TELEKOM AUSTRIA GROUP

I. Introduction

Telekom Austria Group (TAG) welcomes the possibility to comment on the BEREC Broadband Promotion Report as it is focusing on a very prominent topic of current EU policies. TAG shares BEREC's and other European stakeholders view that the further development of broadband access networks can create many benefits both for EU citizens and the European economy and do support efforts to promote broadband.

II. Questions

Question 1: 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?

Governments' leading roll to design and implement Broadband Promotion Programs should not be contested. It is the essence of industrial policy to set the parameters in line with the EU goals for a thriving economy and thus peaceful society. TAG, nevertheless, believes that governments' strategies to promote broadband need to follow a consistent logic in order to be effective and increase economic welfare. We will elaborate our thinking on the core elements of such strategies in form of theses:

1. The first and foremost element of governments' strategies aiming at promoting broadband needs to be a **clear and comprehensive definition of the goals** which shall be achieved by implementing such a strategy.
2. While such **goals need to be aligned with the Digital Agenda targets**, they do not necessarily need to be exactly the same as differences on national levels exist. The reasons for that are manifold and include but are not limited to, for example, differences in existing fixed line penetration, roll-out costs, topographies, financial resources.
3. The **goals and strategies have to be technology neutral** but shall not, however, embrace other goals such as, for example, employment, given that the EU Commission seems to favor the roll out of fibre networks to reach the goals of the digital agenda maybe hoping that initially the necessary investments will also have significant positive effects on employment across the EU.
4. There is **no simple order in which supply side and demand side measures should be taken**. In fact, there rather exists a complex interdependency between supply and demand which has to be taken into account when developing strategies to promote broadband. When looking at the development of both fixed and mobile broadband roll-out as well as uptake and usage by customers it becomes obvious that demand does not always and in every EU member state follow the supply of these services. Accordingly, strategies which aim at promoting broadband should not try to push for an increase of broadband supply with existing or even new technologies (e.g. FTTH, LTE) if the already available supply is not sufficiently used but rather try to increase demand in order to match demand and supply.
5. **National goals and strategies need to ensure consistency also both on a regional and local level**. Therefore, a close exchange between national governments and local authorities should be established in order to follow the same logic.
6. **Private investment should always come first** and must not be crowded out by public investments. Public funds should only be used if there will be no private investment. This "natural order" of a market system should not be circumvented by governmental strategies.

7. In order to facilitate and promote (more) private investments **regulatory intervention should be as light as possible**. It has to be noted, that the current regulatory approach to fiber access networks in the European Union is not supporting the roll-out of broadband networks, i.e. basing access obligations on legacy market position/networks . The current regulatory instruments derive from the beginning of market liberalization 15 years ago. With the markets developing, also regulation needs to take into account these developments and respond with further deregulation especially in the context of regulatory market assessment and incentives/return on investment for new networks/fibre roll-out.
8. **Extensive best practice sharing between both member states and NRAs needed**. All measures/strategies which were applied until today should be thoroughly assessed in regard to their effectiveness both on the level of the individual member states (role of NRAs) and EU level (role of European Commission).

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

1. Due to the increased roll-out costs in rural and peripheral areas the likelihood of widespread roll-out of privately financed fast and ultra fast broadband is less likely in these areas than in densely populated areas. Ensuring broadband coverage in these areas will quite **possibly necessitate public funds**. However, the basic principle of prioritizing private over public funds should still be applied.
2. TAG, however, is not convinced that subsidization of broadband coverage for rural areas/white spots per se is the best/most value creating approach to spend public funds. It might be worthwhile, for example, to spend public funds on demand side measures (increase take up for existing broadband infrastructure) instead of covering rural white spots.

Question 2 (sections 6 and 9): Among the main supply-side obstacles to broadband promotion, NRAs have perceived the low expected return on investment, the lack of access to financial resources and the access to spectrum. In addition, NRAs have considered, among the main demand-side obstacles to broadband promotion, aspects such 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;

While TAG agrees that the low expected return on investment is a very serious obstacle to broadband promotion, we want to point out that the mentioned lack of access to financial resources is not itself an obstacle but a result of the low expected return on investment. Overall, we believe that the financial markets are – despite the various bumps over the last years – functioning rather effectively. If telecom providers were able to present investors reasonable returns on investment with reasonable risks, we do not believe that they would not encounter any difficulties to attract investors and the necessary financial resources to promote broadband any further.

