Creating a brighter future

Response to the consultation on the 'Draft BEREC Work Programme 2019'
.

19 April 2019

Title of the proposed project (which should broadly describe the nature of the proposal):

Evaluation of different business models to judge their impact on VHCN investment and how the new Code can enable those models

5. Brief description of the project (which should set out the aim, scope and expected deliverables of the proposed project): *

The FTTH Council Europe notes that BEREC will have to implement the new EECC from 2019.

In the first instance, the FTTH Council would like to see guidance from BEREC about how it sees the new Code being implemented in an overall fashion. The legislative proposals see the need to stimulate investment in VHCN networks and set out series of measures to achieve that goal- those measures include the wholesale-only model, co-investment and the use of a 'graded remedies' approach. The new Code will likely mark a significant departure from the existing Framework. Of course, it is up to the individual NRAs to implement the new Code in their Member States but BEREC could play an important role in setting out a common understanding of how NRAs would act is specific circumstances. Such guidance would be high level and would guide industry on how BEREC sees the new Code being implemented.

In addition, BEREC will need to develop a series of implementing measures falling out of the new Code. Those measures can be quite specific and quite technical in given circumstances such as the proposed requirement on BEREC to specify the technical parameters of Very High Capacity Networks (VHCN).

The FTTH Council clearly believes that there needs to be a deliberate policy to pursue Fibre to the Home. While the target of VHCN proposed in the legislative text is FTTB or FTTH we note the proposal for BEREC to define in some fashion what exactly constitutes an equivalent network investment. While the issue is also addressed under the comments regarding the internal market, the FTTH Council would already note its belief that any work in this area needs to be avoid defining VHCN in a way that acts as an alternative to investment. Already the FTTH Council sees very different ambitions across EU Member States and hopes to see BEREC acting to create the internal market rather than remain silent on what network ambitions should be.

The FTTH Council believes that a clear target is a requisite first step of any public policy regime that means to stimulate investment in fibre networks. With a clear target, other policy instruments such as the wholesale-only model, the sharing of passive networks or the interpretation of the co-investment proposals can be applied correctly and in a consistent manner.

In those countries that successfully promoted FTTH, regulated virtual access remedies on FTTH were either not available or were greatly curtailed. In addition, each country that achieved FTTH took care to ensure that the cost of deployment was minimised through sharing of expensive passive infrastructure and avoiding duplication of those passive network elements.

The FTTH Council recognises that this is a particular phase of development and also recognises that certain forms of business structures such as wholesale-only operators have different incentive structures to vertically integrated operators. The proposed regulatory approach to such operators in the current legislative proposals makes sense in the Council's view. Similarly, the proposals in the new Code concerning co-investment can be investment friendly and encourage investment but these measures also need to sit within an overall approach which protects infrastructure-based

competition by prioritising investments in VHCNs - the application of these provisions can be further clarified by BEREC.

The FTTH Council would like to see guidance from BEREC about how it intends to advise its members to use the new tools in the Code to promote investments in VHCNs and in particular, how the wholesale-only and any further new investment model will be applied to stimulate new and innovative business models that promote investment. The FTTH Council has many new operator members who are using precisely these business models and would be happy to share their experiences.

While competitive network deployment won't happen everywhere and a way to ensure roll out in more expensive rural areas will have to sit beside a market driven approach. Good access, in all its forms will be required in those high cost areas as consumers must have access to the deepest form of competition available. The FTTH Council believes Public funding is justified given the benefits of fibre that go beyond the private considerations on operators and citizens such as enhancements to healthcare and education systems. However, these public investments should also happen and should happen in a coherent and consistent way and Europe should avoid a starting point which accepts or even aims for a digital divide (e.g. aiming for gigabit connectivity in large urban centres but being prepared to accept 100Mbps outside). The FTTH Council believes that the wholesale-only and alternative investment models can be particularly attractive in these rural areas.

The FTTH Council also notes with some concern that in certain instances, investments in 'non-economic' areas can be foreclosed through strategic investments (in part of these areas) by certain operators. In practice, even non-economic areas may have certain areas which are marginally economic or non-economic – by delivering services to these households, the foreclosing investor can raise the average investment costs for the remainder to a level that cannot be sustained for market actors, even with support.

