

14 July 2009

**TDC submission:
Draft (2nd) COMMISSION RECOMMENDATION on regulated access
to Next Generation Access Networks (NGA)**

Summary:

TDC will based on our previous comments in the 1st consultation round invite the Commission to reconsider three parts of its draft Recommendation (2nd version) to bring the Recommendation in line with: a) The principle of technology neutrality, b) A regulatory approach based on a stringent market analysis, and c) The objective of ensuring competition for both residential and business customers.

1. Lack of a technology and deployment neutral approach

The Draft's favouring of some architectural and technology options at the expense of others represents a considerable disincentive to the current extensive roll-out of NGA based on VDSL. The VDSL roll-out builds however on business cases that include a sound risk assessment contrary to some FTTH roll-outs and it shouldn't be put at an indirect disadvantage compared with e.g. FTTH. Additionally the suggestion to encourage NRAs to mandate the use of a particular technology and architecture is a far-reaching intervention in the business of the operators which will not be helpful to investment.

2. Pre-empting market analysis and decisions (multiple-fibre/joint investment).

The Draft's provision of 'special' treatment for joint investments or for multiple fibre architecture allows a potential smp operator to escape regulatory obligations by pushing an artificial duplication of networks; this approach leads to a pre-emption of market decisions based on choice of technology and appears to be inconsistent with the regulatory framework's basic principles.

3. Role of WBA

The importance of access to active WBA products increase in an NGA environment but rather than acknowledging this fact the Draft nevertheless introduces various solutions to overcome the improbability that NGA can effectively be replicated. The Draft effectively seeks to pre-empt market analysis of current Market 5 and thus the Draft ignores the need to examine if smp can be found in Market 5 and if price-regulated WBA products needs to be made mandatory regardless the underlying physical infrastructure not least for the provision of competitive offerings to business

TDC^{1 2} will in continuation of our submission to the 1st consultation round on the *Draft COMMISSION RECOMMENDATION of [...] on regulated access to Next Generation Access Networks (NGA)* (hereafter the Draft), briefly highlight three interlinked items in the revised Draft:

1. Lack of a technology and deployment neutral approach
2. Pre-empting market analysis and decisions (multiple-fibre etc.)
3. Role of WBA

TDC will also recall our questions in the 1st consultation round where we still feel further analysis would have been helpful:

- If NGA really as a matter of course can be seen as something new and particularly 'risky' compared with other investments made by the network operators, or if NGA deployment rather is part of an evolutionary development that in regulatory terms can be dealt by existing procedures (market analysis) and remedies?
- To what extent access to passive remedies including an obligation to provide information on ducts is meaningful and provide for a viable infrastructure competition or rather will represent a costly and bureaucratic burden to operators³.

In other words, the Recommendation should give guidance to ensure the correct application of the regulatory framework but should not let this be captured by temporary 'policy' goals leading to either inappropriate obligations or regulatory leeway.

TDC is an operator which in its national market is doing and is about to continue an extensive roll-out of high-speed broadband based on FTTH/VDSL, on DOCSIS 3 as well as FTTH in an environment where already a substantial deployment of FTTH takes place by other players. Additionally TDC serves business customers in the Scandinavian region and is thus seeking complementary access to smp operators' networks. As a full-scale alternative operator in the Swiss market TDC has also recognised the deficiencies of the most hyped multiple fibre approach. Based on our experience the Draft fails on the above three items to get the balance right between the promotion of high-speed broadband, notably fibre, roll-out and the need to ensure competition predi-

¹ www.tdc.com

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

³ Accordingly Whereas 10 and paragraph 13 should be deleted or modified

cated upon compliance with of the regulatory framework's fundamental principles of market analysis and technology neutrality.

1. Lack of a technology and deployment neutral approach

The Draft in its considerations regarding regulation of NGA disregards that although different remedies may be applied to different technologies falling within the same market then such a differentiation cannot be made without an analysis of the actual market and the actual competitive conditions. Otherwise one particular technology and architecture, i.e. in case of the Draft obviously FTTH based on multi-fibre, is favoured at the expense of other technologies and other deployment modes.

