

12 November

TDC submission: Draft COMMISSION RECOMMENDATION on regulated access to Next Generation Access Networks (NGA)

Summary:

TDC will call the attention to three parts of the draft Recommendation which may be unclear or even misleading and where more clarity will help to bring the Recommendation in line with the principle of technology neutrality, with a regulatory approach based on a stringent market analysis and with the objective of ensuring competition for both residential and business customers:

- **Access to passive infrastructure and the role of infrastructure competition:** The draft Recommendation over appraises the potential for (FTTH) infrastructure competition based on mandatory access to passive infrastructure (i.e. 'ducts') regardless access to passive infrastructure often is unable to result in economically viable solutions that will ensure future competition and consequently this appraisal may lead to inefficient investments. The final Recommendation should critically examine both the conditions for economically viable fibre based NGA deployment and indeed the potential for replication of fibre based NGA and then provide guidelines for the NRAs how to assess if bottlenecks are present or coming up.
- **Technology-neutrality and interaction with market analysis:** The draft deals with some types of 'NGA' in a way that indicates that in particular FTTH solutions have an exceptional status. Therefore the Recommendation should make it clear that NGA networks regardless of the technology employed are part of a general market analysis, and that standard remedies should be applied in case of SMP with no preferential treatment based on technology.
- **Risk-premium (or risk-sharing) price regulation:** The underlying assumptions in the draft about 'risk' do not appear to be justified neither is it explained why certain technologies rather than markets are pointed out to qualify for a specific beneficial treatment in the form of a 'risk-premium'

TDC¹ welcomes the public consultation on the draft NGA Recommendation as an opportunity to ensure that the Commission will provide the industry with a

¹ www.tdc.com

balanced set of recommendations in order to provide clarifications and guidance on the regulatory treatment of NGA.

TDC acknowledges that the Recommendation will have to strike a balance between various objectives in particular: promotion of broadband/fibre-roll-out as well as the need to ensure competition both in alignment with the general principles of the regulatory framework building on market analysis and technology neutrality.

TDC highlights in our submission some key issues in the draft Recommendation and the Explanatory Memorandum which we believe will benefit from further considerations and clarifications.

TDC will besides our comments below refer to the more extensive submission by ECTA which we largely support².

1) Role of access to passive infrastructure and infrastructure competition

While the draft Recommendation recognises that a one-size-fit-all approach isn't workable:

(Whereas 3) There are a number of possible scenarios for future Next Generation Access (NGA) network roll-out, and competitive outcomes are likely to vary both between and within Member States

this recognition is not fully reflected in the specific recommendations³ where a particular concern is the overriding strong focus on access to passive infrastructure, in particular ducts, in order to create infrastructure competition.

Although infrastructure competition is in theory the optimal way to ensure competition at retail level then fibre based NGA (FTTH) often means that the deployment of parallel fibre infrastructure even in case of available ducts is neither economical nor practical feasible and indeed not beneficial from an ef-

² For clarity it should be noted that TDC disagrees with part of the contribution delivered by ETNO where TDC is member as it may not appear from the ETNO position

³ Cf the ERG (08) 38 rev2 IRG/ERG Response to the Draft Recommendation on the regulated access to Next Generation Access Networks (NGA) of 18th September 2008 October 2008: *Some of the underlying assumptions of the draft recommendation may not hold in all member states, or even across each member state, risking negative impact on these member states or areas where the situation differs... Also, NGA roll-out strategies necessarily show a considerable diversity between countries due to different local conditions as the ERG pointed out in its NGA CP/Opinion in 2007 and no clear view of the business perspectives has yet emerged among market players. With considerable uncertainty as to the technology choices of operators, the speed and geographic extent of roll-out, the pricing and packaging of offers, and the levels of consumer demand for NGA-delivered services, it would be premature – and could in fact be dangerous – to attempt to be too definitive at this stage to try to identify very tightly harmonised regulatory best practice.*

efficiency viewpoint - or at least only in some limited instances (densely populated urban areas, large business customers).