Access to spectrum is in our assessment indeed an obstacle. If more spectrum in the lower frequencies bands (< 1000 MHz) was made available, network roll-out costs would be significantly lower due to the superior propagation properties of these spectrum bands.

To make things worse, additional supply-side obstacles are often artificially created by NRAs if, for example, auction conditions, coverage obligations or **caps on the amount of spectrum an operator is allowed to buy** (just at it has happened in all EU member states where the Digital Dividend was already allocated) are set as such provisions increase total roll-out costs significantly. By setting spectrum caps, for example, the roll-out costs – and therefore ultimately the retail price for customers - of large operators are increased since, as a consequence of less spectrum per customer (compared to local competitors) they need to build a more dense network with more base stations etc. to be able to

offer their customers the same quality as another operator who serves fewer customers with the same amount of frequencies. As a general rule, therefore, NRAs have to attach as few conditions to the licenses as possible if they want to facilitate and speed up network roll-out.

Furthermore, it can be noted that **overly stringent regulatory policies do not foster the investment** in fast and ultra fast (fixed and mobile) networks. Especially in the case of NGA regulation it seems that the European regulatory approach of applying the same regulatory remedies as in the legacy copper networks is not supporting the roll-out of NGA networks. Especially the application of access obligations in case of fibre networks is counterproductive and not in line with good regulatory practice as fibre is a new technology where no legacy monopoly-like structures exist as in the case of copper networks. Roll-outs, therefore, need to be treated as green-field situations, where every market player starts from zero and has the same opportunities and chances. Accordingly, **fibre must not be regulated from the beginning**.

TAG believes that both the current regulatory regime as well as the **uncertainty of future regulatory policies pose significant supply-side obstacles**. One prominent example is the ongoing discussion about Net Neutrality and possible new legislation. While TAG is committed to the open internet we are concerned that policy makers might prevent operators from developing new business models. As this, again, directly influences the business case of (in particular mobile) broadband networks, it is rather impeding the investment in fast and ultra fast broadband networks instead of supporting it.

The discussion on costing methodologies for key wholesale access prices in electronic communications recently launched by the EU Commission is also not encouraging further roll-out of broadband networks. In fact, any measure which aims at reducing retail prices for current broadband usage risks a decline in investment in new access networks as this decreases the customers' willingness to pay for faster broadband access services.

Finally, the national administrative/legal environment also constricts the roll-out of both mobile and fixed fast and ultra fast broadband networks. Roll-out of such networks could be encouraged if, for example, civil works such as digging of the public domain, construction of ducts was co-ordinated. We also believe that a simplification and acceleration of procedures for the acquisition of rights of way by streamlining laws and regulations concerning civil works, town planning, environment, public health and general administration would contribute to a faster roll-out of new BB networks (e.g. for granting rights of way or mast planning).

b) Demand-side obstacles.

TAG agrees that the **lack of perceived need to adopt broadband** and the subscription costs of broadband per se pose demand side obstacles to broadband roll-out/take-up. We do not, however, see the fact that "NGA is still in an initial stage of the product life cycle" or a "lower level of choice between operators in rural areas" as obstacles.

Other demand side factors which pose obstacles for broadband promotion in TAG's view are "**internet illiteracy**", **lack of trust** and the **affordability of the necessary equipment** to access the internet.

The term "**internet illiteracy**" refers to the fact that some people are ignorant of the existence of the internet and/or do not know how to use it and/or do not recognize the value it could have for them. These obstacle could be best addressed by national governments, also with the support of NRAs as this requires investments into educational measures which cannot be made by private companies (even though TAG, for example, is actively supporting the education of "fringe groups" such as senior citizens, socially disadvantaged people etc. to enable them to participate in the digital society).

Regarding the **lack of trust of consumers** into the safety of the internet TAG believes that this could also be best addressed by governments and NRAs. While network operators have a great interest in providing their customers with the best service possible and try to prevent them from harm, they are

lacking the means to educate people when it comes to trust issues as only a "neutral" instance which is being trusted by the internet users could accomplish such a goal. Apart from trying to explain to people the real extent of security concerns in the internet and how customers can avoid these governments can built also trust into the security of the internet by creating a legal framework and apply the right measures which help to discourage cyber crime.

