



Telefónica Group response to consultation on draft RSPG Opinion on Review of Spectrum Use

General Comments

Telefónica would like to thank the Radio Spectrum Policy Group (RSPG) for giving stakeholders the opportunity to comment on their draft Opinion on the Review of Spectrum Use. As we commented in our response to the draft RSPG 2011 Work Programme, the Review of Spectrum Use is one of the more important elements of the Radio Spectrum Policy Programme (RSPP) and we are pleased to see that the RSPG has prepared a detailed draft Opinion in advance of the final adoption of the RSPP. Article 8 of the Commission proposal for a Decision of the European Parliament and of the Council establishing the RSPP included a proposed inventory of existing uses and an analysis of technology trends, future needs and demand for spectrum, and this is now in the process of adoption in Article 9 of the final text.

On a general point, Telefónica notes that the European Commission will have to continue to ensure that all regulatory measures adopted as part of the implementation of the RSPP are both service and technology neutral, and that a sufficiently long term view is taken to ensure that the significant infrastructure investments required to support growth can be made. Spectrum is essential for the digital society, fast wireless services, economic recovery, growth, high-quality jobs and long-term EU competitiveness, and wireless industries can and will contribute significantly to the European region's economic recovery. It is important to us that Europe remains competitive when compared to other regions of the world. Telefónica plans to invest billions of € over the next few years and the right approach to implementation will encourage us to retain the current high level of investment in Europe.

It should be noted, however, that our income is finite and limited; although we have seen the demand for services rise by a factor of more than 30 times in recent years, our revenues have decreased. As noted in our RSPP consultation response this explains the increasing focus on cost, on efficient investment, and on the need for regulatory authorities to avoid taking money away from investment programmes through poorly designed regulations such as spectrum auctions. When assigning spectrum, national authorities should not design auctions to raise large amounts of money to address budget deficits as this simply decreases the amount of economic resources available in private enterprises to invest in modern electronic communications networks. There should be a focus on investment, not on tax, and we continue to encourage authorities to consider alternative methods of spreading the cost of spectrum rights over time.

When finalising the list of criteria used to assess spectrum demand, Telefónica therefore believes that it will be most important to take into account the potential of each use of spectrum to increase growth and productivity, in line with the Digital Agenda for Europe goal of delivering sustainable economic and social benefits from a digital single market based on fast and ultra fast internet and interoperable applications. We note that many of the criteria proposed are quite subjective, and it will be beneficial for the Commission and stakeholders to quantify as much as possible in these terms to assess the relative merits of different service demands.

We note that the RSPG has identified two points in the process where it would be appropriate for the Commission and Administrations to consult with user groups and other stakeholders (when assessing spectrum demand (§III paragraph a), p.8), and when quantifying the supply of spectrum (§III paragraph b), p.9)). However, Telefónica believes that it is highly desirable to introduce other industry consultation processes during the Review of Spectrum Use (for example, when the RSC is analysing the demand and supply data, and when harmonisation measures (EU Decisions) are being prepared). We would be supportive of a more transparent process, with workshops and additional consultations introduced into the Review, to ensure appropriate engagement with all the relevant stakeholders in this complex process.

Objectives and Methodology

Although the RSPP will be reviewed by the end of 2015, its implementation needs to take into account trends that extend to at least 2020. The trends that Telefónica has seen in recent months with the phenomenal uptake of Mobile BroadBand (MBB) suggest that more spectrum will be required for mobile services, in both high and low frequency bands, as the bandwidth per user increases. A long-term view (10+ years on end user requirements, technologies and markets) is needed. In particular, the focus should be on the economic benefits that different radio services and applications could offer Europe as a whole. The draft RSPG Opinion suggests (§III paragraph a), p.8) that the aim of the demand assessment should be "to identify those applications which are likely to drive a significant rise in spectrum demand in the timeframe covered by the RSPP". We would suggest that the timeframe for this initial assessment should be significantly longer than the timeframe covered by the RSPP.

It will also be helpful for the Commission to identify a timetable and review milestone to ensure that the Review of Spectrum Use is revisited at an appropriate time. To align with the RSPP timeframe Telefónica suggests that the Inventory should be refreshed in 2015 (in addition to the twice-yearly updates of information from Administrations that has been suggested by the RSPG).

Our customers are demanding an increasingly wide range of services, with a high focus currently on social networks, hyper-connectivity and machine-to-machine communications. These content rich services require a transformation of existing networks from voice enabled communications to high data traffic enabled ones. In addition to increasing efficiency (for example through the switch to digital technologies), Telefónica called in our response to the Commission's consultation on the RSPP for a review of spectrum allocations between at least 400MHz and 5GHz to ensure that there will be sufficient spectrum allocated to Mobile BroadBand through to at least 2020. We are pleased to note that the focus of the final draft text (Article 9.2.(b)) is on the range 400MHz to 6GHz. This frequency range should be addressed in the initial phase of work done by Administrations and other stakeholders when quantifying the supply of spectrum (§III paragraph b), p.9). The

frequency range(s) to be studied should be identified in the Objectives and Methodology section of the Review of Spectrum Use.

Assessing Demand for Spectrum

As noted in the draft Opinion (§V, p.11) Telefónica agrees that there are many potential sources of information on future demand and drivers of that demand. In particular, we agree that "Demand for any new radiocommunication service may not be enough on its own to directly identify suitable frequency bands needed to operate it" and that as well as operating requirements, economic and social factors should also be used to arrive at an estimate of a suitable frequency range and spectrum requirement. Will the potential service provide economic and/or societal benefits? Will the service introduce new growth and recovery opportunities, productivity benefits and/or create high-quality jobs? Is there a benefit in terms of long-term EU competitiveness? Telefónica believes that it will be most important to take into account the potential of each use of spectrum to increase growth and productivity, in line with the Digital Agenda for Europe goal of delivering sustainable economic and social benefits from a digital single market based on fast and ultra fast internet and interoperable applications. This view appears to be supported in the discussion of challenges in assessing the suitability of frequency bands (§VIII, p.16), by some of the RSPG's recommendations, and in the "Efficiency of use" Annex in the draft , but we suggest that this should also be reflected fully in Section V of the main Opinion.

Quantifying the Supply of Spectrum

Telefónica agrees with the RSPG that a comprehensive programme of spectrum monitoring would involve costs far beyond the utility of the information being gathered and that this is clearly not an option for determining how spectrum is being used. We also agree that it could be useful to collect information on its occupancy in order to assess where spectrum could be used more effectively. Telefónica supports the efficient use of spectrum but we prefer to focus on the flexible use of spectrum within exclusive licences as a means to promote further efficiency, where commercial agreements between players are encouraged within a regulatory "hands off" approach, as opposed to the more deregulated approach to spectrum sharing enshrined in general authorisations. As the RSPG itself notes (§VI, p.13), this latter approach makes it impossible to give an in depth picture on the extent of spectrum use.

Analysis of the Spectrum Review

As Telefónica noted in our response to the public consultation on the draft RSPG Opinion on the Collective Use of Spectrum (CUS), there are some instances, such as the private commons, where sharing is achieved within an individual authorisation and this will help to improve the efficiency of use. However, Telefónica considers that most services currently being provided over radio spectrum need individual rights to be granted in order to ensure an appropriate quality of service by avoiding the threat of harmful interference, and that this puts limits on the applicability of the Licensed Shared Access (LSA) approach to sharing spectrum (§VII, p.15). This fact should not be underestimated as it would directly lead to less efficiency in spectrum use and regulatory uncertainty with a negative impact on investment incentives.