These other technologies may include e.g. FTTN/VDSL, GPON FTTH and indeed DOCSIS 3 upgraded coax and in principle as well mobile broadband (LTE, WiFi etc.).

To provide ex-ante a certain technology and indeed a certain deployment mode a preferential regulatory treatment as proposed by Draft (no cost orientation, no WBA obligations in case of joint investments or multiple fibre) regardless the presence of business cases or the actual development of market and competition will in consequence lead to inappropriate investment decisions that are taken primarily in order to escape regulatory obligations. Consequently competing investments in upgrade of Coax or VDSL (or LTE) may be postponed.

One striking example of the Draft's ex-ante intervention into investment decisions is when the Draft urges the NRAs:

18. NRAs should, in accordance with market demand, encourage, or, where legally possible under national law, oblige the SMP operator to deploy multiple fibre lines in the terminating segment.

If taken literally this may eventually imply that a smp operator today operating a FTTN/VDSL network could be obliged not just to roll-out fibre but in the form of 'multiple' fibre at that. And even if the obligation of Paragraph 18 is presumed only to be imposed on smp operators rolling out FTTH such a requirement is likely to be counterproductive when it comes to promote market oriented investments and TDC suggests deleting Paragraph 18.

Underneath this technology biased approach seems to be an uncertainty if high-speed broadband in the form of NGA may eventually qualify as a sepa-

rate market and to what extent it then requires a differentiated set of regulatory remedies.

However, this is not investigated further by the Draft's which then falls between two stools as the Draft suggests to apply ex-ante exemptions only by resting on technologies and deployment modes whereby it weakens the regulatory system. If the Commission believes that FTTH based NGA services exhibit characteristics that are distinctive from the current BB services it may in a future revision of Recommendation based on a sound economical market analysis of the relevant markets examine if a separate NGA market can be defined. In that case – but only in that case – a separate palette of remedies still based on the state of competition can be applied in such a market. The Draft's favouring of one technology or deployment option at the expense of others indirectly adds a considerable burden to the current extensive roll-out of VDSL (cf. paragraphs 28-31) which although risky then regardless existing regulatory conditions builds on sound business cases contrary to some FTTH roll-outs. Today's VDSL deployment may by and large be accompanied by regulatory conditions that if allowed to include the Draft's proposed adjustment of price regulation with a risk premium could support efficient investment decisions⁴; an approach which in case of a proven increased risk could be applied to FTTH roll-out as well.

Although minor a further problem regarding technology neutrality occurs when the Draft states that smp operators having 'universal obligations' (presumably for voice services although not explained clearly) in case of FTTH roll-out in Greenfield areas shouldn't be required to deploy copper in parallel:

7 Where fibre is deployed in the access network on greenfield sites, NRAs should not require the SMP operator additionally to deploy a parallel copper network in order to meet its existing obligations, including universal service obligations, but allow for the provision of any existing regulated products or services by functionally equivalent products or services over fibre.

While this should be obvious the Draft at the same time ignores that it may be more reasonable to meet current US voice obligations by e.g. mobile solutions rather than make the technology neutral provision of these services to a question about fibre roll-out as it unduly could lead to an indirect inclusion of FTTH BB as a USO. TDC suggests therefore that the Draft in Paragraph 7 also recognises that in case of no presence of copper/PSTN then other technologies – mobile, fibre - can be employed to meet current USO.

2. Pre-empting market analysis and decisions (multiple-fibre)

⁴ This is general assessment without prejudice to the individual regulatory decisions in markets where TDC operate

The Draft's approach to multiple fibre and co-investment accompanied by prospective regulatory relief puts at risk the well-working system of regulation based on case oriented market analysis and in case of smp the application of targeted proportionate remedies. The Draft does so in an attempt to circumvent the problem that Ducatel describes very precisely:

The basic problem is rather simple: the new network technologies based on fibre are not susceptible to being unbundled in the way the old copper networks were and this threatens regulation based on unbundling to promote access.. ⁵.