One other issue that has been raised by the new code but deserves more attention is the issue of copper switch off with specific requirements on NRAs in that process. While only a small number of Member States have reached a level of deployment where a full copper network switch off could be contemplated, many Member States have already achieved a level of fibre deployment in specific regions or even exchange areas where such consideration can arise in a more local context.

The FTTH Council believes that there needs to be a consistent approach to the migration process simply at a practical level. Even just to emulate PSTN services, two options can be considered: Voice over broadband (VoBB) or voice over narrowband (VoNB). The key difference between the two is the location of the voice gateway functionality – in other words, the session initiation protocol (SIP) endpoint and analogue-to-digital conversion point. While the FTTH Council dealing with Deployment and Operations has addressed the practical trade offs faced in such a decision, we see real added value BEREC to develop this issue. BEREC could offer guidance to its members on the outcomes and all the issues that arise with copper switch-off beyond the decision of operators to invest or not (services such as video surveillance or security devices that draw power from the copper telecom network is another challenge for a migration from copper to fibre).

In order to prevent a patchy and uncoordinated approach to the process, the FTTH Council believe that it would be timely for BEREC to look to the experiences gained thus far to look at the issues involved in a full copper-network switch off.

6. Which of BEREC's three strategic pillars is the proposed project most closely related to - please select one of the following: *

Promoting the internal market

Promoting competition and investment

Empowering and protecting end users

Empowering and protecting end users

7. Which of BEREC's five strategic priorities is the proposed project primarily intended to address - please select one of the following: *

Responding to connectivity challenges and to new conditions for access to high-capacity networks

Monitoring potential bottlenecks in the distribution of digital services

Enabling 5G and promoting innovation in network technologies

Fostering a consistent approach of the net neutrality principles

Exploring new ways to boost consumer empowerment

8. If the proposed project addresses more than one of BEREC's strategic priorities, which strategic priority, other than the one selected above, is the proposed project intended to address - please select one of the following:

Responding to connectivity challenges and to new conditions for access to high-capacity networks

Monitoring potential bottlenecks in the distribution of digital services

Enabling 5G and promoting innovation in network technologies

Fostering a consistent approach of the net neutrality principles

Exploring new ways to boost consumer empowerment

9. Brief explanation of how proposed project, if included in BEREC's WP 2019, will help BEREC achieve the selected strategic priorities: *

Even though the provisions in the code that seek to support new business models, from wholesale only to co-investment and the overall 'graded remedies' approach are new, these entities and regulatory approaches have already been seen in one or more Member States already. BEREC can clarify how the Code will be applied by reference to these examples. Investments in VHCN are long term investments by their nature and clarity at the outset of the new Code will give investors the confidence they need to invest over the long term thereby fostering investment in network competition.

10. Indicate the nature of the intended output for this proposed project - please select one of the following: *

Report / snapshot

Report / best practices

Opinion

Guidelines

Common position

Workshop

Other

11. To support the inclusion of the proposed project in BEREC's WP 2019, please provide any other appropriate information.

The FTTH Council has seen in the past a vast range of different directions in Member States with regards to the promotion of the goals of the Digital Agenda and the Gigabit Society. We regret that not all the Member States have made a strong commitment and defined a clear roadmap to achieve FTTH. In addition, the FTTH Council notes in areas such as the sharing of passive network elements (ducts, poles, etc.) and in-building wiring, that the regimes in place today across Europe vary widely even though there is a common legislative framework. This in turn is a function of the different national goals and ambitions as well as a different implementation of the framework by the NRAs leading to a fragmented approach

It is not only in the area of network performance and development that BEREC are being asked to take on more responsibility for ensuring a consistent approach among its NRAs. While the Guidelines in Roaming and Net Neutrality created a largely consistent expectation by industry in terms of the outcomes to be expected, no equivalent exists in the network development sphere. The FTTH Council Europe wishes for BEREC to set a common set of network ambitions for its members.

