Telefónica's position on the Draft BEREC Broadband Promotion Report

Telefónica welcomes the opportunity given by BEREC to provide valuable feedback on this Broadband Promotion Report.

In order to optimise the impact of public policies on broadband promotion, demand side policies should be prioritised over supply side policies. At the very least, they should go in parallel. The role of demand side effects is also very important and should, therefore, be considered by the Regulators as a criterion in assessing the validity of financing NGNs. The demand for and take up of advanced broadband services offered over NGN can have positive effects on an operator's choice to invest in high speed networks.

Furthermore, Telefónica firmly believes that Governments should in the first place focus on full e-inclusion and help people to understand how the internet can improve their lives, rather than relying on transient and unrelated factors like increasing speed. An approach that seeks to stimulate demand will, at the very least, provide a firmer evidence base on which to consider whether there are any groups of people being excluded simply due to cost.

On the other hand, our experience is that regulatory uncertainty is the major hurdle for investment in next generation networks. We have the hope that achieving the right regulatory conditions through a flexible regulatory framework that provides legal certainty and symmetric regulation to all network operators would allow the private sector to keep investing in the deployment of networks and would provide citizens with connections granting them the increasing bandwidth requirements of new services.

In relation to Universal Service we would just like to reiterate our position which has been recently confirmed by the European Commission in its Communication that Universal Service is not the right tool to achieve broadband targets. Therefore, the EC has excluded broadband within the scope of Universal Service Obligations.

Finally, before answering the questions contained in the Report, we would like to expand on the new ICT context which e-communication service providers form part of.

Telefónica's Overview of a New Approach by Telecom Companies within the ICT sector

The telecom sector is no longer a stand-alone sector but forms part of the ICT sector. There is now direct competition with other players coming from previously adjacent sectors such as Over-The-Top players. Data service business models allow new challengers (such as Google, Netflix, Apple, etc.) to seize these opportunities. . This has two main consequences:

1. It accelerates the surge of data volumes over the networks (in particular video) as well as network requirements, and
2. Competition is now more focused on the edges of the networks, i.e. mainly devices and applications. This implies rising difficulties to make overall telco market size grow (much of the new traffic involves cannibalization of previous telco revenues).

This dynamic is translating itself into declining EBITDAs for telecom services (mainly connectivity) while the need to invest in CAPEX to expand network rises. This makes for an equation that is difficult or even impossible to resolve (both for individual companies as well as for the set of companies in the industry altogether).

Consequently, the eventual effect is a decrease of incentives to invest in the required new network capacity because telcos are also unable to increase prices or capture new revenues in proportion to the value created (and captured by others in the value chain), both at core and access network levels which, in the end, significantly reduces or puts profitability of new investments at risk.

The ICT sector needs to achieve a new, and yet unknown, balance. It needs to manage the transition from the current mainly voice-based model towards a new balance which is data-based and find a way to make the end game sustainable for all players across the value chain. A difficult task in a complex and multisided market environment in which political outcomes and desires are of no less relevance.

The so-called telco players need to manage the challenge of the increased data volumes handled over current networks by e.g. reconciling the need to add CAPEX for capacity with the need to manage the networks in order not to waste scarce economic resources and, of course, the need to increase revenues to make this possible in an economically sensible way. Quality of service, in addition to best effort, will play a critical role in this regard.

Innovation in networks and service should therefore continue to be at the core of EU telco players and European public policies. No public policies should restrain the ability of network services players to offer differentiated services. This will facilitate satisfying different audiences over the networks by acquiring the services that best meet their requirements, thus facilitating the creation of overall value at the same time that it is optimally transferred (captured) by the participating parties that create it.

Moreover, the above approach is not only applicable to services based on QoS. Further to the principle of facilitating the ability of parties to capture the value as it is created, operators may need and regulators should allow appropriate pricing schemes to be implemented that are best adapted to the needs of different audiences. This includes over the best-effort Internet in a way that best reflects their underlying economics, i.e. by implementing appropriate peering policies.