Two important factors seem to be underestimated by the draft Recommendation:

- Ducts in many instances will not be available for any practical purposes depending on the employed methodology for laying down fibre. The failing availability is the case both for existing ducts which may not reflect an optimal architecture for the fibre roll-out and indeed for new fibre roll-out e.g. in micro ducts. Excessive requirements on current SMP operators to register existing ducts and to make such information available e. as part of reference offers may cause increased cost on the industry without much real value added⁴.
- Assuming ducts actually are available at the right locations still the associated cost of FTTH will prevent a viable replication of FTTH roll-out, cf. the NGA study made by WIK⁵:

(19) The economics of FTTx do not support multiple replication of the access network sufficient to achieve effective competition...in any case, replicability is limited to denser populated areas⁶

Even in cases where own civil engineering costs are avoided due to access obligations on passive infrastructure then the high costs for FTTH investments (fibre, electronics) are likely to prevent multiple replication on a wide geographic scale. Where multiple replication is unlikely within the time horizon of the market analysis, the Recommendation should request NRAs to ensure that competition is promoted by imposing additional obligations (complementary to the civil infrastructure access) on SMP operators, including the provision of access to fibre at the Optical Distribution Frame or at an equivalent facility.

Such a need is only partly reflected in the draft Recommendation when it says that:

(General principles 15) Where SMP operators deploy fibre to the home, NRAs should impose further physical access obligations (access to unlit fibre) beyond access to ducts, other civil engineering works and other elements which are not active, where access to this infrastructure is technically or physically impossible or where it is not economically viable for a sufficient number of operators to ensure effective competition.

⁴ Cf. also the point made by the ERG: *we consider that the part on specific pricing principles remains overly prescriptive and oppose the generally excessively prescriptive nature of the recommendation (e.g. when requiring NRAs to impose the development of a reference offer in all cases)*. Reference in Note 2

⁵ WIK-Consult: *The Economics of Next Generation Access*. Final Report Bad Honnef, September 10, 2008
<http://www.ectaportal.com/en/>

⁶ See note 3 – Executive Summary

since these 'viability' conditions appears as a second-thought following the predominant emphasis on access to passive infrastructure in the form of ducts.

A key issue is therefore also in the forthcoming revised Access Directive to keep the Annex II with the technology neutrality amendments proposed by the European Parliament cf. the draft Recommendation:

(General principles 15) Directive 2002/19/EC, Annex II sets a minimum list of conditions that must be part of the reference offer for LLU. The existing LLU reference offer should be complemented to take account of such changes.

A further guidance regarding the scope for replication may be appropriate in this respect. Also to prevent unnecessary duplication then obligations on BSA including Active Line Access are important alongside mandated access to passive infrastructure.

2) Technology neutrality and market analysis

The draft Recommendation's definition of 'NGA' presupposes fibre as the target technology:

(General Principles 2): NGAs are access networks which have been substantially upgraded either wholly or in part, using existing local access infrastructures and technologies and/or using new optical fibre infrastructures, and which are capable of delivering broadband access services with bandwidths significantly above those currently widely available.

Likewise the scope is explicitly to promote the use of fibre:

(Whereas 19) The development and upgrading of high-speed networks based wholly or partly on fibre optical cable is a desirable development'

(Equivalence...12) NRAs should promote fibre deployments wherever new electronic communications networks are set to be built rather than copper-based deployments.

This 'pro-fibre' stance is further on reflected in the draft Recommendations approach to price regulation of access networks upgrade based on FTTH:

(Whereas 5) When an NRA calculates the costs of access to new infrastructure elements mandated under the Access Directive3, it is appropriate to allow a reasonable return on the capital employed which should incorporate, as appropriate, a project-specific risk premium.