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Introduction

The FTTH Council Europe welcomes the opportunity to comment on the draft BEREC work programme 2019. The current call for input is in the context of a legislative cycle which is not yet completed, even if its main elements are crystallising. BEREC will continue to have a major role to play to ensure consistency among its members in how it applies the new code. In addition, it looks as if BEREC will be asked once again to give formal guidance on specific aspects of the Code. The FTTH Council Europe hopes that BEREC will continue to engage with stakeholders in an open and transparent consultation process on these issues when they are finalised.

The FTTH Council Europe is an industry organisation with a mission is to accelerate ubiquitous fibre-based connectivity empowering a leading Digital Society throughout Europe.

Comment

The FTTH Council Europe agrees that there should be a continued emphasis on the strategic pillars that form the basis for the BEREC Work Programmes.

- Promoting competition and investment
- Promoting the internal market
- Empowering and protecting end users

These elements continue to be the critical to the development of fibre in Europe in the FTTH Council's opinions. We note that in the context of each of these pillars the following points:

Promoting competition and investment

The FTTH Council Europe notes that BEREC will have to implement the new EECC from 2019.

In the first instance, the FTTH Council would like to see guidance from BEREC about how it sees the new Code being implemented in an overall fashion. The legislative proposals see the need to stimulate investment in VHCN networks and set out series of measures to achieve that goal- those measures include the wholesale-only model, co-investment and the use of a 'graded remedies' approach. The new Code will likely mark a significant departure from the existing Framework. Of course, it is up to the individual NRAs to implement the new Code in their Member States but BEREC could play an important role in setting out a common understanding of how NRAs would act is specific circumstances. Such guidance would be high level and would guide industry on how BEREC sees the new Code being implemented.

In addition, BEREC will need to develop a series of implementing measures falling out of the new Code. Those measures can be quite specific and quite technical in given circumstances such as the proposed requirement on BEREC to specify the technical parameters of Very High Capacity Networks (VHCN).

The FTTH Council clearly believes that there needs to be a deliberate policy to pursue Fibre to the Home. While the target of VHCN proposed in the legislative text is FTTB or FTTH we note the proposal for BEREC to define in some fashion what exactly constitutes an equivalent network investment. While the issue is also addressed under the comments regarding the internal market, the FTTH Council would already note its belief that any work in this area needs to be avoid defining VHCN in a way that acts as an alternative to investment. Already the FTTH Council sees very different ambitions across EU Member States and hopes to see BEREC acting to create the internal market rather than remain silent on what network ambitions should be.

The FTTH Council believes that a clear target is a requisite first step of any public policy regime that means to stimulate investment in fibre networks. With a clear target, other policy instruments such as the wholesale-only model, the sharing of passive networks or the interpretation of the co-investment proposals can be applied correctly and in a consistent manner.

In those countries that successfully promoted FTTH, regulated virtual access remedies on FTTH were either not available or were greatly curtailed. In addition, each country that achieved FTTH took care to ensure that the cost of deployment was minimised through sharing of expensive passive infrastructure and avoiding duplication of those passive network elements.

The FTTH Council recognises that this is a particular phase of development and also recognises that certain forms of business structures such as wholesale-only operators have different incentive structures to vertically integrated operators. The proposed regulatory approach to such operators in the current legislative proposals makes sense in the Council's view. Similarly, the proposals in the new Code concerning co-investment can be investment friendly and encourage investment but these measures also need to sit within an overall approach which protects infrastructure-based competition by prioritising investments in VHCNs - the application of these provisions can be further clarified by BEREC.

The FTTH Council would like to see guidance from BEREC about how it intends to advise its members to use the new tools in the Code to promote investments in VHCNs and in particular, how the wholesale-only and any further new investment model will be applied to stimulate new and innovative business models that promote investment. The FTTH Council has many new operator members who are using precisely these business models and would be happy to share their experiences.