A consequence of this observation is that the already questionable⁶ Ladder of Investment concept cannot be expected to work since the top of ladder is unlikely to be reached⁷. The Draft then appears to propose 'special' treatment of joint investments as well as multiple fibre architecture as a way of clinging to the LoI model by allowing the smp operator to escape regulatory obligations by enabling an artificial duplication.

This raises two issues with regard to.

- Market analysis.

At principal level it appears very harmful to the functioning of the recently adjusted regulatory system if a technology choice ex-ante can pre-empt a market decision and the choice of remedies.

TDC values regulatory predictability and certainty; however this certainty should be provided by a proportionate application of the regulatory framework rather than by an overly complex set-up (notably the criteria set out in Annex III) which may lead either to regulatory arbitrage or to unsound overinvestment.

- Multiple fibre

Is multiple fibre workable as the means to ensure competition and efficient investments? The multiple fibre model is for many reasons⁸ unlikely to enable the much coveted infrastructure competition. The incumbent operator that

⁵ Ken Ducatel: *Regulating for next generation access*. Journal of Telecommunications Management Vol. 2, 1 6–13, 2008 p. 8

⁶ Cf. e.g.: *'La théorie de l'échelle de l'investissement résiste-t-elle à l'analyse économique?'* Marc Bourreau, Pinar Doğan, Matthieu Manant, 17 mars 2009. *From state monopoly to the "investment ladder" : competition policy and the NRF*, Odale A. et Padilla J. (2004), LECG Europe, The Pros and Cons of Anti-trust in Deregulated Markets, in "Swedish Competition Authority p. 51-78

⁷ As explained in our submission in the 1st round TDC sees no or little evidence that access to passive infrastructure ('duct sharing') beyond selected areas is a realistic or attractive option in order to duplicate infrastructure.

due to its scale advantages is most likely to be the one rolling out FTTH will even with multiple fibre be in a position to preserve its customer base. If an alternative operator wants to enter this operator will then have to bind itself to 'IRU' like contracts already before any market demand has been tested. Further in case customer wants to change to the alternative operator this operator has to redo the investment in electronics already made by the incumbent - this duplication is unlikely to represent any service differentiation and thus represents a simply waste of equipment. In case the incumbent electronics are taken over one might wonder what are the difference to just unbundling or WBA.

It appears from the angle of economical efficiency not meaningful to put unlit fibre in the ground which to an extend of 3/4 will be passive waste of investment since the customer is unlikely to have more than provider at a time. All these additional costs make it further unlikely that the presence of multiple fibre will result in competitive wholesale offerings for the IRU operators to allow SPs to compete in the WBA upstream market.

There is sparse evidence to indicate that multiple fibre roll-out is the panacea to the lack of fibre unbundling options. Leaving aside multiple fibre deployed as a commercial 'stand alone' (without regulatory subsidies) product the only justification to pursue this option and thereby pre-empting market analysis as well as the NRA's choice of remedies appears to allow regulatory reliefs for certain players with little value for operators or for consumers.

In conclusion, even if it is of value to ensure investment in NGA the point is exactly to ensure predictability as well as an appropriate return of investment reflecting the actual risk. Therefore we welcome as helpful and constructive the Draft's guidelines regarding the proposed calculation of risk premium whereas there shouldn't be options for ex-ante bypassing regulatory obligation in the form of multiple fibre or co-investment (or duct access) in case of smp. In other words as rightly noted by Ducatel

.. overcoming the uncertainties of whether consumers will pay more for speed is not a problem for policy makers to solve. It is a problem for the private firms that seek to offer these services⁹

⁸ Including TDC/Sunrise's practical experience from Switzerland which at the moment seems to be the key reference for multiple-fibre offerings.

