industrial development on a pan-European basis has resulted from fixed access infrastructures,
- the European expansion of large mobile operators began to stop in the mid-2000’s when European regulation started to apply to mobile operators.

c) Interests of European citizens

The current regime did not anticipate changes in the landscape and in the value chain, notably with the entrance of new players not covered by telecom regulation, even though they act in the same markets.

From an economic point of view, the framework would have supported the interests of European citizens if its main objective was to maximize the social welfare in Europe, or in less technical terms, the economic development in Europe. But this is not objective of the framework as defined in the art.8 of the framework directive, and this has not been among the criteria followed by NRAs.

As a consequence Europe has imposed excessive regulation on the sector overlooking the fact that in doing so, it has encouraged innovation to be developed by new players outside Europe. Ultimately, the resulting regulatory imbalance favoring non-EU players competing with EU players has compromised the development of EU industry, and hence the interests of EU citizens.

See also answer to Q4.
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:

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<tr>
<td>a) Promoting competition?</td>
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<td>b) Maximising incentives for different types of operators to innovate and invest efficiently, in respect of both networks and services?</td>
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<td>c) Delivering the desired level of availability of electronic communications networks and services, as well as quality of connectivity, throughout the Union?</td>
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<td>d) Promoting to the extent possible take-up of high-quality services by end-users?</td>
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<td>e) Ensuring efficiency, bearing in mind in particular the impact of compliance costs on providers of electronic communications networks and services?</td>
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Please explain your responses.

a) The regime has mainly promoted service competition from non-investors at the expense of infrastructure competition based on investment strategies.

b) The current framework has allowed newcomers to enter the market without investing, therefore reducing the incentives for new entrants to invest, notably in the last mile of the networks. Imposing investing network operators to share the fruits of their investment with competitors has resulted in reducing their incentives to invest and innovate. Globally, the current regime has a negative effect on investments and innovation (see for instance answer to question 4, the growing investment gap in telecom infrastructure between EU and US).

c) As seen in point b, alternative operators have not been incentivized to invest and existing network operators have been disincentivized from investing. In addition, lack of proportionality of imposed regulatory obligations has resulted in additional expenditure that could otherwise have been spent on investments. The outcome is low investment per capita and low deployment of NGA coverage in Europe as compared to other regions of the world.

d) The current regime has strongly limited pricing flexibility in the market: through access regulation, actual fixed infrastructure costs are artificially and inefficiently transformed into variable access prices. The ability of the industry to efficiently segment retail prices to bring about both sufficient penetration and sufficient value has been severely hindered. This has reduced the prospect of developing innovative services on new infrastructures, as regulatory constraints generate increases in costs and fewer business opportunities. By contrast, the absence of access regulation in most European mobile markets for a long time supported both market penetration and technological progress.

e) The current regime implies both (a) high short term costs to incorporate the regulatory constraints in network architecture, and in the design and operation of IT systems (b) high long term costs because of the regime’s negative consequences on the health of the European telecom industry, with a lack of resources and less incentives to invest in connectivity and barriers to compete through innovation on a level playing field.

(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:

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<td>c) Delivering the desired level of availability of electronic communications networks and services, as well as quality of connectivity, throughout the Union?</td>
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<td>d) Promoting to the extent possible take-up of high-quality services by end-users?</td>
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<td>e) Ensuring efficiency, bearing in mind in particular the impact of compliance costs on providers of electronic communications networks and services?</td>
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Please explain your responses.

a) The narrow definitions of wholesale relevant markets (number of products covered, no integration of self-supply…) have contributed to the development of service competition instead of infrastructure competition. Regulating narrowly defined wholesale markets generates circular regulation: regulation prevents investment both from incumbent and from new entrants in regulated infrastructures, encouraging the continuation of regulation. Hence, market definitions have had a negative impact on competition through less investment in networks.

b) Market definitions are designed to result in wholesale market regulation. Wholesale market regulation has a negative impact on incentives to invest in networks, both on the access provider, because it is prohibited from enjoying any competitive edge from its investment, and on the access seekers because access regulation lets them enjoy the benefit of network investment without having to invest themselves. It
also has a negative impact on innovation at connectivity services level, because of the indirect constraints it generates on retail prices and offers. It finally has a negative impact on innovation in digital services in general, because narrow market definitions, following artificial and obsolete regulatory boundaries, generate distortion of competition between electronic communications providers and information society services providers.

c) By reducing the incentive to invest, wholesale market regulation resulting from wholesale market definition has had a negative influence on the delivery of electronic communications networks and services and reduced the ability of the market to deliver the desired level of availability of electronic communications networks and services in the Union, as defined in the Digital Agenda for Europe.

d) Narrow market definition has led to considerable restriction of the freedom of access providers to sell innovative services at attractive prices and has disincentivised access seekers from investing in their own services on their own facilities, and from pricing independently of the regulated access price. Less regulation would have led to a more demanding but also more rewarding market for everyone.

e) The narrow segmentation of wholesale sub-markets has resulted in the obligation to provide a very large number of regulated wholesale access offers, tailored to a wide variety of competitors each with its business model, investment or non-investment strategy and benefitting from a specific regulatory niche. These obligations have rigidified network architectures and imposed numerous specific functions and interfaces in operators’ Information Systems. It is a significant additional cost for the industry as a whole.

f) In parallel, too little emphasis on geographical approach led in several countries to the formation or strengthening local dominance of cable operators. It should be reminded that numerous cable operators provide wholesale access on their infrastructure under different regulatory, legal or commercial contexts without specific technical difficulties.

(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:

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The provisions of the 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, have been:

a) Moderately effective in delivering competition; The regime has mainly promoted service competition from non-investors at the expense of infrastructure competition based on investment strategies.

b) Little effective in delivering incentives to innovate and invest; The cost orientation has disincentivised operators from investing.

c) Little effective in delivering the desired level of electronic communication networks and services availability; The outcome of the framework is low deployment of NGA.

d) Little effective in promoting take-up of high quality services by end users; Standard forms of wholesale regulatory price controls, which hinder the retail price flexibility on NGA products have been detrimental to NGA service take-up.

e) Little effective in ensuring efficiency; The remedies and, in particular, the obligation to provide several wholesale products has not been efficient in respect of the related costs and the effects in network infrastructure deployment.

(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
Some NRAs (in particular in Portugal, France and Spain) have already and appropriately used Article 12 for applying an infrastructure sharing regime to the last segment of FTTH. Orange considers that this provision should be more extensively used as the main principle for regulating access to fixed infrastructures, when appropriate, i.e. when fewer than three undertakings, competing effectively, own or co-own fixed infrastructures.

This form of infrastructure sharing regulation is efficient to ensure fair competition between fixed infrastructures and to allow pure Mobile Operators to access fixed infrastructures in the event of a fixed duopoly in order to provide convergent fixed mobile services. Orange considers that convergent fixed mobile offers will become the market standard, because fixed and mobile access provide complementary data services for end-users. If they cannot provide convergent offers, pure Mobile Operators will not be able to continue to operate, or at least be significantly marginalized.

(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.

Although Orange is in favor of keeping Article 5 of the Access Directive and Art.12 of the Framework Directives, commercial agreement negotiated under these articles must take precedence over *ex-ante* regulated terms and conditions.

When regulation is necessary to fulfil the revised objectives of the framework (i.e. when there are fewer than three effective operators owning or co-owning their fixed access infrastructure) the regulator should impose proportionate sharing obligations on owners of fixed access infrastructure in application of Art.12 of the Framework Directive. Fixed infrastructure owners should be able to propose the most appropriate form of sharing taking into account the technical characteristics of their infrastructure.

These obligations could be, as is the case today, differentiated geographically so as to better adapt to regional contexts.

This enforcement of Article 12 of the Framework Directive reflects a sector-specific necessity of sharing the potentially scarce resource of fixed access infrastructure which may constitute a physical barrier to entry. It does not refer to general economic concepts of markets and dominance. It should be subject to the process mentioned in Art. 5 AD to guarantee that these sharing obligations imposed on wireline access infrastructure are regularly reviewed so as to take account of market development and they also are notified to the European Commission. Sharing obligations should remain limited to one mandatory access, non-excessive prices or the absence of abusive discrimination and exclude hard remedies such as price control, transparency or non-discrimination obligations.

In this context, asymmetric regulation following the Article 7 FWD market analysis procedure would remain only as a complementary tool of wireline infrastructure symmetrical regulation, to be used in case of SMP. It may only add stricter obligations such as transparency or non-discrimination to the access mandated by infrastructure sharing regulation, without imposing another layer of mandatory access. This implies that there can be only one single level of regulated access per
fixed infrastructure.

The specific case of the regulation of fixed and mobile voice termination have led to economic and legal confusion and controversies related to the implementation of the Recommendation on Termination Rate regulation. This has to be solved using a dedicated legal instrument, typically a Regulation which could impose a single termination rate level for Europe. See answer to Q123 for further details.

As far services are concerned, retail services are no longer included in the list of relevant markets and should not be regulated ex ante. The only retail service that should continue to be covered by sectorial regulation is the Internet Access Service, for reasons developed in the chapter “Communications Services” of the consultation.

In addition, the regulatory framework could support different forms of cooperation within the industry so as to develop and market open and interoperable end-to-end services.

(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
- [x] disagree
- [ ] strongly disagree
- [ ] do not know
Please explain your responses.

Investment in new networks must be the priority objective of the new framework and the regulatory rules must be in line with this objective. The level of competition and the continuous need for investments require a move from the current asymmetric regulation, based on the SMP concept, to a more balanced and less intrusive one, to address interconnections and fixed access infrastructure sharing.

Furthermore, the mobile market is no longer a candidate for access regulation as it is already subject to a highly competitive market and license agreement obligations.

The current asymmetric SMP regime should remain an exception for fixed access infrastructures, with possibly stricter complementary obligations (transparency, nondiscrimination) to the light touch access obligation resulting from the obligation to share the fixed access infrastructure under Art.12 FWD.

The general regulatory regime proposed by Orange applies in all geographic areas but of course, it will apply differently in different areas, depending on the local characteristics. In each case, regulatory obligations should be imposed only if the costs of their implementation are not higher than the expected benefits.

(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
- [x] agree
- [ ] disagree
- [ ] strongly disagree
- [ ] do not know
Please explain your responses.

With the use of market geographic segmentation and geographic remedies NRA have the necessary tools to address geographic variations and the 2009 framework supports the use of geographical segmentation of regulation, but not all NRAs implement it. Difficulties of implementation result from the complexity of the current access regulation regime itself and the complexity of the necessary work for defining geographic areas.

Infrastructure sharing based regulation (Art 12 FWD) when proportionate, as well as possible complementary SMP remedies, can also be geographically segmented.

New regulatory framework should be more focused on geo-segmentation to address real competition problems notably cases of cable dominance or of fixed access infrastructure duopoly.

(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.

Regulatory intervention should be analysed at local level and should only be justified by concerns about the efficiency of retail competition to achieve the revised objectives of the framework. Orange considers that this may be the case where fewer than 3 effectively competing undertakings own fixed infrastructure in a given local area (including of course cable). In this respect, the regulatory analysis of narrowly-defined wholesale markets does not always convincingly relate to serious retail competition concerns and may be circular. As an illustration, there are no longer any serious retail competition concerns which justify strict cost orientation of Fixed Termination Rates or SMP regulation of mobile backhaul markets. A contrario, the main concern about effective retail competition which regulation should address in the future should be effective competition between fixed mobile convergent offers.

(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
- [x] disagree
- [ ] strongly disagree
- [ ] do not know
In 2020, the NGAs will be deployed to a greater extent than they are today. The first 2020 coverage objective of the 2010 Digital Agenda for Europe, a high coverage of at least 30 Mb/s will be about to be achieved. Fixed-mobile convergence will have become the market standard. What will be needed is one access level per fixed infrastructure in areas with fewer than three effective competitors who own or co-own fixed infrastructures. This assessment has to be done separately between mass market and business segments. By comparison with the situation of today:

- No major change is necessary in the symmetric regulation of FTTH as currently applied, focusing on the last drop and sharing of vertical wiring,
- An obligation of cable infrastructure sharing is necessary in such areas,
- When NGA takes the form of FTTC, one access level per area, rather than several, is also sufficient.

(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?

There should be only one level of access per fixed infrastructure per area instead of several for the following reasons:
- The rationale for several levels of access is to « promote competition » via the « Ladder of Investment » concept. The rationale for one level of access is to “uphold or sustain” competition by keeping the market open, preventing foreclosure strategies by owners of non-replicable assets, which is the case of fixed infrastructures in non-dense areas. As the objective of the framework should move from “promoting” to “upholding or sustaining” competition, access should become limited to one level per geographic area, but differentiating between access for business and for mass market.
- With several levels of access, access provider competitiveness is limited by the competitiveness of the least competitive access seekers, using the highest level of access. In that case the access provider cannot fairly compete with the most competitive access seekers and certainly not with owners of alternative infrastructures.

(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
Where regulation is necessary, i.e. where there are fewer than three effective competitors owning or co-owning fixed NGA access infrastructure (including of course cable), the appropriate conditions, to be first set by commercial negotiations under the supervision of NRA, will be:
- a prima facie symmetric approach
- one access level per infrastructure and per area
- possibly differentiated between mass market and business
- no cost orientation
- based on co-financing and risk-sharing wholesale price models, with economic replicability and margin squeeze testing adapted accordingly
- supportive of investment from all market players in the highest capacity access network such as an FTTH infrastructure.

FTTH and FTTC investments have different economic characteristics which may justify different regulatory approaches:
- First, market players face a more symmetric investment situation when NGA takes the form of FTTH than when NGA takes the form of FTTC. Second, with a single access level, both the access seeker and the access provider have to commit to an investment strategy. Third, with co-financing or more generally risk-sharing forms of access prices, all players, and not only the investor, have to take irreversible decisions.
- FTTH is rolled out in parallel with copper and as a result fiber access competes with the copper access at any end-user premises. FTTC investment takes place within the copper infrastructure and FTTC access replaces existing copper access. An end-user cannot have both an FTTC and traditional copper access at home.
- The switching cost from the end-user’s point of view is much lower for FTTC than for FTTH, as there is no intervention within the home in the former case.
- The investment cost per access is much lower for FTTC.
- FTTH is more risky, as it is more costly and subject to stronger competition from traditional copper. But it is more future-proof.
**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.

Bottlenecks in relation to other inputs than those covered by the telecom framework should be addressed by other competent authorities depending on the case.

However, when NRAs perform economic analysis, content costs should be taken into account in the cost basis as appropriate.

In addition, if NRA considers that the functioning of the connectivity market may be distorted due to content access concerns, it should call for the intervention of the competent authority to fix the issue.

(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
- [x] disagree
- [ ] strongly disagree
- [ ] do not know

If not, should regulators provide specifically targeted incentives for operators that choose to roll out the most advanced NGA networks up to, or very close to, the premises of the customer?

Future regulation should in any case keep the incentive to invest as a permanent principle because the need to upgrade networks to meet demand will not stop in 2020. This is compatible with the fact that there are reasons why FTTH and FTTC should not be regulated the same way as detailed in Q30.

Regulation must evolve into a fixed infrastructure sharing regime under fair and reasonable commercial terms with a primary obligation to give access when necessary to meet the objectives of the framework, when there are fewer than three effectively competing undertakings owning or co-owning fixed infrastructures. In the event of SMP of one single undertaking in a given area, remedies imposed on this mandated fixed access could be made asymmetrically stricter but without adding a new access level.

Cost orientation should disappear from the list of remedies and regulation should give priority to commercial negotiations, subject to the arbitrage of the NRA if no agreement can be reached.

Existing recommendations from the European Commission intended to harmonise regulatory remedies in the Union pursuant Art.19 FWD are attached to the current framework and will not longer be applicable in the new framework.
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).

Please see answer above

(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.

The question as formulated should go further, as those operators who offer their competitors the opportunity to co-invest or more generally to share the risk of investment, should no longer be subject to SMP regulation at all. As long as there is co-investment or other forms of risk sharing opportunities, the related infrastructure should not be SMP regulated.

Experience as well as theory proves that the existence of access obligations acts as a disincentive for access seekers to co-invest, and as a disincentive for access providers to invest. So the access seekers should not be given the opportunity to cherry-pick.

(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?

The answer should distinguish between FTTC and FTTH:
- In the case of FTTC, basic broadband and NGA do not coexist because the “pure” copper infrastructure disappears with the roll-out of the FTTC network. Therefore “pure copper” can no longer exercise competitive pressure.
- As explained in the answer to question 30, FTTH more naturally leads to co-financing arrangements than FTTC, because the situation of all undertakings towards this fully new infrastructure is more symmetric. That is why when FTTH infrastructures have been co-financed, effective competition between undertakings who have co-financed the FTTH infrastructure will in general prevent the need for an SMP approach, even after the copper loop is switched-off.
- In the meantime, the copper network and the fibre network will coexist, including in the customer’s premises. Therefore copper-based services will continue to exert a competitive pressure.

(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.

First of all, the copper network is a private property and must be considered as such by public authorities.