Against this background, it is in the interest of the EU that Local, National and European Authorities:-

1. Understand the need to shift to a new balance. A market-driven approach for the availability of a range of services with differentiated qualities of service at the appropriate market prices is an essential means.
2. Understand that there are no magic recipes and that the new balance sought can only be tried and tested in the market by finding new business models that fuel investment into modern and performing networks both at access and core.
3. Understand that the challenge posed by the surge of asymmetrical data volumes over telecom networks requires different arrangements to make value flux across the value chain toward its legitimate destinations.
4. Give operators room to explore new arrangements avoiding any legitimate market outcomes from being pre-empted based on old models or misconceptions about consumer interests protection, that may eventually prove to be completely outdated (e.g. on tariffs, net neutrality, etc.).
5. Encourage operators to work in the relevant fora towards the development of interoperable services that allow specific levels of End-to-End Quality of Service to be ensured.

Consultation Questions

For a very small number of customers (disabled consumers, those on low incomes and those living in geographically remote or isolated areas) access to services can, in some cases, be problematic. These cases vary across Member States and depend on specific conditions in each country and as such require individual analysis and solutions.

Question 1 (section 5):

What elements do you consider essential for the successful definition and implementation of governments' strategies to promote broadband:

a) Overall at the national level? What role, if any, could NRAs play to enhance the effectiveness of those strategies?

Telefónica firmly believes that the NRA's role in promoting broadband strategies is crucial if we all (Governments, Regulators and the industry) want Digital agenda targets to be achieved. Therefore, Telefónica is calling on regulators to implement rules that encourage operators to support their cost and bear the investment risk.

For example, the NRA's task of analysing SMP in the Relevant Markets (4 and 5) and the subsequent minimum, proportional and consistent set of remedies adapted to the different degrees of competition of the different areas will be key for a successful implementation of the Digital Broadband Targets. Telefónica is convinced that not all remedies imposed by the NRA's will be necessary at the same time in all geographic areas. For example, in geographic areas where infrastructure competition is possible or is considered feasible in the long/medium term, regulation should not prevent this from

happening. However, in geographic areas where infrastructure competition is not delivering results or is considered unfeasible, other types of active remedies could play a major role.

Experience shows that not all remedies and wholesale products are necessary everywhere. Therefore, the role of NRAs to establish the most suitable set of remedies for each market depending on its specific circumstances is crucial.

Government strategies to use public funding to increase broadband penetration must be placed in a wider context. This has to be analysed together with those policies aimed at promoting the deployment of new generation networks through state aids. This must be analysed taking into account the regulatory framework applicable to NGANs. These matters need a holistic approach and it is important that the effects of applying measures from both subsidising and regulatory frameworks be clarified.

In this respect, we strongly agree that NRAs should always ensure consistency between any access conditions imposed as a result of a State Aid measure and the Regulatory framework applied in a particular country.

Finally, it is important that policy makers recognize the value of having a technology mix approach in providing high-speed broadband to all Europeans. The relative cost–effectiveness of different NGAN roll-outs may vary depending on local circumstances. Therefore, market players must be granted full freedom to choose the best solutions for specific area roll-out

b) Specifically at rural and peripheral areas? What role, if any, could NRAs play to enhance the effectiveness of those strategies?

As we have stated above, Universal Service is not the right tool to bring broadband to rural and underserved areas. Therefore, alternative means of financing broadband roll-out in unprofitable areas should be made available by National and European institutions (as planned by the “Connecting Europe” Facility)

In this respect, Telefónica believes that public intervention strategies (e.g using state aid) aimed at the deployment of broadband networks should firstly be focused on rural and underserved areas to reduce the digital divide and social exclusion of citizens.

Moreover, in rural areas, it is not possible to have several competitive players due to the lack of demand and high per household cost. In these cases, Governments and NRAs should avoid direct public funding to build a second network.

In some cases, whenever other regulatory measures are imposed by the NRA’s in these areas, such as the Universal Service instrument (e-g in Spain), special care should be taken by the NRAs to avoid unnecessary and wasteful duplication of resources. The distortive and negative effects of NGA public funding in these areas can be extremely high for the Universal Service Broadband Provider.