Also in cases when people **cannot afford the necessary hardware** to access the internet (e.g. computer, smartphone) governments can take appropriate action in order to reduce this obstacle. One way to help people to afford hardware necessary to access the internet could be, for example, to grant tax breaks for all people who register as new internet customers on the relevant hardware. The rationale of this proposal is that those people who are interested in the internet and can afford it already have the necessary hardware (those who have no interest or have security concerns will have to be addressed differently – see above – and will not be affected by such a measure).

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..

See our answers to question 2.1 above.

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?

When replying, please mention what role, if any, could NRAs play to enhance the effectiveness of those strategies.

Operators have an immanent interest to increase the usage of their existing service and the development of new and innovative services. This, however, also necessitates continuing investments and therefore an adoption of existing and/or the development of new business models in order to provide the necessary quality of service (see also above, Question 2.1). Accordingly, operators must have the highest degree of freedom possible to develop their offers and should be as little constricted as possible as they will only then be able to bring products and services to the market which will meet the expectations of potential customers and therefore promote broadband to the highest degree possible.

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?

The goal of public-private partnerships should not be a crowding out of private investments but should complement these by providing additional public funds to private funds in cases where business cases are not positive for private operators. Therefore, and due to the fact that private operators have a better understanding on how to build and operate a network, the private partner of a public-private partnership should always be leading the operative business.

Another prerequisite to a successful public-private partnership is the ex-ante determination of regulatory instruments which will be applied in the short and long term both for wholesale and retail services. As regulatory decisions can have a substantial impact on the profitability of broadband investments it is paramount that the regulatory conditions do not change during the duration of a public-private partnership. If, for example, the relevant NRA would change the model with which the wholesale access price is being calculated and stipulated a lower access price, the business case might turn negative necessitating additional (public) financial funds. This, however, does not mean that a change in the overall business environment should be impossible. An unexpected and sustainable increase in demand, for example, could trigger a change of public financial support.

In addition TAG believes that the conditions for public-private partnerships tenders need to be neutral and technology neutral as in our view not one technology alone but a mix of the different available technologies (FTTH, cable, upgraded copper technologies, mobile) is qualified to promote broadband usage. In particular as in different areas different technologies are more efficient to use for building broadband access networks (e.g. mobile in areas where no copper/cable infrastructure already exists. Furthermore, tenders should be awarded in a competitive process: the private investor who commits to the lowest need of public funds for a given project would be invited into the partnership. Introducing such a mechanism will help to maximize the effectiveness of such public-private partnerships as governments will need to contribute as little as possible while customers will get the best service possible.

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?

NRAs play a crucial role in promoting broadband in the EU as regulatory decisions have a direct impact on the business case of broadband network roll-out (e.g. the wholesale access price to the copper networks). TAG believes that the current regulatory policy is rather discouraging the further roll-out of broadband networks. Other countries/regions of the world which were adopting a different regulatory policy towards the roll-out of fixed NGA access networks, for example, have been experiencing significantly higher deployment levels and annual growth rates compared to EU member states (e.g. the US and several Asian countries). Commitments of NRAs to regulatory policies which allow investors to recuperate their investments more quickly would considerably help to foster the roll-out of fast and ultra fast broadband networks.

Moreover, regulatory approaches in an NGA market environment should duly take into account market power of other players active in infrastructure roll-out: E.g., across the European Union utility companies are often related to municipalities (involved in NGA roll-out) operating already as dominant local players. With high local market shares, they differ significantly from average alternative operators in their resources and assets and should not be treated as “entrants”. E.g. in Austria, former subsidiaries of municipalities (or municipalities owned local utility companies) already operate as local incumbents in big cities with local market shares beyond 50 % or the activities of local municipalities like the City of Amsterdam (the Netherlands) or Stokab which is founded and owned by the City of Stockholm (Sweden).

This also includes an appropriate assessment of markets according to given national particularities and with regard to new business models in a convergent IP environment. Platform competition now also means, taking into account competitive constraints due to IP-communication on established operators.

In addition TAG wants to note, that in general any regulatory policy which artificially reduces the revenues of operators will impact on their ability to invest in the deployment of faster broadband networks (MTR, FTR, Roaming etc).

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?

The duration of contract per se should not be considered as a disincentive for demand. In Austria, for example, operators subsidize customer terminals (e.g. smartphones, tablets, data sticks etc.) quite heavily. This in fact reduces the barrier for customers to take up new services like broadband and therefore rather promotes the demand than impending it. Accordingly, when assessing the appropriateness of the duration of a contract customers can chose, this relationship needs to be considered.

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