The process of copper switch-off is likely to be complex, given the intricate contractual, commercial, technical, financial challenges involved. It is certainly best managed by operators and should be conducted at the pace at which operators themselves consider most appropriate. Because of dual running costs, operators running copper access infrastructure will obviously have the incentive to conduct the migration as rapidly as possible. It is up to the operators to manage the timing of any switch-off, and this should not be pushed for nor be prevented by regulators.

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
- [x] 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.

Availability of fixed line backhaul capacity is not a bottleneck in dense areas despite the increased volume of traffic thanks to the highly competitive market of transmission capacities in these areas. It is not a bottleneck either in non-dense areas where Mobile operators can deploy fibre for backhaul purposes on ducts and poles for which the necessary regulation is already in place. In addition other technologies could be used, such as terrestrial microwave systems.

On this subject also, commercial negotiation should be the rule. However, if necessary, NRAs should remain competent to arbitrate between undertakings on the subject using their dispute resolution powers.

(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.

As far as mobile/fixed competition is concerned, market and econometric evidence shows that, for data services, fixed and mobile are complementary and are not substitutes for end users. The very wide availability of smartphones and tablets probably explains this. As a result, fixed/mobile convergence is the future of connectivity markets. In this convergent world, mobile-only operators need to get access to fixed access infrastructures. But when there are two competing undertakings owning fixed access infrastructures, the present framework does not provide a satisfactory way to secure access to fixed infrastructure for mobile-only operators. That is a strong reason to support a change in the logic of fixed access regulation, starting with the symmetric obligation to share fixed access infrastructure as potentially scarce sectorial resources under Art.12 FWD where appropriate.
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?

- strong 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?

Civil engineering is one of the most expensive parts of the deployment of a network. Access to ducts, when available, is of primary importance in the business model for deployment. An adjustment should be made to the Cost Reduction Directive. Currently, this Directive allows infrastructure owners to refuse access to their physical infrastructure for a much too broad range of reasons. And it would be very long and costly to have the competent authority analyze and conclude that the refusal is not reasonable. (cf. Art 3.3 of this Directive). These provisions need to be reviewed in order to strictly limit the cases justifying refusal of access. The Directive should also provide fast and simple procedures through which a competent authority may assess whether the refusal is reasonable or not.
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.

**Remedies set out in Art. 9 to 13 should not be imposed outside cases of SMP identified through a market analysis procedure. The scope of application should not be extended but on the contrary reduced to fixed access infrastructures. The list of obligations in Art. 9 to 13 which may be applicable in case of SMP should be limited to transparency and non-discrimination. These obligations should only apply to the mandated access or infrastructure-sharing obligation resulting from Art. 12 FWD when appropriate. SMP analysis should not create any supplementary level of access.**
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.

Art. 12 FWD could play a major role in the future regulation. Today, the application of fixed infrastructure sharing remedies pursuant to Art.12 FWD is not recognized as a major regulatory instrument for access regulation that it should be. To encourage its implementation it should be stated explicitly that fixed access infrastructure sharing applies to all fixed access infrastructures, when there are fewer than three effective competitors owning or co-owning an access infrastructure in a geographic area. In order to make clear that the implementation of this regulatory instrument has to be proportionate and dependent on the existing status of infrastructure competition and the deployment of new networks, the use of Art 12 FWD should be subject to the process of regulatory intervention defined in Art.5 AD. In addition, the Access and Framework directives must be revisited in order to put access sharing pursuant to Art.12 FWD as the primary regulatory tool and asymmetric regulation following market analysis under Art.7 FWD as a complement in case of SMP.

(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
The directives mentioned do not cover the building wiring.

The Cost Reduction Directive provides an unsatisfactory as too long list of reasons for not giving access to physical infrastructure. Moreover the current process to have a competent authority deciding that a refusal to access is not reasonable is much too long and costly: Art. 3.3 of this Directive (on measures to reduce the cost of deploying high-speed electronic communications networks) has to be reviewed.

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
- [x] 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).

From Orange’s point of view, ex-ante SMP regulation should become a subsidiary, to possibly complement symmetric regulation. Orange does not support the concept of identification of tight oligopoly recently proposed by BEREC to extend the possibility for NRAs to impose remedies set out in the Access directive. Instead, we support the idea that NRAs may prevent the occurrence of so-called “tight oligoplies” for instance by using Article 12 FWD to impose a fixed infrastructure-sharing obligation in areas with fewer than three effectively competing undertakings owning fixed infrastructure, hence reducing barriers to entry. Such an obligation would be proportionate only if there are fewer than three effective competitors owning or co-owning fixed access infrastructure in a given area. To be proportionate, this obligation would have to apply to all fixed access infrastructures in a technology-neutral way. In case of SMP, asymmetric complementary remedies may be added to the access obligations of the SMP undertaking.

(continue here if necessary)

**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
- [x] 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.)

If the three criteria are no longer fulfilled to impose ex ante regulation, there is no reason to force the maintenance of a previous regulated wholesale product.

Continuity of service provision is, as appropriate, protected under commercial law between co-contractors and by competition law.

As the case may be, for specific situations a migration period of maximum 6 months based on commercial terms could be put in place.

(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
- [x] 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.

| Easing regulatory obligations should be possible before the end of the period of review when appropriate. |
| As regards the period of review, the three year duration for market analysis was fixed at a time when the average investment cycles of the initial list of potential relevant markets (18 European relevant markets in the initial list) were much shorter than the investment cycle of the fixed access infrastructure on which access regulation is now concentrating. Therefore, there could be a case for increasing the timescale for market analysis. |
| A longer review period could be consistent with investment strategies. However, the market evolves very quickly, meaning that regulators should be able to remove remedies during that period. |
| Therefore, Orange recommends that the timescale of the procedure under which regulatory obligations may be imposed (either under market analysis, or under Art.5 AD) may be longer than 3 years to secure the investment case of the investing party. Easing regulatory obligations should however be possible as soon as it is appropriate. |

(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
- [x] agree
- [ ] disagree
- [ ] strongly disagree
- [ ] do not know

Please explain your response.

| Whatever the timescale, the NRAs should have the opportunity to remove obligations (but not to add any), if appropriate, during this period. |
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.

Harmonisation of regulation within Europe is very desirable, but harmonisation should follow the procedural and democratic steps necessary to adopt an EU-wide binding document.

The most damaging case involving lack of harmonised implementation of a Recommendation is that of the MTR/FTR Recommendation but the origin of the problem does not lie in the non-binding character of recommendation adopted under Art.19 FWD:
- The origin of the problem is that the Commission Recommendation has attempted to impose a controversial cost standard for cost-oriented price regulation, using a general-purpose – and not a case-specific – legal instrument. Hence, it should not be surprising that the resulting rule was challenged by the ordinary courts as being contrary to general legal principles. For an ordinary court, accepting such a form of price regulation in this specific case, whatever its merits, can open the door to imposing this form of price regulation in a large number of cases for which it would certainly be inappropriate.
- The solution to this specific and transitory problem, the extent of which is decreasing in line with the volume of traditional fixed and mobile voice telephony, would probably be a dedicated European Regulation fixing a single value for a fixed and mobile voice termination rate in Europe, while considering the need to ensure balanced negotiating powers when EU network operators deal with non EU operators (reciprocity).

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 requires a high level of investment. Consequently, IP migration will depend on each company’s individual strategy in terms of its own interests, needs, costs, opportunity costs, etc. This is ultimately down to the choice of industry, depending on market evolution and demand. As per technology neutrality, such decisions should not be driven by regulation.

(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.

Because IP migration is a business issue, not a regulatory one, each company has to manage its own deployment taking into account its own constraints.

(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
- [x] agree
- [ ] disagree
- [ ] strongly disagree
- [ ] do not know
Please explain your response and provide examples.

The evolution of wholesale products and their demand will be progressive and be based on commercial considerations. Virtualisation will allow certain functionalities to be delocalized/centralized so as to manage the network in a dynamic way and to ease operational functionalities. These functionalities will be offered to wholesale and even some retail customers, for example in the case of a virtual home gateway the subscriber would be able to configure his own services.

There will be positive impacts on wholesale products: easier and more flexible daily operations/routines, that will benefit customers giving them more service possibilities and more control at the connection point.

These types of progressive development should not lead to any extension of wholesale product regulations.

(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.

Service delivery could be facilitated thanks to virtualization in the core networks: it will be possible to provision data centers, wherever they are in Europe, from a single point, and equipment sharing would also constitute an advantage. But it has no relation with the issue of internet market as addressed by regulation.

(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.

A few applications already exist and more are planned for the Business market. Nevertheless, this trend will be a revolution for industry and standardization organizations. Many elements of the eco-system will change or will have to be reinvented. The migration to this new environment will be done progressively by implementing new services one by one. That is why although effects will start to be felt within the 5 coming years, the biggest impact will be reached in 5 to 10 years.

(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
The voluntary and market-driven approach in standardisation remains valid as it ensures that standardisation responds to, and meets the needs, of the stakeholders. It is true that there has been a multiplication of industry-led initiatives, however this is normally driven by specific market needs and, whilst it can lead to short term fragmentation, it can be observed that this mostly happens with respect to emerging technologies and is often followed by a period of consolidation. Some current initiatives attempt to integrate this phenomenon, for example the OP-NFV is an open source team working under the requirements of ETSI in an iterative way in order to produce a standard or something close to a standard.

The convergence of information and communications technologies, the move towards SDN and NFV and the advent of the open-source approach will play an important role in future networks and services. The industrial environment is changing in such a manner that new elements must be taken into account in the overall organization. First, pieces of hardware will become software needing standardized interfaces for keeping the current level of competition. Second the open source production has taken a huge important in this environment. Collaboration between the standardization and open-source communities will provide further impetus to ICT convergence. If the two communities can collaborate, Open-source implementations of certain high-profile standards would augment their adoption, breadth of application and ease of deployment. Collaboration with the open-source community could in particular bring positive results in areas such as NFV, SDN, cloud computing, IoT and video coding. This is then a question of processes and tools for collaboration with, and adoption of, open source, and whilst there are many open source initiatives, this does not change the principle that it should be voluntary and market-driven.

This means that many initiatives emerge that could create many different eco-systems and be inefficient at the end. Regulatory authorities should support the reinforcement of coordination processes within the industry, so that standard, open and interoperable solutions can be developed fast enough to match the innovation speed of large players pushing their proprietary solutions.
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.

As far as the use of standards is concerned current safeguards are efficient and sufficient.

As far as the protection of citizens is concerned there may be some specific subjects (e.g. safety, transparency) that require regulatory safeguards to foster pan-European service availability and interoperability. However, this should be considered as a complement to the adoption of standards according to market needs and business incentives.

(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
As far as access is concerned, in areas with fewer than 3 effectively competing undertakings owning fixed infrastructure, Orange considers that the priority is to have one single access level on fixed infrastructures per geographical area. The specification of the product corresponding to this fixed access level (e.g. whether it will be passive or active) will depend on local characteristics. Consequently, this is in contradiction with the concept of an EU-wide standard access product.

A common product would only add more obligations and constraints on access providers and be in contradiction with the priority to incentivise investment.

For fixed access networks, the multiplicity of access obligations has resulted in market fragmentation. After years of divergences, there should be a reduction and simplification of access regulations.

For mobile access, existing access products ensure roaming with a consistent customer experience.

For interconnection, common solutions are needed to ensure interoperability of services between service providers, thus improving customer experience.

(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.

Service interoperability can be guaranteed by definition and adoption of standards for interconnect (many of which exist already). Guaranteeing an end-to-end assured quality level requires both standardised technical enablers (for example to request a quality level or associate the right requirements for a given service) and commercial incentives for offering such a quality level, as guaranteeing quality requires the dedication of resources.

The Framework has to give operators the ability to co-operate in order to establish interoperability standards and coordinate research and development projects with business models that will in the end be beneficial for the customers. In the past, such attempts at co-operation have been the object of suspicion. The intervention of the European Commission resulted in a halting of these projects. The opportunity to develop interoperable end-to-end services was missed. The Commission should have a new more open and supportive approach in this respect.

(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)?

Access regulation should definitely be designed to support investment on fair and reasonable terms. Favoring commercial network-sharing agreements, especially in dense and moderately-dense areas can reduce costs and thus improve profitability and coverage.

Subsidies on the demand side may also allow early profitable coverage of areas that may not otherwise have been served.

Concerning non dense areas which will remain unprofitable even in the long run, timely public funding will be necessary to cover investment in high-speed networks. Contrary to investment, operating those networks would, however, not be loss-making and public funding would only be needed to cover the fixed investment costs to roll-out the network. In order to avoid public funds crowding-out private investment, a proper delineation of eligible areas needs to be established.

In addition it should be noted that any regulatory provision attempting to give preferential treatment to one market player at the expense of others would be a direct violation of fair competition and of the right of commercial freedom. It would be a distortion of fair competition and would lead to inefficient outcomes.

Fair competition between new entrants and incumbent in the coverage of non-competitive areas should be guaranteed by nondiscriminatory access to non-replicable assets.

(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.

Orange would not support regulatory provisions that would provide a guaranteed monopoly for the first mover. This would be ill-advised as the boundary between competitive and non-competitive areas will change over time, with technical progress, experience and higher demand for very high speed. Customers of areas currently considered as non-competitive should not be sentenced to live forever in a monopoly area whereas market evolution would have allowed them to benefit later from a competitive market.

Securing the benefits of investing in challenging areas for the first mover is necessary, to the extent that other players have had the opportunity to share the investment risk.

In case of co-financing between public and private undertakings, all parties should benefit from fair equivalent long-term rights to the corresponding infrastructure, in proportion to their contribution.

In respect of technology neutrality, securing investment should not be conditional on the type of network improvement particularly in areas where profitability is uncertain. However, in the case where the technical solution chosen reuses parts of the legacy copper infrastructure, all market players competing to serve the area should have non-discriminatory access to the necessary elements of the legacy copper infrastructure.

Focusing demand-side subsidies on challenging areas would in any case be appropriate.

(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.

It is an illusion to believe that the interests of service competition and the incentives to invest are compatible. Regulators have to choose. As investment should be a priority, the incentive to invest should not be subsidiary to the interests of service competition.

To solve the problem the solution is to impose a light touch obligation on the investor to share fixed access infrastructures under fair and reasonable terms. The other operators may then have the opportunity to share the investment risks and subsequently the investment benefit. In such cases the first mover can reach commercial agreements for sharing part of the access infrastructure. Those not sharing the investment risk should not be eligible to benefit from the investment.

(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.

It is generally agreed that achieving enough investment should be the major policy concern to meet public and consumer interests. Provisions suggested in the wording of the question 59 which reflect a suspicion towards investments from some private operators would therefore be ill-advised.

This should not prevent a rigorous analysis of public funding and initiatives in network deployment. Public initiatives should only be introduced where there is no private initiative in a reasonable timing and the public wholesale price should not be below the regulated price.

(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:

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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.

Please refer to answers to Q61 and Q62

(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?

Co-investment is the efficient way to share investment risk and deploy infrastructure more widely. When co-investment opportunities are available, there should not be any other access requirements imposed. Otherwise, this will constitute a disincentive to investment risk-sharing.

(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.

The wholesaler-only network operator is separated from business and market realities and has no incentive to be innovative or efficient. The loss in synergy and coordination between wholesale and retail operations, as well as the loss in incentives to invest and innovate in the wholesale network will undermine the overall performance of the market.
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).

During the 2009 Review the “Separation model” was extensively analysed and its dangers and absence of benefits were thoroughly demonstrated. Developments since then have only confirmed the reasons to reject this model.

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
- [x] not at all
- [ ] do not know

Please explain your response.

The scope of ECRF, RSD and RSPP respectively are complementary. No major difficulty or inconsistency has been raised so far from this structure of regulatory arrangements. In particular, Orange supports the plan to reiterate a RSPP for the next period of time.

(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.

Orange considers that in the future framework, spectrum for electronic communications should be allocated to Electronic Communications Networks (ECN) rather than to Electronic Communications Services (ECS). ECS is an obsolete concept which should be deleted from the framework, as explained in other chapters of our answer. That is why the acronym “ECN” is used below instead of “ECS”.

Orange considers that from a spectrum efficiency point of view, all services using spectrum should follow the same rules. The fact that many services using radio spectrum are not ECNs does indeed cause a difficulty from a regulatory and consequently from an economic perspective. Defence and Interior Ministry activities, scientific applications, short range devices etc. are managed separately from ECN.

At EU level, all decisions requiring a change in spectrum usage from this type of usage to ECN, or the other way around, or to push for spectrum sharing between ECN and other types of spectrum use cannot be made under the existing ECN framework.

(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?

<table>
<thead>
<tr>
<th>Policy Area</th>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
<th>do not know</th>
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<tbody>
<tr>
<td>a) Transport</td>
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<td>b) Audiovisual</td>
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<td>c) Energy</td>
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<td>d) R&amp;D</td>
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<td>e) Satellite</td>
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<td>f) Internet of Things / M2M</td>
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<td>g) Other (specify)</td>
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Please specify or explain your response.