In addition, any public action (e.g, the use of state aid) and any regulatory intervention (such as Universal Service) in these areas should be technologically neutral. In rural areas, the technology used should be actively set by the operator on the basis of market demand. People do not demand a specific technology, they demand services and they do not care about the technology used. The important thing is whether people in the rural area can access advanced Information Society services, not if there are any fibre connections in the area.

In general terms, NRAs should bear in mind the importance of the principle of geographic segmentation in relation to regulatory obligations, and foster investments in rural areas where costs are higher and customer concentration is lower than in urban areas, and operators are less willing to invest.

Lastly, demand side policies in rural and peripheral areas, to increase e-government, e-learning, e-health services etc, can be a great stimulus to increase broadband take-up, due to the effect on the quality of life of citizens who live in these areas.

Question 2 (sections 6 and 9):

Among the main supply-side obstacles to broadband promotion, NRAs have identified, in particular, the low anticipated return on investment, the lack of access to financial resources and access to spectrum. Amongst the main demand-side obstacles to broadband promotion NRAs looked at such aspects as the citizens' lack of perceived need to adopt broadband, The high price of broadband, the fact that NGA is still in an initial stage of the product life cycle and, mostly in rural areas, the lack of choice between operators.

2.1. What of the above mentioned factors, if any, would you not consider as obstacles? And what other factors, if any, would you add to the list of main obstacles to broadband promotion? Please reply with specific regard to:

a) Supply-side obstacles;

As regards the supply side, the low return on investment is definitively an obstacle to next generation broadband development. In this regard, regulatory policies (price and access obligations) could limit operators' investments because of the low expectation on returns from the capital invested. Therefore, Telefónica is calling for the development of regulatory policies that take into account investment profitability by focusing on both the high costs needed to develop high-speed broadband and revenue streams to be generated.

As regards access to spectrum, the adoption of the Spectrum Decision on the Radio Spectrum Policy Programme in 2011 has to be considered as a positive step.
However, in some EU countries where auctions have taken place, operators have experienced a huge financial burden in securing the spectrum to obtain the right of use of such frequencies. NRAs should take into account the burden undertaken by operators when considering the regulatory policies to develop broadband, by defining

policies for next generation networks that allow them to have higher returns on investment. when investing in NGNs.

b) Demand-side obstacles. (see question 2.2 below)

2.2 Taking into account namely your assessment of the existing and potential obstacles to broadband adoption, what elements do you consider essential for the successful definition and implementation of NRAs' strategies, in particular from a demand-side viewpoint, to promote broadband?
When replying to question 2.2 above, please mention also what core strategic differences, if any, should be weighted regarding the consideration of those elements in rural/peripheral areas and in urban areas.

Firstly, Telefónica would like to point out that Markets respond to demand. Investors will invest in NGAN's and provide services when they see the ability to obtain a fair rate of return. If not, they will invest in other more profitable opportunities, be it in or outside the telecom market.

Of course, if customers do not value high broadband services enough to pay the costs of provision, the market will not spontaneously provide the service. It appears that many of the citizens who have not taken up broadband services do not value it. That is a question of demand not supply.

An initial conclusion we can make is that the low levels of broadband penetration are more strongly related to the demand side rather than supply side factors. Hence the important factors to consider in achieving the goal of social inclusiveness stem from demand, not supply. This limitation of demand is due to users' educational limitations, lower penetration of PCs and other equipment, low perception of the usefulness of the service and other social factors and not the connection price.

In this line of reasoning, Telefónica totally agrees with BEREC' Report which focuses on demand side measures through a combination of actions to lower the cost of access for end users (state aids, tax incentives and direct end-users subsidies) and to increase end users' perceived valued of broadband services, which are regarded by some consumers as unnecessary and expensive (such as measures to encourage the production of content in the national language, promotion of public services, launch of digital literacy campaigns to educate end-users).

In particular, we would like to stress that for a very small number of customers (disabled consumers, those on low incomes and those living in geographically remote or isolated areas) access to broadband services can, in some cases, be problematic. In these cases, the promotion of Broadband should be tackled by public funding, tax incentives and subsidies for end users, especially those with a lower income.