While competitive network deployment won't happen everywhere and a way to ensure roll out in more expensive rural areas will have to sit beside a market driven approach. Good access, in all its forms will be required in those high cost areas as consumers must have access to the deepest form of competition available. The FTTH Council believes Public funding is justified given the benefits of fibre that go beyond the private considerations on operators and citizens such as enhancements to healthcare and education systems. However, these public investments should also happen and should happen in a coherent and consistent way and Europe should avoid a starting point which accepts or even aims for a digital divide (e.g. aiming for gigabit connectivity in large urban centres but being prepared to accept 100Mbps outside). The FTTH Council believes that the wholesale-only and alternative investment models can be particularly attractive in these rural areas.

The FTTH Council also notes with some concern that in certain instances, investments in 'non-economic' areas can be foreclosed through strategic investments (in part of these areas) by certain operators. In practice, even non-economic areas may have certain areas which are marginally economic or non-economic – by delivering services to these households, the foreclosing investor can raise the average investment costs for the remainder to a level that cannot be sustained for market actors, even with support.

One other issue that has been raised by the new code but deserves more attention is the issue of copper switch off with specific requirements on NRAs in that process. While only a small number of Member States have reached a level of deployment where a full copper network switch off could be contemplated, many Member States have already achieved a level of fibre deployment in specific regions or even exchange areas where such consideration can arise in a more local context.

The FTTH Council believes that there needs to be a consistent approach to the migration process simply at a practical level. Even just to emulate PSTN services, two options can be considered: Voice over broadband (VoBB) or voice over narrowband (VoNB). The key difference between the two is the location of the voice gateway functionality – in other words, the session initiation protocol (SIP) endpoint and analogue-to-digital conversion point. While the FTTH Council dealing with Deployment and Operations has addressed the practical trade offs faced in such a decision, we see real added value BEREC to develop this issue. BEREC could offer guidance to its members on the outcomes and all the issues that arise with copper switch-off beyond the decision of operators to invest or not (services such as video surveillance or security devices that draw power from the copper telecom network is another challenge for a migration from copper to fibre).

In order to prevent a patchy and uncoordinated approach to the process, the FTTH Council believe that it would be timely for BEREC to look to the experiences gained thus far to look at the issues involved in a full copper-network switch off.

In summary, the FTTH Council believe that there are a number of areas that it would like to see BEREC produce guidance under this heading:

1. Guidance from BEREC on how it sees the new regulatory Code being implemented and how this differs from the implementation of the previous regulatory Framework
2. Guidance from BEREC on the application of the wholesale-only model as well as the new investments models to stimulate investment in VHCNs. BEREC should evaluate different business models and judge their impact on investment levels.
3. How BEREC intends to go about setting the technical parameters for network performance that will constitute an equivalence to a VHCN.
4. Guidance from BEREC on how to manage the issue of copper network switch-off.
5. Examining the conditions under which strategic investments may foreclose regional markets.

Finally, given the critical importance of these issues for all stakeholders, the FTTH Council asks that BEREC maintain a very high level of consultation and transparency in the

development of these projects. The use of hearings and open workshops can be a useful supplement to written consultations as a means to allow exchange of information in these critical areas.

Promoting the internal market

The FTTH Council believes that the watchword in the context of the internal market portion of BEREC's work programme should be 'Consistency'.

The FTTH Council has seen in the past a vast range of different directions in Member States with regards to the promotion of the goals of the Digital Agenda and the Gigabit Society. We regret that not all the Member States have made a strong commitment and defined a clear roadmap to achieve FTTH. In addition, the FTTH Council notes in areas such as the sharing of passive network elements (ducts, poles, etc.) and in-building wiring, that the regimes in place today across Europe vary widely even though there is a common legislative framework. This in turn is a function of the different national goals and ambitions as well as a different implementation of the framework by the NRAs leading to a fragmented approach

It is not only in the area of network performance and development that BEREC are being asked to take on more responsibility for ensuring a consistent approach among its NRAs. While the Guidelines in Roaming and Net Neutrality created a largely consistent expectation by industry in terms of the outcomes to be expected, no equivalent exists in the network development sphere. The FTTH Council Europe wishes for BEREC to set a common set of network ambitions for its members.

The Council is also concerned in the area of infrastructure sharing that there is little emphasis by NRAs on non-telecom infrastructures which are equally available under the cost reduction directive believing instead that the presence of telecom ducts are essential to a successful FTTH deployment.