Audiovisual: today’s fragmented status and plans for the future of Digital terrestrial TV and Radio across Europe should be overcome so that the future use of VHF and UHF spectrum is optimized to enable greater economies of scale for all users of this spectrum. Broad satellite coverage requires clear regulatory rules across EU.

(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.

Thanks to the EU framework, all mobile spectrum bands for 2G, 3G and 4G services, so far, have successfully been identified (on the basis of ITU decisions) and the technical conditions of use have been harmonized across Europe. Nevertheless it should be noted that a common approach is still lacking in relation to: a) the problems of coordination with the countries bordering the EU; b) extremely low binding limits for EMFs in some countries e.g. in Poland and Belgium while in most EU countries ICNIRP limits are used.

(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:

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<tr>
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<th>significantly</th>
<th>moderately</th>
<th>little</th>
<th>not at all</th>
<th>do not know</th>
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</thead>
<tbody>
<tr>
<td>a) Providing market operators with sufficient transparency and regulatory predictability?</td>
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<td>b) Ensuring an appropriate balance in terms of administrative burden?</td>
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<td>c) Promoting competition in the provision of electronic communications networks and services?</td>
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<td>d) Contributing to the development of the internal market?</td>
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<td>e) Promoting the interests of the citizens of the EU?</td>
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<td>f) Ensuring an effective and efficient use of spectrum?</td>
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</table>
The granting of individual authorizations of spectrum use to mobile operators is designed by Member States (MS) without supervision from the EU institutions. This results in different variations of auction schemes, taxation, time scales, licence duration, etc. which are not all based on the same rationale and often cause extra delays and costs in the deployment of innovative and fast growing mobile services using this spectrum. Furthermore, there is a lack of predictability in most MS concerning the conditions of licence renewal and also on the plan to release spectrum bands for new usages (most MS have no Spectrum Strategic Plan).

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.

The excessive margin given to Member States to implement selection processes has led to inappropriate results.

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
Individual authorizations of spectrum use have proven to be the most efficient way of assigning spectrum to mobile operators. Both beauty contests or auctions (or hybrid models), in principle, can be efficient processes for assigning spectrum, largely depending in practice on the details of these processes, as decided for the moment at national level. An EU framework to promote the “best practices” in this area is necessary.

General authorization has so far proven to be an efficient way of assigning spectrum to equipment subject to technical conditions including low power limits, duty cycles etc. This regime has the drawback that it does not provide any right of protection, neither in-band nor out of band, and in case of intensive use of a given band, existing equipment may suffer from spectrum congestion and stop working.

(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.

The lack of coordination between Member States prevents them from sharing the “best practices” and leads to different timescales, with the consequence of not being “time to market”.

(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.

Please refer to answer to Q71

(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
Although the existing framework has brought positive measures in this area, there are exceptions. One important example of a lack of consistency is the clearance process for the “800 MHz” band from Digital TV for the benefit of mobile services across Europe. Although the RSPP required the January 1, 2013 deadline, with the possibility for MSs to ask for derogations, up to 14 MSs required such derogations (see EC report COM2014/228 final, on the implementation of RSPP). Furthermore, some of those MSs which were granted a derogation by the EC did not respect the new deadline. For example, Spain with a new EC deadline of January 1, 2014 finalised its clearance process 15 additional months later, on April 1, 2015. This had a negative impact on mobile market development both at national level and at international level due to cross border effects, which are considerable in broadcasting.

In line with its response to Q67, Orange also stresses that consistency in spectrum management should include coordination with the countries bordering the EU.

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.

One example of a major barrier which should be removed more quickly is related to the spectrum bands identified as unused or underused in the EC Report on Radio Spectrum Inventory COM/2014/536 final. These bands include the L Band 1452-1492 MHz, the MSS 2GHz band etc. The existing process to re-allocate unused spectrum takes years and years whereas the demand of successful services is growing rapidly.

In consistency with previous responses to Q67 and Q73, Orange stresses that agreements and coordination with the countries bordering the EU are crucial for real access to spectrum across the whole of Europe.
(continue here if necessary)

**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.

See our response to Q65

(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.

The high level of price of spectrum auctions in the context of the low level of revenues of European mobile industries has resulted in a lack of financial resources for mobile operators and delayed investments in coverage, capacity or R&D.

The policy objective of the current framework to promote competition has influenced the spectrum assignment process of Member States which have used it to constantly increase the intensity of competitive pressure on the mobile market. The shortcomings of such a unilateral policy leading to lower investments and ultimately to lower consumer benefits have been described in Orange answers to the first chapter of this consultation (see in particular answers to Q4 and Q15).

As the objectives of the framework should be reoriented towards contribution to economic development through investment in connectivity, the rationale of spectrum assignment process should change accordingly.

(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.

A greater EU coordination would promote more sustainable competition and investment, for example by providing a common rationale and guidelines to Member States for establishing the reserve prices before auctioning given spectrum bands and guaranteeing the operational availability of this spectrum within a reasonably short time (1 year) after the auctions.

As an example, the questionable French requirement included in 800 MHz MNOs’ licenses to finance the fixing of private TV reception installations may not have been permitted by appropriate EU binding general rules on auction schemes and associated requirements.
(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:

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<thead>
<tr>
<th></th>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
<th>do not know</th>
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</thead>
<tbody>
<tr>
<td>a) ease the process for national administrations?</td>
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<tr>
<td>b) increase the predictability and planning sought by investors?</td>
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Please explain your response and provide examples of the impact.

See our answer to Q77

(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.

<table>
<thead>
<tr>
<th>Determination of need for selection process</th>
<th>This issue should not be covered by the Review: National measures adopted are sufficient, no need for legal certainty at EU level.</th>
<th>A - General Approximation</th>
<th>B- Partial harmonisation</th>
<th>C - Full harmonisation</th>
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<tbody>
<tr>
<td>Level of transparency to the market regarding the selection process and conditions</td>
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<tr>
<td>Determination of selection process type (auction, beauty contest, first come first served, hybrid model)</td>
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<tr>
<td>Objectives pursued by the selection process</td>
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<tr>
<td>The appropriateness of an ex ante competition assessment</td>
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<tr>
<td>The national authority which is responsible for the ex-ante competition assessment</td>
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<tr>
<td>The need for specific measures (spectrum caps/floors, new entrant spectrum reservation)</td>
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<tr>
<td>Selection timetable</td>
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<td>Timing of advanced information to market participants.</td>
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<td>Frequencies covered, packaging of lots</td>
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<td>Spectrum valuation and pricing, fees, charges.</td>
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<td>Payment modalities.</td>
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<td>Enforcement and ex post auction assessment and enforcement.</td>
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Please explain your response(s).

Notwithstanding the chart’s classification of this question, Orange’s view on European full harmonization is that it should focus on the key principles of transparency and equity of access to spectrum (which does not necessarily mean the same amount of spectrum). All the other topics should be dealt with on the basis of partial harmonization.

(continue here if necessary)

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.

See answers to Q81 and Q210

(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?

Concerning spectrum assignment conditions (as developed in Q210), Orange supports the concept of a binding European framework laying down general rules for MSs in the way they assign/grant national individual authorizations for spectrum use, including auction schemes, taxation, time scales, licence duration, information on licence renewal.

These general rules should include a general requirement that auction design and administrative spectrum pricing need to promote economically-efficient use of spectrum rather than focusing on raising revenue for Governments. They should also include the following items, as proposed in the EP’s adopted draft version of the TSM, taking into account the EP 1st reading:
- EC coordinated and harmonized timing and guidelines for national spectrum allocation procedures, based on well-accepted criteria (TBD)
- General requirement of transparency throughout the NRAs’ process of preparing allocation and re-allocation of spectrum bands
- Fees for rights of use for radio spectrum of all types are to be paid not more than one year before operators can start using the radio spectrum
- Improvement of the national rules fixing the mobile spectrum fees
- Duration of the rights of use > 25 years
- General authorization regime for the deployment, connection and operation of small-area wireless access points i.e. small cells (nothing to do with spectrum authorization regime)
- New requirement for NRAs to carefully assess risks and means to mitigate interferences with existing in-and out of band-users, prior to any spectrum band allocation.

(continue here if necessary)
**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.

<table>
<thead>
<tr>
<th></th>
<th>A - General Approximation</th>
<th>B - Partial harmonisation</th>
<th>C - Full harmonisation</th>
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<tbody>
<tr>
<td>Licence duration</td>
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<tr>
<td>Prior notice, timing and conditions of renewal</td>
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<td>Possibility to trade or lease assigned spectrum, and related conditions</td>
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<td><strong>Coverage obligations</strong></td>
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<td><strong>Necessity of wholesale access conditions (e.g. MVNO)</strong></td>
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<td><strong>Limits under technology neutrality principles</strong></td>
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<td><strong>Requirements on technical performance characteristics</strong></td>
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<td><strong>Extent of services allowed and limits to service neutrality</strong></td>
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<td><strong>Possibility to share and pool assigned spectrum or mobile network as a whole</strong></td>
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<td><strong>In general, any condition covered by the Annex to the Authorisation Directive</strong></td>
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<td><strong>'Use it or lose it' clause</strong></td>
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<td><strong>Refarming conditions</strong></td>
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Please explain your response(s).

Except for few points more related to national markets, all others should be partially harmonized.

(continue here if necessary)

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
- [x] agree
- [ ] disagree
- [ ] strongly disagree
- [ ] do not know

Please explain your response and provide examples.

Orange supports partial EU harmonization whereas it does not see any benefit in multi-national licenses, due to different national contexts, commercial strategies etc.

(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.

Except for satellite based systems, which by nature have the potential for a pan-EU radio coverage, Orange does not see any other business case for pan-European or multi-national spectrum selection processes.

(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
Some innovative concepts, as introduced by the existing EU regulatory framework, have already proved beneficial. Spectrum trading has already been used successfully and at large scale across the EU (see for example Qualcomm’s L Band case in UK to Vodafone and H3G). Service neutrality has been introduced in particular with the broader concept of MFCN rather than mobile only and Technology neutrality has, for example, been adopted in most EC decisions addressing mobile spectrum, including the harmonized least-restrictive technical conditions of use. All these measures have offered economic actors the opportunity to change spectrum use or “owners” more quickly when needed, with a positive impact on the efficiency of spectrum use and on the economy of radio communication. Furthermore, different forms of RAN sharing including spectrum pooling have also been implemented successfully.

Orange welcomes further steps towards more flexible or shared access to spectrum, subject to detailed impact assessments and experiences. From this perspective, as examples the existing experiments of Licensed Shared Access, mechanisms will soon provide feedback to be considered in the future, whereas TV White Spaces seem to have already found their limitations due to the growing use of UHF frequencies by Digital TV services.

(continue here if necessary)

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

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<thead>
<tr>
<th>Question</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) The availability of sufficient wireless backhaul capacity?</td>
<td></td>
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<td>○</td>
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<td>b) The development of the Internet of Things?</td>
<td></td>
<td>○</td>
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<tr>
<td>c) The development of M2M applications?</td>
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</table>
If other, please specify and explain your response and provide examples.

| a) to complete licenses spectrum  |
| b) for some IoT                   |
| c) for some M2M                   |

(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.

Spectrum use is subject to either the no protection/no interference regime (such as SRD) or the protected regime (such as mobile, TV, satellite), with their respective rights and duties. Orange does not support any change in this area, taking into account that the conditions of coexistence between the applications of the former regime with other applications in-band or out of band are taken into account to a certain extent via the technical requirements applicable to the given SRD and by its specific/nonspecific character (as defined in SRD EC Decisions).

The risk of congestion still exists but this is a matter of appropriate assessment in the appropriate timing by the interested parties and possibly by a revision of the technical conditions rather than a matter of regime.

(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.

(continue here if necessary)

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

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<tr>
<th></th>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
<th>do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Tradability and lease of spectrum</td>
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<td></td>
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<tr>
<td>b) Use of white spaces</td>
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<td>c) Infrastructure sharing, including spectrum pooling</td>
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<tr>
<td>d) Incentive auctions</td>
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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?

Except white spaces (see our response to question 85), Orange agrees with the statements and considers the existing framework is adequate and does not require improvement from that point of view.
**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.

Orange has not identified any problematic limitation of spectrum trading or leasing from the existing framework.

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:

<table>
<thead>
<tr>
<th>Measure</th>
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<th>disagree</th>
<th>strongly disagree</th>
<th>do not know</th>
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</thead>
<tbody>
<tr>
<td>a) further protect existing right holders</td>
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<td>b) further support prospective spectrum users</td>
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<tr>
<td>c) maximise flexibility in spectrum management</td>
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<td>d) allow new incentivising methods</td>
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<td>e) further protect competition</td>
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<td>f) clarify compensation conditions</td>
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<td>g) apply ‘use it or lose it’ clauses</td>
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</table>

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)

Taking into account the need of efficient use of scarce resources, Orange would not be opposed to the introduction in the revised framework of some measures inspired by the “use it or lose it” principle, conditional on the definition of well-accepted (by all stakeholders) general principles and criteria applicable to all bands. Among these, EU requirements for MSs should include:

- the principle of a gradual process with different steps, each giving the stakeholder the opportunity to update its plans to use or to cease the band before any decision is taken
- ex ante definition of the conditions of application of the “use it or lose it” principle for a given band (i.e. before assignment), including the duration of non-use, the state of the art of the technology in this particular band and more generally of the ecosystem
- where applicable, the consideration of the taxes payed by the existing user and/or the price it paid to a previous user since it was allocated the band. In these cases “use it or trade it” would better reflect the principle of the measure.
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.

Such direct interventions of public authorities should indeed be envisaged only as the last step of the process described in our response to above question. The spontaneous use by the stakeholder of the flexibility permitted in the given band should be part of the first steps of this process.

(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.

As identified and adequately addressed in the EP’s adopted version of the TSM (but then taken out together with all spectrum issues), EU measures are necessary to prohibit unduly onerous existing restrictions in most MSs on the development of small area wireless access points SAWAP which, as an integral part of cellular networks, use licensed spectrum. These restrictions include management of building permits, local taxes on pylons, sites, antennas, environmental rules, etc.

Similar measures should apply to RLAN access points where appropriate, still taking into account the different spectrum regulatory regime: as opposed to SAWAP, RLAN use licenses exempt spectrum bands, which have no right of protection.

(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 our response to Q93, including the point on the different regulatory status of spectrum between SAWAP and RLAN, which should be preserved. It should be clarified in further work on this item that the authorization regime mentioned here in Q94 does not address spectrum authorization.

(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.

There are already regulatory rules that ensure competitive retail markets and a general obligation to entitle end-users to share their access, like the one suggested, seems disproportionate.

(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.

> Any public initiative in an area where private operators already intend to invest, thus leading to competition between them, should be avoided.

(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.

> The fast growing development of M2M and IOT, which embraces many different applications, requires new spectrum bands. Orange’s view is that only licensed spectrum-based solutions can provide a given Grade of Service, thanks to the associated capacity of managing radio interferences.

Concerning license-exempt spectrum, the use of existing Short Range Devices (SRD) bands should be optimized by revising them periodically in the light of market developments. One possibility consists of relaxing whenever possible the technical conditions of use (power limit, duty cycle etc.). Another means consists of dedicating some SRD bands to some specific SRD applications.
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 national contexts are not the same across the EU, some MSs may favor dedicated networks whereas others would rather support commercial or hybrid schemes. One single EU scheme appears unrealistic and Orange’s view is that it should be left to commercial discussions and contracts between the interested parties at national level rather than a matter of regulation and inclusion of additional requirements in the licenses.

(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:

- 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.

The current regulatory framework has provided protection for end-users in the field of traditional telecoms services. Currently, consumers benefit from provisions that facilitate switching between providers, reduce bill-shocks and guarantee transparency. However, the consumer protection rules in the telecom framework have failed to anticipate the predictable major changes in the market, choosing the conventional approach of regulating only services provided by telecommunication providers.

Unsurprisingly, since the last framework review in 2009, the digital communication market has experienced profound changes with the expansion of OTTs’ communication services that consumers consider to be a substitute for traditional services provided by telecommunication operators, as demonstrated by a recent ETNO survey - https://etno.eu/datas/publications/studies/ComRes_ETNO_Final%20Report_LA TEST%20FOR%20PUBLICATION.pdf. The progress of OTTs’ offers has increased consumer choice and at the same time has introduced different consumer protection levels compared with the highly protective approach adopted for telecom traditional services.

Orange’s proposals described in the following responses, concern services regulation within the scope of the review of the electronic communications framework and constitute a consistent, stand-alone solution to adapt consumer protection to the mass market and the technological evolutions which have taken place since the last framework review.

Orange urges the Commission to adopt a comprehensive review of the digital market to effectively achieve the goal of ensuring coherent consumer protection across the digital sector.