In relation to low income users (already in urban or rural areas) we firmly believe that Member States, within their social cohesion policies, should assume responsibility for enabling low income families to have access to broadband services, as they do with other services such as education or health. As with any other national social policy, this

should be financed by the state budget without placing the cost on the companies within the sector (this is what is happening in some countries like Spain through the Universal Service Mechanism). For this purpose, the Government should redesign the social income support structure and adopt a series of mechanisms that directly subsidise low-income users.

In this respect, Telefónica proposes that "telecommunication vouchers" be adopted, so that the user can utilise this to partially pay their chosen operator bills in urban areas or to pay the single universal provider in rural and high-cost areas. An additional advantage of this approach is transparency, as it enables the public to clearly see the cost/benefit trade-off inherent in governments' policies to extend broadband. We propose that BEREC analyse and evaluate best practices procedures on how to implement these voucher mechanisms instead of burdening the industry with more regulatory obligations.

In addition and within these social support actions, we propose to promote user subsidies to support the acquisition of software, computers or other terminals to remedy the lower penetration of PCs and other equipment.

In relation to network deployment in high-cost areas (remote and isolated areas) the problem is that the high cost of lines prevents the investment from being profitable at normal market prices. This cost may be due to low population densities (rural areas) or to specific factors in certain towns, villages or districts (mountainous areas, historic districts, particular buildings, etc.). In these areas, the actions of public authorities will be most effective if they manage to create the necessary regulatory conditions, with regard to both supply and demand, so that it becomes profitable for an operator to provide the services. Telefónica proposes simultaneous and complementary public initiatives in these areas such as:

- Reinforce the already existing programs that use structural funds and state aid: rural broadband extension plans for rural areas, telemedicine, e-health and e-administration programmes, amongst others. This is the case with the "Plan Avanza" in Spain.

- To design and implement new forms of public-private collaboration applying state aid in those zones which the market does not spontaneously cover. E.g. promoting private networks supported through open, transparent and non-discriminatory tenders using public funding. The case of using State aid to extend coverage of standard broadband to the final underserved or currently not served is clearly much more efficient than using state aid in areas already served.

Question 3 (section 7):

What elements do you consider essential for the successful definition and implementation of operators' strategies, in particular from a demand-side viewpoint, to promote broadband, with regard to:

a) Fixed broadband?
b) Mobile Broadband?
c) NGA Broadband?

Public policies and public funding should be used mainly in stimulating and aggregating demand of broadband to let more people enjoy the benefits of the information society services and improve the business case for private infrastructure investment. Governments, in their capacity as investors in public services, should promote e-services, e-government, e-learning, etc. in order to create the demand and accelarate broadband take-up thus encouraging investment by the private sector.

Fixed and mobile broadband networks and services have experienced rapid growth in recent years throughout the European Union (EU), with growing penetration rates and the emergence of new and advanced on-line services offering attractive bundling of services.

For Telefónica, the price, quality and bundling of those services offered have become key selling features on its expansion of its fixed and mobile broadband strategy.

In relation to NGA broadband, the need for content and applications that demand high bandwidth is critical for the take-up of NGAN´s by consumers. If new content bandwidth thirsty and appealing to consumers does not come on the market, the demand for ultrafast broadband will be limited.

Question 4 (section 8):

What elements do you consider essential for the successful definition and implementation of public-private partnerships strategies, in particular from a demand-side viewpoint, to promote broadband? What role, if any, could NRAs play to enhance the effectiveness of those strategies?

Regarding public-private partnerships strategies, Telefónica would like to point out that any form of public intervention foreseen by NGAs must meet the primary and fundamental condition of not hampering private investments in a specific area or region.

Indeed, the role of governments or public authorities in promoting new networks should not be to replace or substitute the operation of market mechanisms. Governments have, however, two primary roles, namely encouraging the demand for new services through demand side promotion measures such as the provision of e-government, e-health, etc. (which will in turn foster and act as an incentive to private investments in

both networks and services) and establishing predictable legal and regulatory frameworks that broadly act as an incentive for investment and innovation.