It should be noted that the Netherlands had a rapid deployment before Reggefibre was controlled by KPN. When Reggefibre was ultimately sold, its owners moved to Germany as it had the best cost profile for new build deployments. This is in the absence of any regulatory or governmental assistance to lower the costs in Germany, much more could be achieved if there was a clear target and measures put in place to support that target.

FTTH can be deployed in any Member State and in any topology (even those where little or no ducting exists as in the examples above) but it requires a number of elements including major efforts by public authorities to reduce deployment costs combined with the right incentive structures. There are many ways to reduce costs and a number of relevant infrastructures exist for those operators rolling out FTTH networks. The FTTH Council would like to see BEREC revisit its work in this area[1] as the FTTH Council believe that there are a range of instruments that are available to BEREC's members to use in order to lower deployment costs.

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[1] The report of BEREC on NGA published in October 2016 "Challenges and drivers of NGA rollout and infrastructure competition"

The FTTH Council is happy to work with BEREC to explore those options and to share its experiences.

The FTTH Council recognises as well that it does not help the work of NRAs that different legislative instruments and different regulatory bodies are, and will be, addressing the same issues in terms of infrastructure sharing. For instance, the Broadband Reduction Directive and the new provisions in the telecom code on sharing of passive infrastructures will have to co-exist even where they may be administered by different government agencies. In that context the FTTH Council believe that it is important that BEREC takes the initiative once the legislative proposals are finalised to issue a series of short papers giving guidance to industry on what they should expect by NRAs in different areas.

The treatment of geographic segmentation

The FTTH Council Europe believes that geographic differences are an important characteristic of markets that needs to be reflected in the regulatory approach dealing with FTTH investments in order to ensure that an appropriate treatment is given to such investments. An appropriate regulatory treatment strikes a balance between rewarding and encouraging the allocation of capital to long term investments with correct build or buy signals while at the same time ensuring adequate competition is in place such that end-users are the ultimate beneficiary of policy (both in the short and long term). It is in this context that the appropriate treatment of geographic segmentation must be viewed.

The FTTH Council notes the traditional metrics which BEREC adjudges to be appropriate in determining the extent to which geographic segmentation might be justified. The pricing differentials, market shares, number of operators etc. are in the FTTH Council Europe's opinion not giving enough weight to the prospective force of competition. Such an approach risks institutionalising competition whereas under the Code, NRAs now have the possibility to look more to what is possible in a prospective sense rather than what has happened in the past. The identification of digital exclusion zones grants NRAs for the first time the ability to be prospective in identifying areas where economic roll-out may or may not happen.

Regulation, existing and signalled, has a profound impact on the market operations. Credible, predictable and stable policies create a framework in which capital can make strategic choices over the longer term. BEREC is correct and justified to express concern to have market boundaries which are stable, not for the administrative burden it might impose on Regulators but rather because of the uncertainty it can create in a context where returns may take 20 years to be realised. The most extensive and detailed cost modelling exercise conducted in Europe was commissioned by the FTTH Council[2] (and in which its Members co-operated and participated) and 'the' key cost driver that was identified in that study is population density and the associated built environment characteristics. The fact is that over a 20 year period, some areas can support entry whilst others have a much less likely capacity to do so. An appropriate differentiation of regulation in these areas will be important for investors. The cost drivers identified above will remain stable over time and thus can form the basis of a predictable regulatory delineation of geographic markets.

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[2] http://ftthcouncil.eu/documents/Reports/2017/FTTH%20Council%20Cost%20Model%202017_final.pdf

The FTTH Council would like to see the issue of geographic market definition reviewed.