(continue here if necessary)

**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.

Yes, Orange considers that there are provisions that constitute a particular administrative and operational burden that hinder telecommunication operators’ capacity to innovate.
One particular illustration, among many, of the specific regulatory burden that impedes innovation concerns the provisions applying to users’ location data, for which specific prohibitions and obligations apply to telecom operators, whereas they do not apply to other providers of similar services. This is because:
- the sector-specific e-Privacy directive de facto prohibits the efficient commercial use of users’ location data. This capability is essential if players are to propose innovative services – and therefore constitutes a domain where regulation inhibits telcos’ competitiveness;
- at the same time, the Universal Service directive requires telcos to collect and communicate the location of calling parties in case of emergency calls, anywhere and at any time. This obligation generates direct extra costs and increases the complexity of technological choices.

This example shows that telecom operators are not allowed the same access to product or process innovation as are other players in the internet value chain.

However, the negative impact of regulation on the ability of the telecom sector to innovate cannot be easily demonstrated by precise examples of specific well-developed projects which would have been blocked by regulation, because telecom operators are efficient organizations that optimize their innovation processes as well as their operations and cannot afford to spend time and resources developing projects that may be non-compliant with the legal framework. If telecom operators were subject to less regulation, they could free their creative power in all their processes, to the benefit of consumers.

As explained also in Q110, Orange considers that the digital single market needs a comprehensive regulatory vision built upon the central role of Internet Access Services, the repealing of the outdated and confusing ECS definition, extending the enforcement of existing regulation related to the use of the public numbering plan to all digital services which use numbering resources and format, and relying upon the current horizontal consumer protection system.

The framework should provide for specific regulatory obligations to be imposed on digital services in relation to the use of numbering resources or format of the public numbering plan. Directly associated to the usage of numbering resources or format, there should be provisions requiring digital services providers to protect voice services – such as routing emergency calls, pricing principles attached to number series, portability, security, ability of NRAs to impose interoperability etc… This regulation for digital service using numbers should be equally applied to all relevant digital services that use numbering formats – excluding uses related to IoT and M2M – whether or not numbering resources have been attributed by NRAs.

In relation to IoT and M2M, some of the requirements associated with the use of E.164 ranges are inappropriate for the large majority of IoT
connected services and should not apply. For instance, for an electricity smart meter or an asset-tracking tool number portability, CLI-rules (Calling Line Identification) or pricing transparency rules are neither required nor relevant.

Apart from IoT and M2M, digital services using numbers of the public numbering plan would comply with provisions associated with the management of numbering resources already established in the sector-specific telecommunication framework and to horizontal laws such as the Consumer Rights Directive and the forthcoming General Data Protection Regulation.

(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.

Yes, Orange considers that there are provisions that are no longer relevant and that should be repealed both at European and national level.

In the current telecommunication framework there are provisions that are now redundant because of the evolution of cross-sector obligations, notably the adoption of the Consumer Rights Directive in 2011. Others are obsolete because of usage and technology evolutions and, again, others are no longer proportionate as markets have become highly-competitive, to the benefit of consumers. There are also provisions that have been proved by experience to be inappropriate either because they annoy or confuse consumers or, they were designed in
ways that generate unnecessarily high costs. Keeping these provisions would ultimately hurt consumers because they distort competition, generate high costs and hinder telecom operators’ capability to innovate.

The more specific issues are addressed below:
- For instance, if the right to withdraw from a contract without penalties upon notice of modification of contractual conditions (Art. 20.2 of the USD) is legitimate in principle, the way it has been written in the current USD constitutes an especially significant extra burden for telcos that impedes innovation. The possibility to cancel a contract if the service evolves should only be allowed in case of modifications unfavorable to consumers.
- Provisions concerning printed directories and public payphones are now obsolete. People searching for new numbers use alternative sources and comprehensive electronic directories are already provided free of charge; accordingly, the need for a printed telephone directory to search for an individual’s number has massively decreased.
- The rule on porting numbers constitutes an example of a relevant rule loaded down by irrelevant and burdensome provisions. One working day was a very demanding and costly requirement that could have been less prescriptive without reducing its market effect.
- One of the main novelties introduced by the 2009 framework review was the so called “cookies rule” that annoys and confuses internet users without increasing their protection. This rule should have addressed the real “dangerous cookies” instead of creating disinterest and “fatigue” with unnecessary solicitations. Given the imminent adoption of the General Data Protection Directive the sector-specific ePrivacy Directive should be repealed.

Finally, given the convergence of services in the digital single market, horizontal instruments such as the Consumer Rights Directive 2011/83/EC (CRD) and the Directive on Unfair Terms in Consumer Contracts should be preferred to sector-specific instruments. The CRD imposes numerous obligations on every trader entering into a distance contract with consumers; information requirements for contracts; duration and the right of withdrawal conditions. As such, Art. 6 and 8 adequately address price transparency and information on the main characteristics of a service, therefore Orange considers the CRD an appropriate instrument for the digital single market.

Basic consumer protection should also cover non-monetary transactions. Given the increasing role of other possible against-performance business models, a minimum set of contractual rules at least should apply to these types of transactions.

Accordingly, general consumer protection provisions that since 2011 are covered by the Consumer Rights Directive should be removed from the Universal Service Directive, which should only keep those provisions which are sector-specific by nature, for the benefit of all end-users. This change would focus the scope of generic (non sector-specific)
consumer protection measures to consumers and would exclude business clients that are in the scope of the current USD but not of the CRD. This is a logical evolution considering the evolution of the market of telecom services for business. Business does not need more sector-specific consumer protection for telecommunications than it does for any other products or services they buy. Besides, most Member States have already developed cross-sector laws protecting B2B contracts from unfair practices.

Note: Orange would support a European harmonisation of national laws protecting fair B2B contracts, but this issue is outside the scope of the framework review.

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):
Yes, Orange considers that there are provisions that need to be adapted to the reality of the current and forthcoming digital market. All digital services should be considered from a consumer perspective, therefore providing a similar level of consumer protection across the digital sector.

The changes in the market are so far-reaching that Orange calls on the Commission to maintain only those sector-specific provisions that are still justified by carrying out a thorough new assessment.

First of all, and within the scope of the review of the electronic communications framework, the current provisions on emergency calls should be maintained in the framework and associated with the use of numbering resources, to be applied equally to all relevant services that use numbering resources and more generally number formats, whether or not numbers have been attributed by NRAs.

More generally, the DSM should translate into legislation how digital services in general should contribute to addressing emergency situations. At the same time, current provisions on basic emergency calls should be maintained and associated with the use of numbering resources and format, to be applied equally to all relevant digital services that use numbers.

Efforts aimed at a wider contribution to emergency services have already been made through standardisation where, in response to a mandate from the European Commission, ETSI has developed architectures for providing location information for emergency calls, covering fixed, mobile, VoIP and OTTs. This architecture includes an option whereby mobile operators may transfer location information to the OTT players, thus paving the way to a greater number of players being technically able to provide emergency services. The pan-European in-vehicle emergency call service, e-Call, defined under the e-Safety initiative of the European Commission, is based on standards that are open to OTT providers.

Opening up the contribution to emergency services to cover all “relevant” providers, telecom operators or not, would boost the integration of emergency services into OTT applications. Such an extension would benefit individuals that would benefit from a broader and more advanced offer for successful emergency intervention, such as real-time location tracking. Furthermore, telecoms operators could share the costs of the deployment and operation of, for example, their local call identifier platforms.

Today, the disabled and elderly and other users with special needs can rely on a broad choice of offerings provided by telecom operators but also by other industries which are equally- or even better-placed to contribute to the public objectives established by USD Art. 7. Provisions for disabled users should be moved into horizontal law to cover all the players of the internet value chain.
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?

Orange considers that the role of regulation is modest because the disabled, elderly and users with special social needs have today such a wide choice of offers and innovation in terminals and applications that overall, the digital market itself meets the policy objectives.

Given the variety of solutions available, Orange also questions the need to maintain specific regulation for the disabled, elderly and users with special social needs because this is an area where self-regulation has proven its value.

If regulation is maintained, to be meaningful, it should be reviewed in such a way that it is extended to all the players of the internet value chain – see also answer to Q102.
**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.).

---

It is Orange’s view that Article 30 of the Universal Service Directive has been instrumental in the implementation of number portability across the EU. Whilst the ability to keep a phone number when switching provider has been largely welcomed by subscribers, the implementation has been complex and expensive for the service providers. Orange also notes that Number Portability mechanisms have sometimes been misused (slamming and win-backs) at a cost for providers.

Number portability has proven to be an effective instrument to reduce switching barriers. Today, consumers face other kinds of “lock-in effects” that the outdated number portability rules cannot cope with, and competition law is too slow to keep pace given the rapid market changes. Changing operating system on mobile phones is today more challenging than changing telecom operator and consumers may be requested to pay again for applications or for content they have already purchased when switching from an Android to an iOS mobile phone - or vice versa.

The new right of Data Portability in the imminent General Data Protection Regulation is a step in the right direction because it rightly addresses a general issue in cross sector instruments.

If a form of ex-ante regulation is maintained, Orange recommends including mechanisms to avoid lock-in effects in cross-sector instruments and to maintain number portability.

(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.

Emergency services provisions in the USD are an important piece of legislation; however it should be noted that emergency services already existed a long time before the telecom framework was adopted.

Within the scope of the telecom framework review, the current provisions on emergency calls should be maintained and associated with the use of numbering resources to be equally applicable to all relevant services that use numbers, including all users of numbering resources, including those using numbering format without having either directly or indirectly been allocated numbering resources.

In the wider context of the DSM, as explained in Q102, emergency calls legislation should be extensively reviewed and extended to all the players of the internet value chain, using a cross-sector legal instrument such as the Consumer Rights Directive.

(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.

The internet value chain is only as strong as its weakest link, therefore rules on reporting security breaches should not be for the telecom sector alone but should involve all the players in the digital economy. The integrity and security of networks and services should be addressed horizontally to obtain effective results as the Framework Directive and the imminent Networks and Information Security Directive should provide consistency and appropriate protection within the digital economy.

(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.

Yes, Orange considers that there is a need to improve the integrity and security of networks and services for the reasons expressed in Q 106 and also because with the spread of internet encryption and browser proxy, network operators might no longer be able to fulfil their obligations.

Digital services should be within the scope of the Network and Information Security Directive and of any other instrument designed to make services secure.
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 OTT 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.
Orange understands the question as referring to a need to maintain the definition of “Electronic Communications Services” - under sector-specific regulation.

If this is the meaning of the question, Orange strongly disagrees that sector-specific regulation should continue to be imposed on “Electronic Communications Services”. As detailed in the answer to question 109, Orange considers that the concept of ECS as defined in the framework is obsolete. This definition wrongly considers that the conveyance of signals should be used as a criterion to enforce specific regulation of the service provided. The reality is that this characteristic has become irrelevant from a technical point of view – as many services are now provided independently of the conveyance of a signal – but also from both a consumer protection and public security point of view.

Orange, however, agrees that the future framework should maintain regulation related to the use of numbers, and end-user protection related to the provision of Internet Access Service (as defined in the TSM Regulation and the USD but deleting the obsolete concept of ECS from this definition) as they are sector-specific by nature – see QoS provisions for example – while all other services currently covered by the definition of ECS should be removed from sector-specific regulation.

Today, the market for telephony and digital communication is very competitive and offers consumers a wide choice of services that consumers consider substitutable. The problem is that consumers are not aware of the imbalance in the level of protection provided by these services. Orange considers that maintaining sector specific-regulation for communication services in Europe confuses customers and that horizontal instruments should be preferred for consumer protection.

The recent Boston Consulting Group study ‘Five Priorities For Achieving Europe’s Digital Single Market’ observes that “the combined revenues of Europe’s telcos are expected to shrink by 1 percent annually between 2015 and 2019, while the revenue of OTT players will increase at an annual rate of 13 percent. As a result, telcos’ share of the overall ecosystem will drop from 41 to 34 percent while OTT’s share rises from 19 to 30 percent.” These forecasts for the ecosystem prove the relevance of the changes currently under way in the digital market.

In Orange’s view, consumer protection (Consumer Rights Directive) and security rules (NIS Directive and GDPR) should be applied horizontally while sector-specific regulation should be limited to Internet Access Services (IAS). In addition, services that use numbering resources should respect obligations to route emergency services; be subject to legal interception obligations; to pricing rules associated with special number series; to portability and to contribute to national security obligations as appropriate, and NRAs should have the competency to address interoperability issues.
Question 109: As regards the current definition of electronic communications services (ECS):

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<th>disagree</th>
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<tr>
<td>a) Do you consider that the current definition of electronic communications services should be reviewed?</td>
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<td><img src="image" alt="Strongly Disagree" /></td>
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<td>b) If the current definition of ECS is reviewed, do you consider that the &quot;conveyance of signals&quot; should continue to remain a necessary element of the definition of electronic communications services subject to sector-specific regulation?</td>
<td><img src="image" alt="Strongly Agree" /></td>
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<td><img src="image" alt="Disagree" /></td>
<td><img src="image" alt="Strongly Disagree" /></td>
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<td>c) If the current definition of ECS is reviewed, do you consider that &quot;transmission services in networks used for broadcasting&quot; should continue to be considered as ECS?</td>
<td><img src="image" alt="Strongly Agree" /></td>
<td><img src="image" alt="Agree" /></td>
<td><img src="image" alt="Disagree" /></td>
<td><img src="image" alt="Strongly Disagree" /></td>
<td><img src="image" alt="Do Not Know" /></td>
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</table>

Please explain your responses.

Orange considers that the ECS definition must be repealed to reflect the ongoing changes in the digital single market in order to ensure the application of the “same service, same rule” principle to equivalent services, regardless of the provider of the service or the technology used.

Providers of electronic communications services, as defined by the current European regulatory framework, deliver interfaces to communication services at the user’s location. Providers convey the signal between users’ service interfaces. The ability to convey the signal between users’ service interfaces characterizes the provision of electronic communication services and their associated obligations that are detailed in the telecom regulatory framework.
With the massive spread of internet access, users today access transparent IP transport interfaces which allow access to all the services available on the internet. Providers of internet-based services (OTTs) operate their technical platforms, which may be located anywhere in the internet, and deliver their services thanks to the software and hardware resources deployed on the platform to manage the relationship between users. In this architecture, OTT providers do not convey a signal, as the internet access provider carries out the transport function between each user and the platform where the service is delivered.

This is why OTT providers are not electronic communication services pursuant to the definition of the framework and consequently are not subject to the associated obligations, but belong to the lightly-regulated category of Information Society Services.

Voice or messaging services are considered as electronic communications services or as information society services depending on the provider or the technology they rely upon, hence they are subject to inconsistent regulatory obligations. This inconsistency particularly affects consumer protection, security policies and fair competition.

One illustration, among many, concerns rules applying to the location of users impose specific prohibitions and obligations on telecom operators, whereas they do not apply to other players:
- the telecom-specific e-Privacy directive de facto prohibits efficient commercial use of the location data of users, which is an essential capability if providers are to propose innovative services. This is a domain where regulation inhibits telcos’ competitiveness.
- at the same time, the Universal Service telecom-specific directive requires telcos to collect and communicate the location of calling parties in case of emergency calls anywhere and at any time. This obligation generates direct extra costs and increases the complexity of technological choices.

This example also illustrates what is at stake with regulatory imbalances. Unequal constraints make telecom operators less competitive than OTTs when providing services. As users switch from the former to the latter, the social benefits of regulation disappear. Since services covered by regulation are used less by customers as they increasingly opt for non-regulated services (due to the competitive advantage resulting from not being regulated), then the protection granted by regulation also diminishes; end users are therefore less and less protected, which is contrary to the objective of such regulation.
Concerning the current ECS wording that also includes “transmission services in networks used for broadcasting”, namely IPTV, Orange considers that this part is also outdated and that this aspect of the ECS definition could also be repealed for the following reasons:
- economic regulation for broadcast services has already been repealed in the 2007 Recommendation on Relevant Markets; the conclusion of the explanatory note 2007 on the “Broadcasting transmission services and distribution networks, to deliver broadcast content to end-users” market: “On the basis that the wholesale market for broadcasting transmission services to deliver broadcast content to end-users is not deemed to meet the second criterion in a majority of Member States, and on the basis that access problems related to public interest objectives can be addressed under must-carry provisions, the market is withdrawn from the recommended list”
- Art. 5 of the recently adopted TSM already covers the specific nature of offers “optimised for specific content”.

The future-proof definitions also need to consider that services are increasingly bundled or offer various integrated features within the same service, e.g. communication and audiovisual services provided over one platform. An updated framework needs to be sufficiently dynamic to cover this increased convergence, to achieve this horizontal law, as the CRD is the most appropriate instrument instead of sector specific law. Only where clearly necessary should specific rules remain as complementary to horizontally applied rules.

To conclude, the revision of the ECS definition is crucial because whether services supporting inter-personal communications are integrated with networks (such as in the case of ECS), or not (in the case of OTTs), is of no relevance for consumer protection rules and therefore the criterion of the “conveyance of signals” should in no way be taken as a criterion to discriminate between regulatory obligations.
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:

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<tr>
<td>a) managed or subject to best-efforts online provision only?</td>
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<td>b) Remunerated through monetary payment (directly or as part of a bundle)?</td>
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<td>c) Remunerated by other means (advertising supported, provision of data by users, etc.)?</td>
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Please explain your responses.