(General principles 6) *Where NRAs mandate access to new infrastructure elements (inter alia ducts and ancillary services), price controls on reference offers should incorporate a project-specific risk premium to reflect any investment risk incurred by the operator. The economic terms for such access are set out in Annex I.*

...

(Annex 1): *The usage price for new ducts, other civil engineering works and other elements which are not active should be based on costs plus a project-specific risk premium to be included in the costs of capital for the investment risk incurred by the operator...*

Where access to alternative physical remedies such as mandated access to unlit fibre (passive access) is imposed on an SMP operator, access pricing should be cost-based and include a project-specific risk premium in the costs of capital for the investment risk...

Contrary the draft Recommendation finds that for upgrade of access networks in the form of FTTN + VDSL then:

(Whereas 9) *In a Fibre to the Node (FTTN) roll-out, all existing SMP obligations [i.e. no risk premium] in relation to Market 4 should not be undone by changes to the existing network structure or topology.*

(Annex 1) *A risk premium should not be applied in the case of fibre backhaul from the street cabinets to the MDF or equivalent in an FTTN scenario. Such a scenario is considered in this context as a modernisation of the copper-based network, which should not encompass a higher risk remuneration than other modernisation and maintenance*

Thus it is not obvious why one technology upgrade (FTTH) is singled out for a beneficial treatment at the (indirect) expense of other choices (FTTN + VDSL – or DOCSIS3 or wireless). If fibre is the right choice for an upgrade to NGA then investment in fibre based NGA deployment should happen as a consequence of normal business plans and predictable regulatory conditions.

The elaboration in the Explanatory Memorandum provides in this respect only a general statement:

(Explanatory Memorandum 3.1.3) *Nevertheless, the principle of technological neutrality does not prevent NRAs from taking proportionate measures to adjust remedies to take account of the specific technical characteristics of fibre networks.*

It is obvious that remedies will have to respect the technical specificities of an access product. It is here worthwhile to recall that it should also be the case if for example cable networks are considered for inclusion in markets 4/5 where some NRAs then to ignore that even if different technologies included in the wholesale market may deliver substitutable products at the retail market then

adoption of these technologies to deliver regulated wholesale products may be prohibitively costly.

But as it is done by the draft Recommendation to ex-ante apply different pricing remedies may lead to unwarranted consequences ('picking winners', distortion of competition) and in any case it needs substantial guidance on when this discrimination is justified for objective economical and commercial reasons (cf. point 3 below on risk):

Furthermore the draft Recommendation fails to consider when or if the NGA networks always are part of the current markets for access networks (markets 4/5) or potentially could be seen as a separate market with a risk for dominance and market control⁷.

This ambiguity arises since the draft Recommendation suggests that investment in upgrade of access network based on investment in e.g. VDSL should be treated differently from investments in fibre in the form of FTTH but at the same time the draft finds that FTTH is part of M4/5 following a market analysis:

(General principles 4) Where NRAs find that one or more operators have SMP in Market 4(including shared or fully unbundled access), they should mandate access to new and existing ducts (with associated measures and processes necessary to ensure access is effective), civil engineering works and other elements which are not active, necessary for the roll-out of competing infrastructure, and in particular of fibre, street cabinets or an optical equivalent.

But the possible imposition of regulatory access obligations will have to build on identification of SMP operators based on a substitution analysis that demonstrates that the 'default' access product: (a) existing 'pure' copper based DSL is in the same market as the upgraded access product: (b) FTTH (fibre + copper VDSL) and the same analysis will as well have to be performed on the upgraded access product: (c) (new) FTTH.

If (a), (b) as well as (c) all are in the same market it remains thus unexplained why one NGA upgrade substitutable with another one should be treated differently being mindful that if the two 'upgrades' are not substitutable then there they are not in the same market.