⁹ Ken Ducatel: *Regulating for next generation access* Journal of Telecommunications Management Vol. 2, 1 6–13, 2008, p. 8

3. Role of WBA

When it comes to the role of WBA the Draft in Paragraph 41:

Where NRAs consider that there is effective access to the unbundled fibre loop of the SMP operator's network and that such access is likely to result in effective competition on the downstream market, NRAs normally should not impose an obligation of wholesale bitstream access.

applies a dogmatic understanding of the Ladder of Investment concept in spite of the otherwise acknowledged fact that NGA FTTH essentially makes it meaningless to assume that 'infrastructure' competition will take place in the form of duplication of networks:

(16) In a Fibre to the Home (FTTH) context duplication of the terminating segment of the fibre loop will normally be costly and inefficient.

The decision whether or not to impose a bitstream access obligation including price regulation should follow the normal procedure of market analysis, i.e. it will have to be determined by the outcome of a Market 5 analysis and cannot be made just contingent on a specific technology choice made in Market 4 (Paragraph 37) or just whether an LLU obligation is applied (Paragraph 41).

The Draft should thus take full account of the observation made by ERG that:

The distinction between Market (4) (→ layer 1) and Market 5 (→ layer 2, 3) as defined in the ERG CP NGA is considered clear and still valid even with the emergence of new bitstream products with more functionalities offering greater scope for innovation. As long as the substitutability gap remains these market should not be blurred in an NGA environment.¹⁰

While the importance of access to active products may increase in an NGA environment the Draft nevertheless tries to introduce various solutions to overcome the improbability that NGA can effectively be replicated by introducing a pseudo-infrastructure competition primarily in the form of ducts access, multiple fibre architecture but also co-investment arrangements.

¹⁰ Report on Next Generation Access - Economic Analysis and Regulatory Principles ERG (09) 17, p. 13

A much more plan sailing solution than this questionable approach is to emphasise the necessity of a mandatory WBA price regulated product in case of smp in the relevant Market 5 regardless the underlying physical infrastructure.

In any case if a smp operator believes there is a business case in deploying a multiple-fibre solution there will of course be no mandatory obligation to provide WBA until it has been analysed that the outcome is a presence of smp in Market 5. Such a decision about deployment mode, technology etc. should therefore be based on a sound business case and not on options for regulatory arbitrage.

To exclude ex-ante the need for a proper market analysis and the application of remedies including price regulation if so needed will be a serious mistake not least for the provision of competitive offerings to business customers. Concerning the Draft's proposal to ex-ante exclude WBA regulation as the Draft effectively does in:

37. NRAs should not impose an obligation of cost orientation where the SMP operator has deployed an FTTH network based on multiple fibre lines and has granted effective and fully equivalent access to at least one independent alternative provider of electronic communications services competing on the downstream market.

TDC suggests thus that paragraphs 37 as well as 38/41 are deleted and accordingly also Annex III whose criteria in any case may be difficult to satisfy and most likely will result in complex discussions with access seekers, NRAs and SMP operator(s).

4. Conclusions:

TDC suggests that the final Recommendation should 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 and other remedies should be applied in order to preserve the technology neutral approach of the regulatory framework and ensure sound investment decisions. Alternatively if the upgraded access products are not in the same market it should be further investigated and eventually reflected in a future Recommendation. Accordingly so far no ex-ante exemptions for necessary regulatory obligation should be granted due to:

- Technology choice (FTTH respectively FTTC/B/N)

- Choice of certain deployment modes (multiple fibre)
- Choice of particular investment models (co-investment)

Regarding NGA and the actual risks associated with this deployment it should be analysed more carefully. Also having in mind the risk of re-monopolisation an additional key issue is that the potential establishment of future bottlenecks in the form of fibre access that is unlikely to be replicated should be taken into account and a mandatory provision of upstream of BSA/ALA should be applied to ensure competition for both residential and business customers.