The current ECS category in the sector-specific framework should not just be “reviewed” but deleted. Sector-specific regulation of services should apply to the provision of Internet Access Services (IAS) only, as recently defined in the TSM, which refers to the obsolete concept of ECS in that definition. IASs set up end-users’ connection to the internet, upon which both communications services and other services are provided. Sector-specific rules should no longer apply to IASs and not to the other communications services today covered by the telecom framework, namely telephony and SMS.

Current rules concerning the use of number formats, routing of emergency calls, pricing principles, etc. ... should be associated to the usage of numbering resources and of numbering format. Complementary consumer protection should rely on the Consumer Rights Directive.

To trigger the application of these rules, the simple criterion of the usage of numbering resources could be used: when internet services use numbering resources then current rules should apply, in the same way as the Payment Service Directive applies to those internet services providing payment facilities.

The other criteria proposed in question 110 to trigger sector-specific regulation have no relevance whatsoever for the definition of regulatory obligations. The rationale for a service to be able to route a communication to an emergency number is not dependent on whether or not the service is managed by a network operator or based on a best effort transport, or on whether or how the service is paid for. People who need to reach an emergency service should be able to do so with the services they are commonly using. It is also obvious that legal interception should apply in any case, as well as the respect of the confidentiality of the content of communications – a right that goes beyond the digital environment.

(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.

Yes, Orange considers that sector-specific regulation should be maintained but limited to IASs, use of numbers and to ECNs, all other services being ruled by horizontal law. This would guarantee a level playing field by design between digital services.

It is normal that IASs remain regulated, as this regulation guarantees that consumers benefit from high quality IAS offers, subject to a high level of consumer protection, providing open access to the whole world of services available on the internet.

When it comes to services other than IAS, no sector specific regulation is needed. Indeed, consumers benefit from competitive offers granted by:
- Internet Access Service (IAS) regulation that includes the open internet provision adopted within the TSM Regulation, and which guarantees that:
  (a) because of non-discrimination provisions in the best effort internet, consumers benefit from a fierce competition between services available on the internet, and
  (b) due to the protection of the quality of IASs, consumers benefit from competition between services provided on the internet and services provided by electronic communications network operators.
- Electronic Communication Networks (ECN) regulation in the Telecommunication Framework that guarantees:
  (a) competition between providers of IAS, and
  (b) competition in the provision of services “optimized for specific content”, as referred in TSM Art. 5.

Moreover, the maintenance of the regulation on the use of numbers guarantees that more general concerns attached to electronic communications, such as reaching emergency services, confidentiality of correspondence, legal interception, interoperability as far as appropriate, etc. continue to be guaranteed.

For the rest, sector-specific services regulation is no longer necessary and should not be extended to other digital activities for the following reasons.
Firstly, the current framework was originally designed to support the transition of telecommunications markets from monopoly to competition. The multiplication of communication services delivered over the internet is a demonstration of a fully competitive market. Consequently, the justification that was used when competition was only emerging, at a time when services were mainly delivered via conveyance of signals over the networks, and therefore sector-specific regulation was imposed, is no longer the case and should not be used as an argument to maintain or extend regulation.

Secondly, the European priority is to unlock initiatives and investments in digital activities. Subjecting digital activities to rigorous ex-ante regulations, and providing public authorities with multiple grounds and powerful instruments to interfere with market developments, would undermine the attractiveness of European digital businesses for investors and entrepreneurs.

Last but not least, all sectors of the economy - industry and services - are already or will soon become digital. By nature, a sector-specific authority and a sector-specific law cannot cover the whole economy. It would be impossible to define a boundary; it would immediately be by-passed or exceeded. For these reasons, the solution is not in the extension of the scope of telecommunication law.

The forthcoming review of the regulatory framework should not extend the scope of telecom law and should be limited to the regulation of networks, of Internet Access Service and the usage of numbering resources and format, eliminating the obsolete notion of Electronic Communication Service. This would guarantee a level playing field by design between digital services.

Fair competition between services provided Over The Top and services provided by telecom operators on equal regulatory grounds will also be guaranteed by the Net Neutrality provisions adopted within the Telecom Single Market European Regulation.

The bold, positive and future-proof choice to limit sector-specific regulation at the service level to Internet Access Service will eliminate all the ambiguities and uncertainties in the regulatory qualification of services such as CDNs or Cloud and ensure a clear future for fair competition in digital services to all market players.

The Commission itself has given a definitive proof that the true boundary of sector-specific service regulation should be Internet Access Service, when it launched its Internet 2020 consultation on the needs of European users in 2025 on the same day as the consultation on the Framework Review. This consultation on users’ needs is 100% dedicated to Internet Access Service, as fully representative of the needs to be met by the outcome of the Framework Review. It could not provide better evidence of the fact that the scope of service regulation should be limited to Internet Access Service.
(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
Yes, Orange supports the wording adopted for the IAS definition as part of the TSM compromise, except the reference to the obsolete notion of ECS. The TSM has already been adopted and the discussion on the IAS definition should not be re-opened.

Nevertheless, the progressive implementation of encrypted protocols reopens the discussion on the regulatory liabilities of IAS providers because this trend has already, and will increasingly have a major impact on the performance of IASs, non-discrimination and security policies. Services using encrypted protocols, provided from devices on top of IASs and towards proxies, fully control traffic routing, thus functionally control IASs.

Encryption is increasingly being promoted in protocol standardization for both packet headers and data payloads whatever the protocol. IETF requires the standardization of encryption for all the stacks above the IP layer, namely HTTP, TLS, TCP and UDP.

Studies have shown that because of encrypted protocols the quality of services of IAS may degrade – see IETF, “Effect of Ubiquitous Encryption” https://tools.ietf.org/html/draft-mm-wg-effect-encrypt-01 – and that encryption may affect network management – see GSMA, “Network Management of Encrypted traffic” http://www.gsma.com/newsroom/all-documents/wwg-04-network-management-of-encrypted-traffic-v1-0-2/ – because IASs providers will no longer be able to rely upon clear information to improve network operation and traffic management. As a consequence, and beyond the control of ISPs, customers may experience discriminatory access to services, abusive packet prioritization or IAS quality degradation.

Irrespective of the use of encryption, other significant issues might occur with the development of proxies deployed by digital services providers between end-user’s devices and other digital services providers. In this case and regardless of IAS providers’ obligations in terms of quality of services and non-discrimination, these proxy managers may change transmission parameters, modifying the perception of the respect of these obligations by the end-users.

The review of the telecommunication regulatory framework should consider these evolutions potentially impacting IAS performance and neutrality, outside the scope of IAS providers’ liability. The limits of IASs providers’ liabilities should be clearly established. To grant consumers access to any content or service, a horizontal law could extend non-discrimination obligations to other bottlenecks in the internet value chain.
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.
There are provisions in the USD that are relevant for IAS. However the USD should be updated in the light of the recently-approved horizontal consumer protection instruments, see answer to Q101 in this consultation. The ePrivacy Directive should be repealed once the GDPR is approved, and the confidentiality of communication should be subject to a horizontal instrument, namely the GDPR, to be applied to any form of communications - not only to “electronic communications”.

Retail IAS would continue to be regulated on a sector-specific basis, while the ECS definition should be repealed.

The following section addresses the main consequences of the abolition of the concept of ECS in the framework and of limiting the scope of sector-specific service regulation to IAS.
- How will MTRs/FTRs be regulated? Call termination rates could be seen as an ECN issue. Orange recommends the adoption of EU-wide MTR/FTR levels but this is a separate matter.
- How will the universal service be safeguarded? This concept has to be reviewed, see next section of this consultation.
- Will voice telephony providers have to continue to carry emergency calls? The obligation to carry calls to emergency services (currently applied to PATS) should be mandatory for all services providers using E.164 numbers.

In addition, digital services which have integrated communication functions should have the general obligation to deal with emergency situations taking into account their technical limitations.
- Number portability: portability of numbers associated with IAS will continue to apply as (a) numbers remain under sector-specific competency, and (b) numbers are considered as ancillary to IAS services as long as a change in phone number would imply significant switching costs for a customer wishing to change IAS provider. Number portability has been a powerful tool in the past and could continue to play a role, as “lock in” effects are also now prevalent in the digital sphere.
- What would be the impact on the roaming regulation? IASs provide data roaming services that will continue to be subject to data roaming regulation. Telephone and SMS roaming services, to the extent that it is still relevant to regulate them once the new framework is implemented, could continue to be regulated under roaming regulation as using E.164 numbers.
- Will operators have to continue to publish QoS indicators? Yes, QoS indicators related to IAS will continue to be published.
- Will the privacy of e-communications services be guaranteed? Communication functionalities included in digital services should be subject to the obligation of secrecy of correspondence. This obligation could be included in the general EU consumer protection directive. In addition GDPR will also apply.
- Should the general Authorisation regime for ECS, including notification of the NRA be maintained? Yes, they should be maintained for IAS providers and for services using numbers.
(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?

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<thead>
<tr>
<th>(i) Contractual information (e.g. related to quality parameter other than speed)</th>
<th>strongly agree</th>
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<th>disagree</th>
<th>strongly disagree</th>
<th>Full harmonisation</th>
<th>Minimum harmonisation</th>
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<tr>
<td>(ii) Transparency measures</td>
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<td>(iii) Independent price and quality comparison tools</td>
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<td>(iv) Control of consumption</td>
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<td>(v) Contract duration</td>
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<td>(vi) Measures facilitating switching (receiving operator-led process;</td>
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<td>Protection of end-users throughout the switching process, compensation in case of delay and abuse in the switching process</td>
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<td>(vii) Measures to guarantee the effectiveness of end-user rights (in particular contract termination and switching) in relation to bundles of services</td>
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<td>(viii) Measures eliminating restrictions and discrimination based on nationality or place of residence</td>
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Orange considers that in relation to IAS, there is no need for any further end-user rights in addition to those included in the recently-adopted Telecom Single Market Regulation, as the current regulation comprehensively addresses the needs of the Open Internet. In addition, we would point out that IASs are also subject to the Universal Service Directive and to the Consumer Rights Directive.

What remains to be fixed is the cross-sector harmonization of consumer protection because consumers generally do not make a distinction between the underlying technologies or business models within the digital sector. Consumers treat telco services and those provided by other players as substitutes. Therefore, the discrepancies in consumer protection standards between telco services and other providers’ services need to be removed.

(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)?

<table>
<thead>
<tr>
<th>Service</th>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
<th>do not know</th>
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<tr>
<td>Voice telephony</td>
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<td>Video telephony</td>
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<td>Sms/text messages</td>
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<td>e-mails provided by telecom operators</td>
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<td>Other traditional telecommunications services</td>
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</table>
Please explain each of your responses and provide examples of such OTT services.

Orange considers that traditional electronic communications services are functionally substituted by OTT services or platforms with communication elements.

On this point, ETNO has recently published a survey - ETNO survey: https://etno.eu/datas/publications/studies/ComRes_ETNO_Final%20Report_LA TEST%20FOR%20PUBLICATION.pdf - on the level of customer understanding of the current substitute services available in the digital single market.

Unsurprisingly, ETNO’s survey confirms that consumers consider those services similar, regardless of the provider and/or the technology and do not have a clue about the level of protection when using for example their telecom provider’s text service or text message services provided by OTTs.

Against this evidence, regulators should aim at converging regulation and not introducing new criteria to increase divergences.

(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
- [x] strongly disagree
- [ ] do not know

If you disagree, is it possible and appropriate to identify the relevant addressees of each communications-specific rule provision-by-provision? Please explain your response.
As explained in Q110, Orange does not support the proposal to include all communications services which are functionally substitutable to existing ECS under a new common definition for such communications services.

In a recent consultation on OTT services, BEREC developed the proposal to maintain the notion of ECS and to expand the scope of the framework to OTT substitutes; BEREC also identifies OTT-0/1/2 services, building upon the outdated definition of ECS. In the BEREC proposed taxonomy OTT-0 are those services that are already ECS and should be regulated; OTT-1 are those services which are potentially substitutes for ECSs which could be partly regulated; and, OTT-2 are services that are not substitutes for ECSs and would not be regulated by the telecom framework.

BEREC’s proposed taxonomy looks backward, rather than forward to the future.

BEREC OTT-1 concept is even more confusing than the current ECS definition and will be prone to even more uncertainties and litigations. For instance, it may imply that a Skype video call may switch from the category of non-substitute to the category of substitute if telcos launch their own version of video calls. Furthermore, this option maintains, and even extends, the uncertainties and imbalances due to the obsolescence of the ECS definition, for instance on Cloud and CDN services.

From a market point of view, introducing the concepts of “communication service” or “OTT-1” indicates a lack of understanding of the evolution of usages and services because communications tend to disappear as an autonomous category of services as communication becomes a component of richer offers. People increasingly use communication functions (voice, video, messages) within the context of a richer interaction: social network, e-commerce, CRM, on-line gaming, etc. People communicate because they interact in a social network, e-commerce or on-line gaming site and will no longer use the addressing plan of traditional communication services. That is why the segmentation proposed by BEREC represents the past. OTT-2 services are substitutes for a key part of telco service because they replace the addressing plan, and they provide the context in which people communicate. OTT-2s are swallowing OTT-1s, to use BEREC taxonomy.

The review should consider the future and not the past. Communication should no longer be seen as a specific regulatory category but as a function included in any digital service.

The general European law protecting consumers already covers the communication function integrated in any digital services; legal obligations of secrecy, interception and dealing with emergency situations should also have a cross-sector approach and be addressed by all services to the best of their technical capabilities.
**Question 117:** What should be the essential elements of a functional definition of communications services? Please explain your response.

A regulatory definition of communication services is inadvisable because the digital market is evolving and communication facilities are increasingly provided in addition to general purpose digital services and will in future be provided less and less as standalone services.

Orange considers that the digital single market needs a comprehensive regulatory vision built upon the central role of Internet Access Services; the repealing of the outdated and confusing ECS definition, the preservation of regulation applied to the use of numbering resources and format, and the development of a horizontal consumer protection system.

**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 answer to Q117.

**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.
As a general principle the future framework should envisage that communication between machines (M2M and IoT) are fundamentally different from communication between persons and between persons and machines.

The rationale that applies to regulating communications between persons does not apply to M2M and IoT services, which will in the vast majority of cases, have only a very limited voice functionality (e.g. in emergencies), if at all. Therefore, it would also be beneficial to have the roaming regulation clarified as not being applicable to IoT and M2M services as in most cases, IoT connected services have a closed user group, whereby open internet or any-to-any voice communications are not the primary purpose of the service. In addition, customers are generally not the service end-user, but rather a business that requires global distribution coverage and managed platforms for economic viability and the provision of consistent global services.

In the recent public consultation on the draft BEREC Report on enabling the Internet of Things on IoT, BEREC notes that the EU roaming regulation is a consumer protection instrument applicable when services or devices are likely to be ‘travelling in the Union’ and delivered on a ‘mobile device’. It is worth noting that a similar interpretation is followed by the Commission in the provisional agreement on the Telecom Single Market (TSM). The TSM specifies that the roaming regulation is aimed at regulating roaming services used by roaming providers’ end-users while the latter periodically travel within the Union.

The current provisions make no specific reference to M2M or IoT connected services and do not draw a distinction between person-to-person communications and IoT connected services. Nevertheless, while a wide variety of services and deployment scenarios may be possible, most IoT connected services do not meet the criteria identified by BEREC and the Commission for the roaming regulation to be applicable.

In most cases, IoT connected services have a closed user group, whereby open internet or any-to-any voice communications are not the primary purpose of the service. In addition, customers are generally not the service end-user, but rather a business that requires global distribution coverage and managed platforms for economic viability and the provision of consistent global services.

At this stage, there is no one distinct business case for IoT and M2M. As such, some agreements between operators and providers will be based on a one-time fee, and others will be charged according to the amount of traffic supported, keeping in mind that it is far from any M2M/IoT that will be in need of roaming at all. What is certain is that for any M2M/IoT-business case to be economically viable, the price-setting of the traffic will have to be very low per device.

For these reasons IoT connected services should be excluded in principle from the applicability of the roaming regulation.
(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 answer to Q117

(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.

In regard to providers of telephone services, who make use of telephone numbers and who incur Electronic Communications Network costs, Orange has provided a detailed answer concerning voice termination in question 122. For providers of telephone services using telephone numbers but who do not incur Electronic Communications Network costs, there should be no termination fee as there are no network costs.

Orange considers that regulation of fixed and mobile termination rates do not need to make reference to the concept of Significant Market Power.

Besides these specific cases of rate terminations, Electronic Communication Networks Providers are not in a situation to exploit any “termination monopoly” and therefore should not be regulated ex ante. In particular, it can be legitimate for internet access service provider to recover the extra cost of receiving asymmetric Internet traffic.