Fibre to support 5G – Small Cell deployments and issues

The FTTH Council believes that the use of small cells and the deployment of fibre to support those cells will be important in the context of 5G network developments. From a telecom industry perspective two significant changes that are underway already will be greatly enhanced; the first is Software Defined Networks (SDNs) which will allow the control of network resources to be opened to third parties, with the possibility for these third parties to manage their own physical or virtual resources individually – for instance emergency or military networks which require complete autonomy could sit within an existing network rather than beside it as is the case today; the second change to be enhanced is Network Function Virtualisation (NFV) which offers the prospect of implementing specific network functions in software running on generic hardware, without the need for costly hardware-specific machines – in short the speed to deploy new services and functions in traditional telecom companies which current take perhaps 18 months or longer would approach the dynamics of the internet.

However, it is clear that 5G cannot happen without fibre driven very deep in the network (hence Very High Capacity Connectivity is defined as FTTB/FTTH or equivalent) since these wireless networks need equivalent backhaul and offloading capacity that meets those wireless standards.

The FTTH Council would welcome work to look at restrictions to small cell development in Europe such as exclusivity agreements, planning and practical constraints. Given the symbiotic nature of the relationship between Fibre and 5G, BEREC should also consider the question of economic substitutability and/or complementarity and how that is changing in view of technical developments.

Therefore under the heading of the internal market the FTTH Council Europe would like to see actions under the headings of

1. Consistent network targets for NRAs across Europe
2. Consistent approaches to the sharing of passive infrastructures and other measures to lower deployment costs
3. Consistent approach to geographic segmentation of market analyses
4. Guidance on enabling Small Cell deployments in Europe and other measures to enable 5G.

Empowering and protecting end users

The FTTH Council believe that BEREC should also consider the accuracy of advertising of speeds. The FTTH Council has noted a significant discrepancy between advertised and delivered speeds a phenomenon remarked upon by BEREC and the Commission but it is not something being actively monitored.

Users are not properly informed about the services they receive, or are likely to receive when signing up for a broadband connection because the use of 'up to' advertising suggests that consumers will receive speeds that are often never available. In other sectors such misleading advertising is not tolerated and purchasing a litre of milk which only has 700ml in it would immediately lead to action.

The European Commission has through a series of studies and surveys noted the poor relationship between actual and advertised speeds with 75% of the advertised speed being delivered on average with xDSL being a particularly poor performed at 62% of the advertised speed delivered[3].

The mislabelling of product has an important distortive effect on consumer choices and in turn, these misinformed choices send inappropriate investment signals to network operators.

Furthermore, the parameters that are specified need to go beyond speed and give metrics for other QoS parameters that effect service delivery on-net, such as latency and jitter.

Studies suggests that consumers will pay for higher speed once they understand the difference that exists between high and low capacity networks. Over time, FTTH consumers on average deliver 46% higher ARPU than DSL consumers[4]. Misleading advertising can undermine the transition from low to high speed since uninformed consumers don't realise the difference and would not be prepared to pay for better service. Such misleading advertising would artificially depress the fibre premium.

If consumers do not understand what they are buying then they cannot send appropriate investment signals to market operators.

The FTTH Council acknowledges on-going efforts to increase transparency of network performance and actual vs advertised speeds though notes also the continuing delays in that timetable. In the interest of consumer protection, the Council believes that published results should make possible a comparison of network technologies and service providers[5]. The use of 'fibre' in advertising to create the impression that it is a wholly fibre network when it is not, is particularly problematic. The FTTH Council notes the position of the French regulator ARCEP and believes that this is a model intervention[6].

The FTTH Council would emphasise that the issue of network transparency is not simply one of user rights (though these are important) but it is also an issue regarding the development and take-up of advanced networks and services which will have an impact on the general economy.

Well informed consumers with choice of suppliers will be enable a more dynamic and responsive market to the benefit of consumers and industry.

1. The FTTH Council would welcome guidelines from BEREC on the issue of advertising for industry.

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[3] https://ec.europa.eu/digital-agenda/en/news/quality-broadband-services-eu-samknows-study-internet-speeds
[4] http://www.diffractionanalysis.com/2012/05/09/free-webinar-successful-ftth-service-strategies/
[5] Similar comparisons exist in other parts of the economy such as energy see for example http://www.vreg.be/vergelijk-doe-de-v-test-en-vind-uw-ideale-leverancier
[6] https://www.arcep.fr/uploads/tx_gsavis/15-1492.pdf