⁷ Compare also the observations by the ERG regarding the draft's lack of clarity regarding market analysis and the treatment of NGA: *It is rather confusing to have measures related to market definition and market analysis in this recommendation rather than the Recommendation on relevant markets (2007/879/EC) and the Guidelines on SMP analysis. This might create inconsistencies due to overlap. In this respect the ERG likes to ask the Commission on how the reviewing of relevant markets is compatible with regulatory certainty and predictability which is particularly important for long term NGA investment.*

TDC believes that the market accompanied by appropriate regulatory measures to safeguard competition where needed is best placed to ensure further development of the access networks and to select the most appropriate technologies. In many cases FTTH will be the appropriate technology but the choice should be left to the market and not driven regulatory incentives which pick one technology at the expense of others. A particular concern arises when these regulatory incentives are applied to potential future bottleneck technologies that may allow foreclosure of competition. The bottom line is that role of regulation and selection of remedies must be to ensure that the companies which invest in this critical infrastructure have the prospect of making a reasonable return, and that a genuinely competitive market is preserved.

Therefore the final Recommendation should preferably stick to a more stringent application of the market analysis methodology to make it clear that in case all (upgraded) access products are in the same market then the same pricing remedies should be applied in order to preserve the technology neutral approach of the regulatory framework or if the upgraded access products are not in the same market it should be explained what's required to constitute a new market and the actual risks associated with this the deployment should be analysed very carefully having in mind the risk of re-monopolisation.

3) Risk premium price regulation

The draft Recommendation proposes a risk-premium price regulation when mandating access to FTTH based upgrade of access networks including unbundled fibre (unlit).

The underlying assumption is that roll-out of fibre based NGA is particularly risky and thus 'deserves' a regulatory incentive in the form of a risk premium. The assumption fail remains however to explain what is the exact nature of this 'risk'.

While it is obvious that NGA upgrade may require significant investments it should at the same time be kept in mind that all the potential fibre-investing operators are working in potential competitive markets (leaving public funded initiatives aside) and will have to take commercial sound and viable decisions. FTTH investments will rather than being risky investments in new products represent a long-term investment in a future de facto monopoly status as it is unlikely that any parallel fibre networks will be established even in case of e.g. mandatory access to passive infrastructure in the form of e.g. ducts (cf. point 1 above).

The demand for broadband services will inevitably continue to increase with Web2.0/3.0, HDTV etc. and thus the 'riskiness' of the future market for broadband capacity is not evident. The only risk is the emergence of some

disruptive technology which either should reduce the need for capacity or bypass existing fixed and mobile broadband technologies. The role of mobile appears to be complementary and focussed to certain geographical areas. Based on national experiences the crux of the investment matter is that investment in FTTH upgrade of access networks will rely on a long term investment plan which means that any regulatory in form of price control for access to passive infrastructure or fibre should be based on a standard LRIC approach which will deliver the appropriate buy/build signals to the market and at the same time allow a reasonable return of the investments made. Obviously the possibility of regulation will play a role but the key concern is not to introduce distortive investments signals for one technology at the expense of others but to establish a predictable set of rules.

Conclusions:

Based on the above TDC suggests that the final Recommendation should make it clear that:

- Regulated access to NGA regardless if it is fibre, xDSL/FTTN, or passive infrastructure will need to take into account both local and practical circumstances in particular an examination if duplication of FTTH at all makes sense as well as the outcome of a market analysis and then if needed apply standard regulatory remedies in a technology neutral fashion.
- A key issue is that the potential establishment of future bottlenecks in the form of fibre access should be taken into account and remedies such as BSA/ALA should be applied to ensure competition for both residential and business customers.
- Recommendations concerning the price control methodology should taking a forward-looking perspective be based on a realistic assessment of any claimed risk and also the impact on competition in case that future bottlenecks are established. In particular a consistent pricing methodology based on LRIC across all regulated products should be prioritised.
- A more realistic approach to the likeness or desirability in terms of overall economical efficiency of rolling out duplicating networks is necessary.