(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
If your response is positive, should regulation continue to be applied in accordance with competition principles (market definition, identification of SMP, assessment of remedies, i.e. cost-based price controls), or can a simplified approach be considered (symmetric regulation of termination charges, European benchmark termination rate, other)? Please give substantiated examples.

The EU Recommendation on Termination Rates price regulation has been applied heterogeneously in Europe and has led to open-ended litigations. Even though this issue is transitional in nature, as the telephone traffic using numbers and subject to this TR regulation decline, it is however necessary to find a simple and efficient solution to resolve this problem. In this respect, the adoption of a European Regulation imposing a single cap to all Termination Rates in Europe, based on Article 5 of the Access Directive, should be the preferred option. The cap should be defined to cover Termination costs.

Please explain your response.

The current system has proved to be totally inefficient: (a) high and useless administrative costs of artificial market analysis, (b) unjustified heterogeneity of TR values in Europe, and (c) high-profile and never-ending legal litigations (see The Netherlands and Germany cases in particular).

In addition SMP access regulation of TR is conceptually flawed, as the true nature of the problem is a problem of a lack of economic coordination between market players to efficiently provide end-to-end services. It is fundamentally an interconnection (or two-way access) problem with specific economics and in this respect, it is more sound to address this issue specifically as such, rather than artificially model it as an access problem.

(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
- [x] disagree
- [ ] strongly disagree
- [ ] do not know
Please explain your response.

As explained previously Orange does not support the introduction of a new definition of communication services. Provisions concerning services using numbering resources and numbering format should remain in the sector-specific framework and be applied to any services using numbers.

(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 previously explained, Orange does not support the introduction of a new definition of communication services. Services using numbering resources, irrespective of the provider, should comply with the provisions and benefit from the rights associated to the management of numbering resources established in the sector-specific framework.

(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?

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<thead>
<tr>
<th></th>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
<th>Full harmonisation</th>
<th>Minimum harmonisation</th>
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<tbody>
<tr>
<td>(i) <strong>Contractual information</strong> (e.g. related to quality parameter other than speed)</td>
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<td>(ii) <strong>Transparency measures</strong></td>
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<td>(iii) <strong>Independent price and quality comparison tools</strong></td>
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<td>(iv) <strong>Control of consumption</strong></td>
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<tr>
<td>(v) <strong>Contract duration</strong></td>
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<td>(vi) <strong>Measures facilitating switching</strong> (receiving operator-led process;</td>
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<tr>
<td>protection of end-users throughout the switching process, compensation in case of delay and abuse in the switching process</td>
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<td>✔</td>
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<tr>
<td>(vii) Measures to guarantee the effectiveness of end-user rights (in particular contract termination and switching) in relation to bundles of services</td>
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<td>(viii) Measures eliminating restrictions and discrimination based on nationality or place of residence</td>
<td></td>
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</tbody>
</table>
Please provide a brief explanation for each of your responses.

As previously explained, Orange does not support the introduction of a new definition of communication services. Services other than IAS using numbering resources, irrespective of the provider, should comply with the specific provisions and benefit from the rights associated to the management of numbering resources established in the sector-specific framework.

Since 2009 horizontal regulatory instruments – such as the Consumer Rights Directive and the forthcoming General Data Protection Directive and Networks and Information Security Directive - have evolved, ensuring a reliable horizontal framework for all digital services.

(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.

Voice services using numbering resources, irrespective of the provider, should comply with the specific provisions and benefit from the rights associated to the management of numbering resources established in the sector specific-framework, such as routing calls to emergency numbers.

In addition, voice services like any other service should be subject to the requirements of horizontal laws that should include, for example, the principle of confidentiality of communication whatever the kind of communication used.

(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?

No, there are no other communication services requiring specific end-user protection.

(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.

Yes, all services using numbering resources and numbering format, irrespective of the provider, should comply with the specific provisions and benefit from the rights associated to the management of numbering resources established in the telecom framework.

(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.

| No, Orange does not consider that there are new or emerging sector-specific end-user protection issues which need to be addressed within the sector-specific framework. |
| Orange considers that new issues, such as consumer protection for services paid through the exploitation of personal data, namely data as a currency and non-discrimination issues related to encrypted protocols, should be addressed through horizontal regulation. |

(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
- [x] 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.

No, Orange considers that increasing the maximum contract duration would not diminish the risk of first movers investing in very high capacity networks in challenging areas.

The best way to diminish this risk would be based on the following levers:
- providing a positive regulatory framework incentivizing maximum coverage by private undertakings on commercial grounds;
- supporting the demand side by appropriate tools (vouchers, etc.);
- supporting coverage in these non-profitable areas via timely public subsidies to cover the related local fixed costs.

Such an approach, which is to deliver the best results, does not call for derogations to the consumer provisions.

(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)?

As explained in Q104, Orange considers that number portability has proven to be an effective tool to reduce switching barriers; nevertheless today consumers face other kind of “lock-in effects” that the current number portability cannot cope with and that competition law is too slow to keep pace with given the rapid market changes. Changing operating system on mobile phones is today more challenging than changing telecom operator, and consumers may be requested to pay once again for applications or content they have already purchased when switching from an Android to an iOS mobile phone – or vice versa.

The new Data Portability right in the imminent General Data Protection Regulation is a step in the right direction because it rightly addresses a general issue via a cross sector instrument.

If a form of ex ante regulation is maintained, Orange recommends including mechanisms in cross-sector instruments to counter lock-in effects while at the same time maintaining number portability in the sector-specific framework.

(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.

No. Competition policy already has all the tools to address any potential anti-competitive effects of bundled offers.
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.

Orange supports full harmonization for sector-specific end-user provisions because only full harmonization provides consistent consumer protection.

(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.

The regulatory objective of the 112 emergency services number should be to ensure that end-users are able to reach the 112 emergency services, and for the PSAPs to receive location data at the same time as the call to the emergency services is being made.

This obligation should be linked to usage of numbers. The expectation of end-users is that when a call is made, such ability includes dialing the 112 emergency services. As such, the ability to reach the 112-emergency service is intrinsically linked to the usage of numbers from a national numbering plan.

In this case, providers who request number ranges from the national numbering plan would, along with the allocation of numbers, also have obligations, such as ensuring that the emergency services can be reached.

In terms of funding, total emergency call costs should be covered by public funds.

In relation to the awareness of the 112-number, this review provides an opportunity in itself to ensure that emergency services can be reached by dialing 112 in any Member State. It is of great concern that different numbers are still being used to reach the emergency services at national level, which only generates confusion in the public.

(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.

Orange has not identified areas at this point in time, e.g. in relation to eCall, where PSAPs should be regulated at EU-level in relation to performance criteria.

116 is a range of easy-to-remember and free-of-charge phone numbers to assist citizens who need support throughout Europe. Based on the Commission decision on reserving the national numbering range beginning with ‘116’ 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 Eurobarometer surveys to assess the level of awareness in the Member States. The survey showed the widespread lack of awareness of these services. The survey showed strong support expressed by citizens across the European Union for such services, but also the lack of awareness of these numbers.

To conclude, Orange considers that the level of awareness remains limited and that introducing further regulation, such as for example performance criteria for emergency services, would be premature.
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.

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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.

Whilst Orange will continue to support the current five short numbers in place such as the Missing Children Hotline and Child Helplines, we do not see any current need to expand the use of 116-numbers. In our experience, consumers including especially children will look for national-based hotlines and helplines to seek assistance and a uniform number across the EU is not essential (and may indeed lead to confusion) when seeking help and advice. As new issues arise, new and existing support organisations tend to publicise their own numbers at national level, and there may be a number of different organisations which provide a range of support services dealing with similar issues – consumers will choose the one which best suits their needs. In addition, such hotlines and helplines increasingly make use of online services where children and other users are able to chat with an advisor via instant message, or just raise a query to see what a potential reaction to an issue would be. Such online services are at the same time able to offer complementary support in terms of written material and FAQ.

In addition, Orange has repeatedly observed that public interest and take-up of “harmonised numbers for harmonized services of social value” have proven very limited because the need itself for such numbers were initially very limited too. Orange considers these provisions have even led to inefficient use of national resources and should not be reproduced in the future and could even be removed.

(continue here if necessary)

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.

Orange strongly agrees that the scope of assignees of rights of use of numbers is still relevant, both for E.164 numbers and E.212 IMSI. These numbers are used as addresses for technical reasons and are even unknown to the subscribers for some services (e.g. M2M). Orange considers that revising the rights of use would not be desirable but aspects relative to the length of the numbers or the applicable constraints (e.g. portability) may be accommodated on a national basis.

Regarding M2M, Orange also notes that European players do not limit their M2M connectivity services to the EU and that other global international resources exist for services that would need to be global. Orange appreciates the concerns related to competition but considers that the benefits of extending the criteria for assigning resources (such as E.212 Mobile Network Codes) have not been demonstrated in this area. Furthermore, Orange would like to point out that any modification to assignment policies should be associated with a prior evaluation of the volumes of potential assignments to assess the impact on the numbering plan. Such an evaluation has not been undertaken so far. For all these reasons Orange advocates that these criteria remain unchanged.

(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.

Orange disagrees. Orange considers that IP resources (used for M2M and also for many other services) are properly managed by organizations that are well placed to accommodate emerging needs in terms of new policies. Orange has repeatedly expressed its support to these organizations in the past.

(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?

Orange considers that national resources are designed for services that are by their nature national, whilst international (i.e. ITU or global) resources can be used for services that are global. Orange believes that a resource limited to Europe would have no relevance for services that are by nature not limited to the borders of the EU. Orange considers that trying to reproduce ETNS would be bound to fail.

(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.

Orange is one of the largest contributors to the ETSI standardization work related to Embedded SIM (eSIM). One of the most important goals of developing the standards for eSIM is to facilitate the over-the-air configuration of the SIM-card. This includes the enablement as well as the disablement of an operator profile. A customer who owns a device with an embedded SIM will likewise be able to transfer his subscription to another operator as well as to another device. As such, there is no lock-in at operator level or at customer level. Assigning MNCs to the end user will not facilitate or complicate SIM card provisioning or re-provisioning.

We are at the infancy of the development of eSIM for all types of devices: starting from the M2M market, moving progressively to connected objects (watches, tablets, wearables, …) with the uptake in smartphones as the final step. This process will take some time as operators need to progressively adapt their IT-systems to this new way of getting customer subscriptions. In 5 years, we can anticipate that this process will be common in most of the devices.
**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.

The M2M communications market is global and industry has already proven - on a voluntary basis - its willingness to develop standards in order to improve OTA provisioning of both user profiles and choice of operator to eSIM-cards.

The eSIM is a sensitive topic and the security is a key component. It is essential that regulation pushes for certification of modules storing operators’ credentials. These credentials cannot be obtained by anyone but operators when they are downloaded; neither by the customer, the device vendor or the chip/eSIM vendor. It is crucial for the security of the entire systems that the implementation cannot be tricked.

There are two main reasons for this: firstly; Customers need to be known at the access as this is a regulatory requirement requested by the national authorities, hence the authentication cannot be faked or tricked. Secondly; It is essential that no-one in the system is able to obtain these credentials which could ease tapping from non-authorized entities.

It is therefore essential that certification is ensured by national/European entities.

(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

Orange does not find it necessary to tick any of the above boxes, as the issue at hand is not so much a lack of availability of content or ensuring access to content for certain viewers, but rather to ensure a fair application of the rules to relevant players in the market.

The audiovisual economy has changed profoundly. Formerly, consumers were able to watch audiovisual content only through broadcasting channels and then through on-demand services. Nowadays, user-generated content platforms offer more and more audiovisual content such as TV and on-demand services, and many internet platforms no longer merely provide aggregated content. They make editorial choices as well, for instance by promoting and aggregating content on their homepages according to the overall profile of the platform and its target groups.

In the current market, European audiovisual media services are at a competitive disadvantage and whilst we strongly believe that the AVMSD should continue alongside the eCommerce Directive, the respective set of rules should still secure a strong and competitive market based on fairness of rules. As such, Orange calls for the Commission to carry out a comprehensive assessment of the wider role of platforms with a view to deregulating broadcasters.

In addition as mention in our answer to Q31, if NRA considers that the functioning of the connectivity market may be distorted due to content access concerns, in particular to premium content, it should call for the intervention of the competent authority to fix the issue.

Question 143: Is there a need to adapt or change the provisions on:

<table>
<thead>
<tr>
<th></th>
<th>yes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Must carry'</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>Electronic Programme Guides (EPG)</td>
<td>☒</td>
<td></td>
</tr>
</tbody>
</table>
Orange’s answer is interlinked with our response to Q142.

The Commission should aim to create a level playing field subjecting all services to the same regulatory obligations. Rules on “Must-carry” and “EPG” should not be extended as, for instance, scarcity considerations cannot be applied to platforms, which could otherwise be deemed a relevant factor to consider in relation to accessibility, as there are multiple different infrastructures available for the user to choose from. Therefore, a “yes” is indicated for supporting changes to the provision both relating to “Must carry” and “EPG” in the context of ensuring a greater degree of competitive leverage between broadcasters and online platforms.

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:

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<thead>
<tr>
<th>Question</th>
<th>Significantly</th>
<th>Moderately</th>
<th>Little</th>
<th>Not at all</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) the availability</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>b) affordability</td>
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<tr>
<td>c) and accessibility of electronic communications services to all EU citizens?</td>
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</tbody>
</table>
The universal service regime has lost its effectiveness over time. Whereas it made some sense immediately after the liberalisation of the market, the goals of availability, accessibility and affordability have been largely met by the market.

a) availability: since liberalisation market forces have brought about a greater availability of services. The universal service specific funding mechanism has had little effect on the availability of services. It has been implemented in a four countries only and its results have been modest in those countries. In practice and independently of Universal Service Obligations, electronic communication networks have continuously increased their coverage and their capacities over time.

b) affordability: Prices of telecommunications services have been massively decreasing in Europe over the last 20 years, thanks to technological progress supported by market forces. Regulation of retail prices for average customers is therefore no longer required. Market forces are also providing offers for customers with specific social needs.

c) accessibility of electronic communications services to all EU citizens: customers can choose between offers from different providers. So rules on a universal service obligation, imposed on the offers of one specific undertaking, have also become less relevant.

(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
Assessment of the administrative and regulatory costs resulting from the USO in comparison to the effects produced leads to the conclusion that the current USO mechanism is not at all efficient.

The current regime has led to tremendous amounts of different interpretations and litigation, within European and national courts. This is due, for instance, to the legal uncertainty attached to the mechanism for cost assessment and the unclear concept of “unfair burden”. The net calculations are always subject to lengthy timescales and in addition, those rules have been implemented differently across the EU.

As further outlined below, we consider that once a public interest objective has been defined, before imposing any specific obligation the public authorities should assess whether or not this objective has already been delivered by market forces. If not, then this public interest objective should be endorsed by the Member State and funded by public money.

(continue here if necessary)

**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
- [x] little
- [ ] not at all
- [ ] do not know
The current universal service regime is rooted in an obsolete PSTN voice-centric monopolistic world and thus ignores the rapid development of market and services. It focuses on the supply side and, as such, it is not meeting a true demand. For example, in France a significant number of customers could potentially benefit from subsidized subscriptions. However, the mechanism is actually used only by a small minority of those who are entitled to use it. The ratio between actual beneficiaries and entitled customers has been constantly decreasing and should today be around 5%.

Additionally, as mentioned in Q144, since the USO was designed back in the mid-90’s, market forces have evolved significantly and provide a huge variety of offers that match the USO objectives, while at the same time telecommunication prices are constantly decreasing, which means that universal service obligations are now less relevant and no longer justified.

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.

Although the USO regime was designed to be fully compatible from a legal point of view with the rest of the framework and with competition rules, it was based on a concept dating from before liberalization, rather than being a consistent part of the current regulatory framework. It was logical at the time to make exceptions to the principles of the regulatory Framework in order to guarantee universal provision of traditional telephone, payphones and directory services inherited from pre-liberalisation times. Indeed the US mechanism involved a two-fold exception to the principles of the regulatory Framework: consumers could not choose their provider (usually only one provider is designated) and a financial transfer was required between telco operators to compensate this provider for the net loss incurred (if a private fund was set up in preference to a public one).

For the future, and for reasons detailed in the answers to the fourth chapter of this consultation, Orange considers that in the future framework the scope of sector-specific service regulation, including what is covered today in the Universal Service Directive, should only concern Internet Access Service (IAS) and the use of numbers of the public numbering plan. There is no doubt about the availability and affordability of services, notably voice services, using numbers. Therefore, the issues of universal service availability and affordability can only concern Internet Access Service. The European Commission itself shares the same views: its consultation on the needs of end-users after 2020, launched the same day as the present consultation, is fully addressed to the needs in terms of quality and speed of Internet Access Service.

There is no reason to maintain the two-fold exception to the principles of the regulatory Framework implied by the US mechanism mentioned above, in order to provide universal IAS. The objective of universal coverage and affordability of IAS can be met in ways which are much more consistent with the principles of the regulatory framework: to make sure that unprofitable areas of the territory or low income consumers are served by private providers, public authorities can support part of the network infrastructure cost or provide direct subsidies to low income consumers. Such an approach allows subscribers to keep their freedom to choose between competing offers and does not give rise to financial transfers between private telco operators.