The deployment of high speed NGNs – and especially next generation access networks (NGA) -- requires large-scale investments. Telefónica is convinced that investments to bring NGA to EU citizens must be primarily carried out by private capital, as has been case for the first generation of broadband services.

In other cases where public-private intervention is granted for the development of NGA (i.e when municipalities retain ownership of the network and the construction and management of the network lies with the private sector), it must never jeopardize efficient allocation of investments within the internal market. Moreover a large degree of freedom should be given to public-private projects as to the choice of the technology used to develop those broadband infrastructures that better suit local/regional circumstances (including vectoring VDSL).-

Moreover, funding by the State or local authorities should never allow for a mere duplication of infrastructures (e.g. cities build and manage a second infrastructure as a utility network), nor should it be granted in a non-symmetric way to some market players to the detriment of proper market functioning.

Question 5 (section 10):

In addition to the initiatives already taken by BEREC with regard to the promotion of broadband from a supply-side perspective, what other initiatives do you perceive it is important that BEREC develops in the future from that perspective?

For Telefónica it is not clear what BEREC is referring to in promoting broadband from a supply-side perspective. If BEREC refers to the ULL and NGN regulation, Telefónica would like to point out that these initiatives are not promoting broadband, as should be obvious from the need of carrying out this public consultation. This view is held in most of the recent economic literature. What's more, Telefónica has made a strong point against it in its response to the recent EC public consultation about ULL.

Telefónica would like to suggest that politicians and regulators consider:

- Allocating public money through the less distortive public-private partnership (PPP) investments models

- State aid initiatives targeted strictly on geographical areas not being served thus ensuring universal basic broadband availability and secondly on demand side measures;

- Ensuring that any public initiatives for NGN deployment deliver clear economic outcomes and avoid distorting competition.

- Applying the “Technological neutrality” principle: Compared to conventional fixed networks, wireless technologies allow more flexible and effective delivery of broadband in remote or inaccessible areas

- Recognizing effective competition between fixed and mobile standard broadband products

- Price flexibility should be allowed by NRAs in order to foster the deployment of services through proper price/service segmentation.

- Ensuring the appropriate release of spectrum resulting from the switch-off of analogue TV services (the digital dividend). Building of broadband mobile networks in the lower frequency bands released from the digital dividend lead to significantly lower costs in rural areas compared to using frequencies from higher bands (e.g. UMTS 2,1 GHz). The mere fact of reducing the cost of deployment will increase availability.

Question 6 (section 10):

A list of potential measures was identified, in the present document that could be adopted or reinforced in order to promote broadband from a demand side perspective.
a) Are there any identified demand-side measures that you consider inappropriate?

BERC considers Transparency dealing specifically with “net neutrality” as a demand side broadband measure to be promoted.

In relation to BEREC ‘s consideration on Net neutrality, Telefónica would like to state that:

- Telefónica shares the social and economic importance of preserving the openness of the Internet through transparency
- Currently there is a consensus that operators have the right to manage their networks to ensure their integrity, efficient use and quality and to differentiate Internet access services in order to adapt them to users’ needs and to applications requirements.
- Emphasis should be put in the debate on customer needs and consistency across the value chain of service delivery, which in turn raises the need to consider neutrality and openness in a comprehensive way, especially with regard to devices and operating systems.
- We support the way the discussion in Europe has been managed by the European Commission and we believe that the current regulatory framework has the means to correct distortions due to any anti-

competitive practices involving access to the Internet and that no specific Net Neutrality regulation is needed.

b) What other demand side measures, if any, would you consider particularly important to promote broadband?

Operators are in a good position to bring innovation to the Internet in terms of attractive online services for users. However, in order to do so, the right regulatory environment must be in place to allow operators to compete on a par with Over the Top (OTT) players, who currently have more freedom to innovate. This imbalance is not only damaging Europe's competitive position on the global stage but is holding back a possible surge in innovation that could result in many more users pushing for broadband services and, in particular, high-speed broadband services.

Finally, users need to be educated at a young age on the benefits of broadband, with Internet-learning being an integral part of the national school curriculum. In doing so, the future demand for broadband is fullproof. Public-private partnerships can be particularly useful in delivering broadband to schools at competitive rates and with national coverage.