Finally, as further explained below, the use of state aid rules to achieve public interest objectives that would not be delivered by the market would be more efficient and less subject to litigation.
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.

Please refer to previous Q146.

(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
USO were shaped in a context of market liberalisation but the market conditions have drastically evolved since that time, with more competition and choice available to consumers. Market forces have multiplied and are now delivering most of the USO, as highlighted by the European Commission in its latest Digital Agenda Scoreboard for 2014. In addition, due to the drawbacks of the universal service regime (calculation of “net costs” and the assessment of the unfair character of the proven burden, and related legal uncertainty), the USO financing mechanism should be fundamentally changed.

The framework review should therefore be the opportunity to reconsider both the obligations and mechanisms which are no longer relevant.

First of all, Orange would point out that our position, as explained in our answer to question 147, is that the concept of USOs may only concern Internet Access Service (IAS). The universality of Internet Access Service implies a universal availability of an underlying access network.

Whereas the current USO mechanism should be removed in its current obsolete form, the concept of an obligation on Member States to ensure universal access to internet access could be imposed on Member States in the regulatory framework. Member States would then have to comply with this obligation by:
- providing a positive regulatory framework incentivising maximum coverage by private undertakings on commercial grounds to minimise the extent and the cost of non-profitable areas, and supporting the demand side through appropriate instruments (vouchers, public procurement);
- supporting coverage in these non-profitable areas via public subsidies,
- guaranteeing the benefit of a competitive retail market to all customers, including those of non-profitable areas.

The concept of universal service or public interest goals could be kept in the regulatory framework as far as it is made clear that the funding cannot be sectorial (as it benefits to the society as a whole) but based on public budget and that it is designed to support rather than crowed-out private operations.

(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.

It is important that citizens with special needs, such as a disability, can communicate to the same degree as other citizens. Luckily innovations and new services have made this much easier and in general variety of offerings are replacing earlier dedicated systems (e.g. text-telephony being replaced by chat, messenger, video telephony etc). However, if the market does not deliver, it may be appropriate to impose general legal obligations that would be legally binding and operationally much more efficient and flexible, adaptable to changing market conditions and to changing technologies, than a rigid and detailed sector-specific obligation. A holistic assessment is needed; these needs can be met not just by services but also through devices or apps for instance. In that sense consumer protection rules, including provisions on disabled end users, should be moved from sector-specific rules to horizontal law.

(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
- [x] strongly disagree
- [ ] do not know

Please explain your response.

The Scope of the USO is completely outdated. ETNO’s consumer survey carried out by COMRES this summer clearly shows that public payphones and printed directories are no longer necessary to participate in society. In some countries, these obligations have already been lifted.

Even if the current scope is outdated, this does not mean that new provisions should be added. USO principles and mechanisms must be completely rethought and be based on a new a mix of supply-side and demand-side tools. The political objectives of universal availability and affordability of access, necessary for social inclusion, can be better met by other means than the current USO mechanism.

The USO mechanism should be deleted in its current obsolete form. If internet access is deemed to be a necessity for participation in society, Member States could be obliged under the future Regulatory Framework to meet this objective of universal access to Internet Access Services by:
- providing a positive regulatory framework which incentivises private undertakings on a commercial basis to maximize coverage, to minimize the extent and the cost of non-profitable areas, and which supports the demand side through appropriate instruments (vouchers, etc);
- supporting coverage in these non-profitable areas via public subsidies,
- guaranteeing the benefit of a competitive retail market to all customers, including those in non-profitable areas.

(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.

The designation of universal service providers for telephony services at a fixed location is no longer either necessary or appropriate to prevent social exclusion in societies which are progressively being transformed by the internet and the digital economy. Voice services are provided through various types of players.

In addition, mobile network operators have already, independently of the USO, committed to specific obligations in terms of quality, coverage and security (for instance via spectrum licensing conditions); these players provide ubiquitous voice services on a competitive basis and are an alternative to voice services at a fixed location, as acknowledged by numerous regulatory authorities including the Commission itself and as proven by empirical evidence.

The regulatory framework already provides guarantees for the quality of Internet Access Services, and of the underlying access network, which implies that VoIP will be functional.

(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 understand the question as: does universal service now mean being able to be connected on the move, wherever you are?

This is not an issue as mobile coverage is close to 100%, even in sparsely populated areas and if this is deemed to be necessary, there is an option to include coverage requirements in licenses. The fixed position provision is sufficient to ensure that citizens can participate in society. Any extension of this obligation would impose undue costs of meeting public objectives on private companies. Besides, public authorities are already providing connectivity in public areas such as schools, libraries, public gardens, entire cities sometimes, roads, railroads, etc.

The means to achieve this form of universal access would then be the responsibility of Member States which should be liable for universal service vis-à-vis the Union.

(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?

<table>
<thead>
<tr>
<th>Service</th>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
<th>do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) public payphones</td>
<td></td>
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<tr>
<td>b) comprehensive directories</td>
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<tr>
<td>c) comprehensive directory enquiry services</td>
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</table>

Please explain your response.

USOs were shaped at a time when the market was being liberalised but market conditions have drastically evolved since then, with more competition and choice available to consumers. Market forces are now delivering most of the USOs, as highlighted by the European Commission in its latest Digital Agenda Scoreboard for 2014.

Some services, such as public payphones and paper directories, are largely outdated. Others are following the same trend. Market forces are sufficient to deliver remaining requirements. The obsolescence of these obligations is also demonstrated by the decision of Member States who initially imposed such obligations to withdraw or lighten them (e.g. Belgium, Denmark, Finland, France, Netherlands and Sweden).

In the study “Universal service obligations and public payphone use: Is regulation still necessary in the era of mobile telephony”, the author concludes that removing public payphones from the scope of USO would have a small impact in terms of welfare (Published in Telecom Policy May 2015 –http://www.sciencedirect.com/science/journal/03085961/39/5).
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.

Providing services to disabled end-users is essential in a connected society. Market-led solutions have served disabled end-users well (e.g. text-telephony by messenger and other standard chat-services) whereas a number of country-specific services for disabled end-users have been extremely costly to establish with little actual benefit for users.

Therefore before imposing specific obligations, the public authorities must first assess whether the market forces are already achieving the objective of safeguarding the interests of disabled end-users, Moreover, these issues should be analysed holistically: devices or applications can, for instance, meet the needs of users, not just services. This is why Orange considers that any obligations related to disabled end users would be better placed in cross-sector horizontal legislation rather than in a sector-specific universal service regime.

In any case, any obligation should apply equally to all market players.
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?

Orange fully endorses the political objectives indicated in the question. An obligation on Member States to ensure universal access to Internet Access Services should be supported by the regulatory framework.

Public procurement to match the demand for connectivity of schools, universities, public libraries, hospitals or administrations can play a crucial role in incentivising broadband investment and increased coverage. Public authorities should support the demand for telco services by launching public tenders for the connectivity of public places and the development of digital points of access.

Therefore, it should be the responsibility of Member States and not be considered as part of any possible extension to the scope of the current USO regime.

More generally, the current USO mechanism should be abolished in its current obsolete form. Member States would then have to comply with this obligation of universal access by:
- providing a positive regulatory framework which incentivises maximum coverage by private undertakings on a commercial basis so as to minimize the extent and the cost of non-profitable areas, and supporting the demand side by appropriate instruments (vouchers, etc.);
- supporting coverage in these non-profitable areas via public subsidies,
- guaranteeing the benefit of a competitive retail market to all customers, including those in non-profitable areas.

But extending the scope of the current USO mechanism to new obligations would be counterproductive for the sector and thus for investment.

(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
- [x] Against including
- [ ] both
Please explain your response, in particular what would be the possible implications for the economy and society.

As previously mentioned, Orange believes that a basic/functional Internet Access Service will be crucial for an inclusive participation in society. However, while the political goal of ensuring broadband connectivity for all is certainly sound, the universal service mechanism to achieve it is not. The current system involves many drawbacks and should therefore not be maintained as it is but should be replaced, in case of proven market failure, by a more efficient mix of other tools.

If US were to be an obligation imposed on Member States, IAS should be the only service to be covered by the US Directive. Indeed, whereas Internet access service is defined in the TSM Regulation, this is not the case for “broadband”. Therefore broadband cannot be used as a reference to define regulatory obligations, unless it is very clearly defined, which would be difficult (see answer to question 158). Furthermore, we believe that adding a new regulatory concept is inappropriate if the objective is to build a simple and clear new regulatory framework.

Regarding what a “functional” IAS could be, so as to comply with the universal service policy goal, as we will develop in Q 158 & 159, “functional” should to be assessed in terms of “use of certain services”. Indeed, the question to be answered is “what services should a customer be able to access in order to avoid social exclusion?”

(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 explained in Q157, the question to consider is what a “functional” IAS would be and not what “broadband” would be. If included in the US, “functional” IAS should be defined in such a way that it enables end-users to use certain categories of services. The question to be answered is “what services should a customer be able to access in order to avoid social exclusion?”. Universal service should not be defined in terms of speed. An approach based on categories of services, also avoids pre-determining any particular technical solution.

(continue here if necessary)

**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
As explained in answer to Q157, the question to consider is what a “functional” IAS would be and not what “broadband” would be. In defining the criteria for “functional” IAS, the criterion of social exclusion should be the primary consideration. The question to be answered is “what services should a customer be able to access in order to avoid social exclusion?”

Services such as web browsing, messaging services, access to basic e-government, … could be considered as essential for the average citizen.

The list of services which should be supported by universal functional IAS could evolve overtime.

(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
- [x] strongly disagree
- [ ] do not know
Please explain your response.

This cannot be ensured under the current regime. See answer to Q161.

Public funding is the only means of guaranteeing a balancing of the different interests at stake.

Whereas the current USO mechanism should be deleted in its current obsolete form, the concept of an obligation on Member States to ensure universal access to Internet Access Services could be kept in the regulatory framework. Member States would then have to comply with this obligation by:
- providing a positive regulatory framework which incentivises private undertakings to maximise coverage by on a commercial basis, to minimize the extent and the cost of non-profitable areas, and supporting the demand side by appropriate instruments (vouchers, etc.);
- supporting coverage in these non-profitable areas via public subsidies,
- guaranteeing the benefit of a competitive retail market to all customers, including those in non-profitable areas.

(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 response depends on the regime under which broadband was included.

If inclusion of broadband in universal service is considered under the current regime, this would be highly disruptive. Broadband inclusion in USO would be disruptive in terms of the competitive model for the BB market. It would also lead to unpredictable financial transfers. At the very least, it would jeopardise not only private investments but also public subsidies.

However, if broadband were to be included under a revised US regime, i.e. under the responsibility of the MS, then this inclusion could be consistent with the proposed financial mechanism. As explained in previous answers, the costs should be borne by society as a whole through public funding.

(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.

As previously indicated, in case of market failure, we consider that any political objective would be better achieved by other means than the current universal service regime.

Alternatives to the purely supply side policy and sector-based funding should be supported, such as demand-side subsidies and public funding, as long as they are “timely”, “proportionate” and non-discriminatory. See also previous answer.
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.

Public funding should be preferred to private funding financing the cost of US. Universal service should be a general social objective and accordingly be a responsibility of society as a whole, as a safety net complementing a market-driven communications sector. Public funding is the only way of ensuring that Member States are properly weigh needs against costs. As Universal Service benefits society as a whole, it is logical that it is supported by society as a whole through public funding. Hence, the cost of USO should no longer be supported by the electronic communications sector.
(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.

Funding from the electronic communication sector should be discontinued, as this system has led to numerous litigations and has proven to be inefficient and unfair. Public funding through taxation, applied on a non-discriminatory basis and without any exemptions, should be put in place.

(continue here if necessary)

**Question 165:** As regards individual contributions by relevant undertakings:

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<th>disagree</th>
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<tr>
<td>a) Should there be any minimum/maximum contribution?</td>
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<td>b) Should certain small market players/certain groups of end-users be excluded from contributions in order to safeguard against undue financial burden?</td>
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Funding from the electronic communications sector should be discontinued as this system has led to numerous litigations and has proven to be inefficient and unfair. Public funding through taxation, applied on a non-discriminatory basis and without any exemptions, should be put in place.

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 mentioned previously, public funding through taxation (and not sector-based funding) should be supported. European funding could be an option, provided that it is done on an equitable basis. Such a public funding mechanism would need to be established by each MS following harmonized rules. At the EU level there are already other funding instruments that can be used to close the digital divide in the European Union such as the structural and cohesion funds, the CEF. Any funding based on sectorial taxes or fund-raising should be discontinued.

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.

The current rules appear to have been effective in protecting NRAs from explicit political interference in the areas for which NRA independence is required by the framework: market analysis and dispute resolution.
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.

The current EU consultation process has contributed only to some extent and to a certain degree of consistency in the application of the framework. However, consistency appears more formal than substantive. One reason is that the scope of regulatory intervention is very broad and at the same time, the nature of the Framework texts provides considerable scope for interpretation as to intervention, with very loose and inefficient processes for consistent implementation.

As a result, implementation currently varies widely from one country to another. NRAs have the power to hinder the implementation of EC recommendations for a long time. They may be very late to adapt their market analysis to market evolutions. Furthermore, some NRAs are still referring to the 2003 EC relevant market recommendation: for instance “market 15” of mobile access is still regulated in two Member States.

A better way of ensuring consistent application of the EU rules for market regulation would be, firstly, to drastically reduce the possible scope and content of regulatory intervention, as further explained in the section on access regulation; secondly, to use EU legislative texts with a greater degree of harmonisation (full harmonisation instead of minimum harmonisation principle, Regulations instead of Directives, as far as possible) allowing simpler and more effective processes for consistent implementation.
**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.

Despite its stated intention to do so, BEREC has not achieved its objective regarding the internal market and a consistent application of the Framework. Even though it may have improved the quality of the exchanges between NRAs and the EC in the market analysis process, ultimately, it has not made any difference to the outcome (e.g. the inconsistent application of the MTR Recommendation).

Outside market analysis procedures, BEREC has however provided extremely valuable independent expertise, for instance on Roaming in the TSM legislative debate or on the implementation of Roaming Regulations.

(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.

Where NRAs use their dispute resolution power provided by the Framework, it is an efficient regulatory tool. But not all NRAs have been willing or able to use this tool. It should be noted that the scope of NRAs’ powers in this respect depends on the way in which the Framework has been transposed at national level. The powers of NRAs to implement a decision are not homogeneous in all the countries. For instance, in Belgium, only a court renders the NRA decision enforceable.

(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).

The corpus of regulation is too large and the instruments not efficient to ensure consistency, leading to many different interpretations. The procedures to tackle inconsistencies are either too lengthy or even non-existent. Harmonisation could be reinforced through a reduction in the scope and content of sector-specific regulation, marking it simpler to implement, while using better instruments for harmonisation such as Regulations.

(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.

Consistency can be achieved both by reducing the scope and content of regulation, and by using the right tools for better harmonisation: making use of the principle of full harmonisation and Regulations as legislative instruments, for the remaining elements of sector-specific regulation.

(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
Orange considers that the scope for Art. 7 consultation should be considerably reduced in the future through a reduction of the scope of asymmetric regulation because:
- it should no longer cover mobile networks as (a) mobile access should by law be outside the scope of asymmetric regulation and (b) mobile voice termination should be better addressed through an ad hoc pan-European Regulation ensuring symmetry and homogeneity;
- fixed voice termination should be addressed with the same ad hoc pan-European Regulation, ensuring symmetry and homogeneity;
- it should apply only by exception to fixed access infrastructure, as the primary instrument should be to impose, where proportionate, sharing obligations on all fixed infrastructures and use the Art 7. market analysis procedure only as a complementary tool to asymmetrically reinforce sharing obligations in case of SMP;
- retail markets in general should be outside the scope of regulation pursuant to market analysis.
- the framework should prohibit regulation of relevant markets outside the scope of fixed access infrastructures. Consequently, the European Commission should have to use its powers to impose this prohibition and any ongoing regulation of relevant markets which are outside the scope of fixed infrastructures should be lifted.

(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
Since 2003, RSPG has played a positive role in analysing and providing Opinions on such hot topics as Sharing Approach, Digital Dividend, License Shared Access, EC Spectrum Inventory, Interference Management, Wireless Backhaul etc. Public consultations also give stakeholders the opportunity to express their views before these opinions are adopted. A useful improvement would be to require all Member States to consult all interested parties, not only via the RSPG consultations on Opinions on specific subjects, but also before all RSPG plenary meetings, for instance via national preparatory meetings, as some Member States already do.

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.

The main improvement brought about by the current governance of EU spectrum management is the number of decisions identifying new harmonised spectrum for new services, including mobile services, and harmonising the least restrictive conditions of use.

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
- [x] 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.

Legal certainty and accountability should be ensured primarily by reducing the scope and content of regulation, and the use of more appropriate legal instruments, i.e. more binding instruments such as Regulations and applying the principle of full harmonisation.

In the long term, a review dedicated to the institutional set-up could take place a few years after the revised framework is in place.

(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:

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<th>disagree</th>
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<th>do not know</th>
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<tr>
<td>a) market regulation</td>
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<td>b) spectrum management in the EU</td>
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<td>c) end user protection</td>
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<td>d) other</td>
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In the promotion of competition, the Framework has served to manage a transitional period which has now ended, but the Framework has not delivered any significant outcome for market integration. Therefore we still have to manage a transitional phase for European market integration. In this respect a European agency/regulator should be a long-term objective, which we believe not to be a realistic prospect in the context of the present review.

For the time being, enhanced harmonisation should be the objective:
- for spectrum in particular, through stronger and more binding rules developed at European level concerning the substance of spectrum allocation objectives, conditions, timetable and auction design. An EU Agency could add extra bureaucracy whereas improved, more efficient application of the existing governance arrangements between existing institutions should be sufficient to reach the objective;
- for the Framework in general, by reducing the scope and content of sector-specific rules, and ensuring better harmonisation by applying the principle of full harmonisation for the remaining rules and as far as possible using Regulations instead of Directives.

An institutional review of the Framework should be planned for a few years after the revised framework is put in place, in order to assess whether and in what areas further progress could be made in institutional integration. This assessment will have to take into account the fact that switching from sector-specific regulation to general law will reduce the scope of activity of any sector-specific regulator, whether European or national.

(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.

Orange doesn’t believe BEREC should be given more tasks or powers.

Orange considers that numbering plans are better managed at a national level by the relevant authorities in cooperation with the national industry. Orange recognises the need for some cooperation in this area at European and international level and welcomes the various initiatives taken by the CEPT in having common approaches in a variety of numbering issues. Orange considers that future work should continue in this spirit and looks forward to further cooperation.

On the other hand, Orange considers that the initiatives relating to the harmonization of numbering plans across the EU have not demonstrated any relevance for EU citizens or the industry at large and giving BEREC more “executive tasks or binding powers” in numbering or addressing would be, in Orange’s view, counterproductive.

(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
- [x] strongly disagree
- [ ] do not know
Under the current framework, European provisions ensuring NRAs’ independence when performing wholesale market analysis or dispute resolution were initially justified by the risk of conflict of interest for Member States. Independence in these matters has been further advocated to prevent political interference on individual decisions requiring both objectivity and technical or economical expertise.

As far as the end-users’ rights issue is concerned, the rationale for independence of the national competent authority is less clear. Furthermore, sector-specific end-user rights should be strictly limited to matters which are technically dependent on sector-specific concepts (numbers, access speeds, …) and should be subject to full-harmonisation.

**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.

As we have explained earlier, other than rules relating to the specific technical characteristics of IAS and to the use of numbering resources, there should not be any other sector-specific end-user rights. Corresponding rules should be moved to horizontal law and applied to all players, electronic communications network providers and online service providers. For IAS and numbering regulation, a single authority should be competent to enforce sector-specific end-user rights, in order to keep matters simple and avoid confusion and potential detriment in the event of overlapping competencies between competing public authorities.
**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.

See previous questions.

The most appropriate solution would be to move end-users’ rights to common law except for those relating to the specific characteristics of the IAS and for the use of numbering resources, which would remain subject to sector-specific rules. Moreover, all rules should be based on the principle of full harmonisation.

(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
In Orange’s view, only the technically specific characteristics of IAS and the use of numbers should be subject to sector-specific regulation protecting end-users’ rights. This regulation should be governed by the principle of full harmonisation. All other – non-specific – provisions regarding end-users’ rights should be dealt with at European level on the basis of the cross-sector consumer protection directive which is also subject to the full harmonisation principle. For the implementation of the remaining sector-specific rules at national level, a single authority should be competent. Generally speaking, national authorities should cooperate among themselves for those which have a related interest.

(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.

In Orange’s view, there is no need to revise provisions related to BEREC except from the point of view of the organisation of its consultation process. Any public consultation launched by BEREC should allow contributors to develop a considered response, i.e. allowing enough time to respond without undue haste. We have noted that on several occasions, the BEREC consultation process has allowed an excessively short timescale for stakeholders to respond. The latest example is the consultation on a draft report on OTT services, running only from 5 October until 2 November 2015.

Also it would be welcome to have greater transparency and explanation as to why BEREC has decided whether or not to take on board the comments received during the public consultations.

At the moment, BEREC’s consultation process appears to be purely formal. BEREC appears to be more focused on finding a compromise between its members than on taking account of the content of responses from stakeholders.

(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
- [x] no
- [ ] do not know

Please explain your response. If your answer is yes, please specify which provisions would benefit from a revision.

Orange considers that the issue at stake is broader and that BEREC’s opinions and guidance cannot deliver a significantly greater degree of harmonisation. Harmonisation can be better achieved by reducing the scope and content of sector-specific rules and making use of more binding texts: full harmonisation instead of minimum harmonisation, Regulations instead of Directives.

The question of institutional reform should be addressed later after the substance of the rules has been harmonised.
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.

Under the current Framework, enforcement relies on a voluntary process of notification by undertakings to NRAs. This has proved to be ineffective in some important cases. Despite the shortcomings and the ambiguities of the current Electronic Communications Service definition, services such as voice over IP “from PC to phone” which are interconnected with classical telephone networks can be considered as Electronic Communication Service and therefore should be subject to the relevant provisions of the framework. However very often, providers of such services do not notify themselves to NRAs which may deprive NRAs of the ability to impose the provisions of the framework on these providers. In the future framework, the competency of NRAs should not depend on a voluntary process of notification by undertakings.

NRAs should be competent purely on the basis of the nature of the undertaking’s activities, independently of any notification process. As developed in our answers to the other chapters of this consultation, Orange considers that the scope of sector-specific regulation should be limited to Electronic Communications Networks, including the relevant spectrum regulation, to the sector-specific characteristics of Internet Access Services and to the use of numbers. In particular, any undertaking using a numbering format for the provision of its service should be under the competency of NRAs regarding the enforcement of the rules on the use of numbers.

In addition, the Framework should more clearly define a right of appeal for European operators. Currently, national arrangements do not allow for consistency in appealing an NRA decision.
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.

Currently, NRAs already have access to information on the location and availability of ducts, as part of the Recommendation on NGA. Access to civil engineering infrastructure is crucial for the deployment of parallel fibre networks. It is therefore important that NRAs obtain the necessary information to assess whether and where ducts and other local loop facilities are available for the purpose of deploying NGA networks. NRAs should use their powers under Directive 2002/21/EC to obtain all relevant information on location, capacity and availability of such facilities. All operators should have the opportunity to deploy their fibre networks at the same time, possibly sharing the costs of civil engineering works.

(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.
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.

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
The EU Guidelines on state aid rules are sufficient regarding the role of the NRAs. It is the role and, when appropriate, the obligation for NRAs to alert Competition Authorities if they identify a risk of breach of competition law. This could apply if an NRA considers that EU State Aid Guidelines are not being complied with.

In addition, the Framework should guarantee that all undertakings, public and private, which co-invest in a new network infrastructure, have their fair share of property rights on the corresponding infrastructure, in proportion to their contribution.

(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
- [x] disagree
- [ ] strongly disagree
- [ ] do not know

Please explain your response.

Orange considers that the scope and content of the future regulatory arrangements should be reduced, and at the same time made more binding: full harmonisation, Regulations instead of Directives. This would reduce the scope for divergent interpretation. The process would be simplified and made more effective. Consequently, Orange’s proposal on the review of access regulation would lead to a drastic diminution of the Art 7 consultation process in the future. See Orange’s position in the “access chapter”.

Currently BEREC is delivering opinions that are not necessarily followed by NRAS (e.g.: MTR/FTR) and the EC does not have any strong instrument to harmonise remedies. The existing process remains very lengthy and could be simplified, which is part of our proposal.

(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
- [x] 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).

The most appropriate means of simplification is in reducing the scope and content of regulation, using market analysis and more binding laws based on the full harmonisation principle and Regulations instead of Directives.

The market analysis process is currently very long whereas some cases are simple. This is especially true for the MTR/FTR markets. The system could be simplified, and better harmonised, by imposing via an EU regulation the relevant level of FTR and of MTR that should be applied between operators.

Also, when looking at the broadband fixed markets, Orange considers, as explained in the access regulation section, that access regulation should be based prima facie on proportionate sharing obligations for fixed infrastructure owners, a simplification of the wholesale offers available, and a very limited and targeted use of SMP remedies. This would streamline the entire process.

(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 conditions attached to the general authorisation are various. Some of them will require changes. For instance, we consider that the sector-specific e-Privacy Directive should be repealed and its provisions inserted in the draft European Regulation on data protection that is currently under debate. This would allow a more level playing field. Similarly, the relevant provisions on consumer protection should, in our view, be covered by the Consumer Rights Directive, while the sector-specific framework would be restricted to regulation of the electronic communications network (including spectrum), of internet access services and of the use of numbers. The provisions on universal service obligations also merit substantial changes. All these texts should be subject to the principle of full harmonisation. Those changes would therefore impact the Annex of the Authorisation directive.

The scope of sector-specific regulation will be reduced and the remaining parts will be harmonised. It will lead to more consistency that will facilitate cross-border activities.

See also answer to Q193 for BERC’s single template.

(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
- [x] disagree
- [ ] strongly disagree
- [ ] do not know
Please explain your response if possible by indicating also which kind of obstacles, if any, occur.

Such a proposal was put forward in the Commission's initial TSM proposal. But it led to completely impractical options for implementation. As the issue has not changed since, this would lead to the same outcome. Any revision of national notification requirements should avoid such an approach of notification in only one country. That would lead to complications at the implementation level and difficulties for NRAs to manage issues. However, an approach based on BEREC’s proposal for a single template would appear more practical and could help ease the process.

(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.

The current notification system has not raised any particular issue in terms of implementation (apart from aspects linked to the scope of the framework –VoIP services providers). It is not particularly burdensome or costly.

Having a standard template notified to BEREC would not represent a substantial or costly change (as long as current notified operators would be deemed to have complied with the new notification system should it be adopted).
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.

The rights of use, especially for spectrum, have been used as a way to shape the market and organise competition (in some respects circumventing the process of market analysis in some countries) either by reserving some specific resources to new players at preferential conditions and/or by imposing specific obligations, for instance for MVNO access.

In addition, the allocation of spectrum resources is also a budgetary instrument for Member States; meaning the timing and financial conditions attached to allocation or licence renewal are not always in the best interest of the sector.

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.

Orange supports a strong administrative and legal harmonisation concerning notification on the one hand, and process and conditions for spectrum allocation on the other hand. This would reduce red tape in general.

However, Orange does not support technical standardisation of access obligations. See answer to Q54.

(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:

<table>
<thead>
<tr>
<th></th>
<th>significantly</th>
<th>moderately</th>
<th>little</th>
<th>not at all</th>
<th>do not know</th>
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<tbody>
<tr>
<td>a) Satisfactorily transparent in regard to the way the necessary technical studies are conducted?</td>
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<td>b) Efficient and timely in responding to technology developments and/or market demand?</td>
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<td>c) Effective in terms of providing legal certainty to operators throughout the EU?</td>
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<td>d) Successful to spur the benefits of wireless innovation in the EU?</td>
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Please explain your response.

Transparency is better ensured in the CEPT as meetings are open to all stakeholders. Timescales should be reduced to help players to meet Time To Market constraints for new radio services.

(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.

The CEPT process is satisfactory: very productive and transparent, participants have a high technical profile, meetings are open to contributions from all stakeholders, and it works mostly on a consensus basis.

(continue here if necessary)

**Question 199**: For SMEs, how do you view the current CEPT technical spectrum harmonisation process? (several answers possible)

- [x] efficient
- [x] supportive of SME innovations
- [x] a comparative advantage for the EU
- [x] 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.

See answer to Q198.

(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
- [x] disagree
- [ ] strongly disagree
- [ ] do not know
Access to scarce resources as spectrum requires equity.

(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.

Shorter timescales should be applied where appropriate, but not at the cost of bypassing or downgrading the required technical studies to ensure a high standard of service, with no coexistence issues.
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.

Orange agrees that such a principle is the direction to take now, although not blindly as it could still be applied to good or bad effect.

(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.

Orange sees a need for transparency in the phase where the EC amends CEPT technical proposals, usually approved by consensus.

(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.

The technical complexity of compatibility and sharing studies requires time.

(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.

The success of the existing transparent contribution-driven process indicates that this should continue.

(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.

> The existing information available at European level (for example the EFIS Data base) and at national level, provides NRAs with the appropriate basis to efficiently manage spectrum.

**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.

> Shorter timescales should be applied where appropriate, but not at the costs of bypassing or downgrading the technical studies required to ensure a high standard of service, with no coexistence issues.

(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.

As outlined in our response to Q68, today the way in which mobile operators are granted individual authorisations for spectrum use is designed by Member States without any additional supervision from the EU framework. This state of affairs results in different variations of auction schemes, taxation, timescales, licence duration etc. which are not all based on logic and often cause extra delays and costs in the deployment of innovative and fast growing mobile services using this spectrum. Furthermore there is a lack of predictability in most MSs concerning the conditions of licence renewal and also on the plan to release spectrum bands for new usages (most Member States have no Spectrum Strategic Plan). New EU-level guidance should address these issues.

(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.

Orange supports the concept of a binding European framework laying down general rules for MSs in the way they assign/grant national individual authorisations of spectrum use, including provisions on auction schemes, taxation, time scales, licence duration, information on licence renewal.

This should both serve overall EU interests in terms of network coverage and wireless connectivity in the DSM and increase regulatory predictability and legal certainty for spectrum rights holders. See also Q211.

Furthermore, once such a framework was in place, its management would require some monitoring which RSPG may be the most appropriate body to carry out. See also response to Q81.

(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.

See answer to Q210.

(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.

See answers to Q210 and Q213.

(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.

Rather than setting-up an additional committee, Orange would recommend broadening RSPG’s scope of work.

(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
- [X] disagree
- [ ] strongly disagree
- [ ] do not know

Please explain your response.

In line with previous responses, Orange does not support spectrum assignment on an EU-wide basis.

(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
- [X] 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
- [X] in parallel to the public consultation
- [ ] shortly before launch of the procedure
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.

Orange is actively involved in a number of self-regulatory initiatives and to a lesser degree co-regulatory initiatives, e.g. together with industry partners we are founding members of the ICT Coalition for Children Online (www.ictcoallition.eu) with the purpose of helping younger internet users across Europe make the most of the online world and deal with any potential challenges and risks, and the GSMA Mobile Alliance to fight against child online sexual abuse content, which is a global initiative.

The general purpose of Orange’s commitment to provide resources for the development of self-regulatory agreements has been to respond to the needs of customers which have typically either not been met by current regulation, or are of such a nature that formal regulation would respond too slowly to avoid a negative impact if no action were taken.

The key point is to maintain the principle of industry being able to initiate self-regulatory actions where regulation has either not been foreseen, or it would not be conceivable to formally regulate. Self-regulatory agreements most often have the purpose of adding an extra layer of consumer protection, and Orange believes that the ability for industry to step in on a voluntary basis and find common solutions to avoid any negative impacts should be maintained.

Self-regulation efficiently addresses issues just outside the borders of formal regulation of consumer rights and is therefore very useful to manage the boundaries of regulation in a fast-changing world.

Co-regulation can be seen as an alternative to self-regulation, and often we see co-regulatory agreements where the initiative is rather driven by governmental / EU-bodies. Both models have their role to play depending on the concrete issue that needs to be solved and the ability of partners to commit.

But co-regulation could also play a significant economic and industrial role in the future. The framework and NRAs should secure legitimate and efficient cooperation between market players in the development of future end-to-end interoperable services. See also answer to question 218.

(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.

The Framework has to give the operators the ability to co-operate in order to establish interoperability standards and coordinate research and development projects, in that respect including business models, that will be beneficial for the customers at the end. In the past, such attempts at co-operation have been viewed with suspicion. The intervention of the European Commission resulted in the de facto rollback of these projects. This constituted a missed opportunity to develop interoperable end-to-end services. The Commission should have a new, more open and supportive approach in this respect.

As already mentioned in Orange’s answer to Q189, the Framework should guarantee that all undertakings which co-invest in a new network infrastructure, public and private, have their fair share of property rights on the corresponding infrastructure, in proportion to their contribution.

(continue here if necessary)

Useful links

Connectivity needs consultation

Background Documents

Annex I (/eusurvey/files/67c9df42-f4d6-4b7a-b9a7-c8f00fd49eff)
Annex II (/eusurvey/files/48b06e67-e76d-4171-bc2c-58b2bd5804c)
Annex III (/eusurvey/files/4c8ef988-6e2c-4f3b-bf4d-e1d8294c39f4)
Annex IV (/eusurvey/files/3381b4f9-30a7-4ed9-8753-df791d50f326)
background%20document.pdf (/eusurvey/files/182117c3-c974-4e7e-9782-09ea77f77cdc)

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