TDC[1]: Comments on the ERG *Consultation Document on Regulatory Principles of NGA* (ERG (07) 16

TDC is pleased to submit a short note on the ERG **Consultation Document on Regulatory Principles of NGA** (ERG (07) 16.

Do you agree/disagree with the general approach?

TDC welcomes a technology neutral approach to the analysis of possible bottlenecks in access infrastructure. Such an approach will allow first a proper definition of the markets for wholesale access services most likely geographically segmented and then the identification of possible bottlenecks controlled by SMP players.
However, while the inclusion of fibre as proposed by ERG in this analysis obviously is appropriate also other access technologies (wired or wireless) should not be excluded in a forward looking perspective. Whether e.g. wireless or cable networks represent a real both economical and technical feasible substitute to fibre or copper may then be assessed case-by-case.

Do the scenarios describe the relevant roll-out alternatives for NGA?

In principle it may not be the case since some technologies are excluded, but for the options most close at hand the answer is affirmative.

Do you agree/disagree with regard to the conclusions on economics and business case studies?

We believe there are several important points to be aware of which partly are reflected in the ERG paper:

- The role of **fibre** is not clear for the moment regarding:
    - Substitution: In case of FTTC (and similar) primarily fibre is part of a progressive development of – typical – the incumbent's access network as noticed by the Commission in its comment to BNA's market 11 decision. This may also be the case for FTTH[2]. As OFCOM has noticed it is not yet so that any distinctive fibre-bound new services have been identified

      At this time it is not clear whether services provided over fibre access networks would constitute a separate market.[3]

      In this respect fibre (both FTTH and FTTC) obviously are part of market 11.

    - Players and bottlenecks: In case of FTTH fibre may be deployed by incumbent operators or by other operators. Fibre may eventually also constitute an opportunity to deliver new services which cannot be delivered by other existing infrastructure

[1] http://tdc.com/

[2] As noted e.g by Ministry of Internal Affairs and Communications (Japan): *Copper cable and optical fiber are both used for the provision of broadband services, which are highly possible alternative (substitutable) services from the viewpoint of the users; ii) Both are laid in existing line infrastructure; and iii) NTT East and West effectively have the advantage in upgrading existing copper cable to optical fiber*. In: Report of the Study Group on a Framework for Competition Rules to Address the Transition to IP-Based Networks "New Competition Promotion Program 2010" September 2006, Tokyo http://www.soumu.go.jp/joho_tsusin/eng/studygroupreport.html

[3] OFCOM Consultation paper: *'Regulatory challenges posed by next generation access networks'* .

(including VDSL). In that case fibre will constitute a bottleneck regardless if delivered by incumbents or other operators since it is unlikely that a 2nd fibre network will be deployed (se comment below on duct sharing) thus potentially foreclosing the market for alternative fixed line infrastructure as observed by OFCOM:

> *An enduring economic bottleneck may arise as a result of new infrastructure deployment by either an existing incumbent operator or by a new entrant.*[4]

Also in this case fibre will part of market 11 analysis.

- Investment: To what extent investment in fibre, particularly FFTH will happen depend on a number of variables including regulatory conditions but the determining factor is the viability of the business case which is still uncertain. However, while fibre investment implies a 'first-mover' risk this investment will in a medium-term perspective allow a market position that in case the capital strength and endurance are present enable recovery of investment.

- The proposal on **duct sharing** is unlikely to remedy such a smp position since there are some many practical issues related to ducts sharing: different ownership, control by utility companies or network operators, capacity may be limited and the tying to an existing physical structure may not be optimal as new players then have to reproduce network architecture of other operators

What is your opinion on the regulatory implications and on the evolution of the ladder of investment? Additionally please provide more specific comments regarding the issue of multicast capabilities and their regulatory treatment.

Regulatory implications

For market 11 regarding access to street cabinets we find that since the complexity is growing in line with the various (and potential) options included in both scenario 1 and 2 the need for industry co-operation e.g. in development of Cable Management Plans (CMPs) should be more emphasised.
As street cabinets do have physical constraints and since the business strategies for each operator may vary then definitive mandatory access obligations will not be proportionate. At the same time the paper's notion that: '*The NRAs' role is not to protect commercial investments against market risks that may arise, for example from the emergence of new technology developments that supersede some operators' current market propositions', (p.26)* should be integrated in the NRAs' approach so that micromanagement of access to street cabinets are avoided.
The main issue is that it should be possible partly to maintain existing services for reasonable period of time while access to any upgrade may depend on case by-case analysis.

In this respect we will like to draw the attention to the potential need for establishment of new models for cost-calculation in case of price regulation (see below). We suggest that ERG should consider investigating more in-depth alternative cost models. In case enduring bottlenecks on the one hand are identified that may require also a price remedy but at the other how is characterised by a relative higher high-risk level investment price models such as *Cost plus with an activity-specific cost of capital* and *Returns adjusted for a symmetric 'fair bet' (OFCOM NGA consultation 4.41-53)*

[4] OFCOM Consultation paper: *'Reguatory challenges posed by next generation access networks*'

We welcome the option for symmetrical access to in-house wiring as an important feature to avoid any foreclosure.

While in some cases there may be a possibility for duct sharing - regardless if seen as a separate market or as part of AID Article 12 obligations it may as mentioned imply of number technical capacity constraints which can reduce the immediate value. Duct sharing will not be the solution to any enduring bottleneck created e.g. by FTTH solutions.

Concerning BSA we can confirm the observation ERG has made on WBA:

> *WBA has so far been seen as a lower step of the ladder of investment than LLU. However, in the case of phasing out MDFs, the importance of LLU as a means to derive competition may decrease compared to WBA, especially if alternative operators are not able to roll-out their networks towards the street cabinets. Therefore, WBA at the core-node, MDF, or even at lower levels, may gain importance. In order to maintain the benefits of infrastructure competition based on LLU, the design of the WBA product might need to be enhanced to allow alternative operators maximum control of quality parameters possible*

and in particular the need for more control of QoS as far as possible. This is not only required in case of future FTTH based offerings but also in today's BSA products where in some instances the architecture puts alternative operators at a disadvantage at remotes sites where LLU will not be feasible even though requirements on non-discrimination are formally complied with.

Ladder of investment

The 'ladder of investment' approach appears to be less relevant if the assumptions presented in the ERG paper are right.
When for example the report finds that:

> *It may be the case that, to some degree and in certain locations, these scale economics mean that there is a natural monopoly in certain areas of the electronic communications value chain (p.20)* and that '*As shown, NGA investments are likely to reinforce the importance of scale and scope economies, thereby reducing the degree of replicability, potentially leading to an enduring economic bottleneck*'

then the logic and thus value of the LoI concept is less obvious as it in case of 'natural monopoly' seems unlikely that alternative operators 'climb the ladder'. Also the various access options that NGA deployment brings forward call even more the LoI concept in question. For example the variantions in network architecture, geography etc. may mean that it makes more sense for non-established operators to go away from their current LU solution and to BSA type options eventually based on fibre.

Do you agree/disagree with the conclusions?

TDC thus:

- Welcomes a technology neutral approach to market 11 by inclusion of fibre but regrets the proposal by ERG is not complete in term of technology neutrality
- Agrees that the existing market 12 definition is sufficient and believes that market 12 measures may get increased relevance in case unbundling of FTTH bottlenecks is not feasible. In any case a focus on increased possibilities for access to differentiated QoS provision within existing WBA regulation is important.
- Agrees that in-house wiring deserves further examination to avoid any foreclosure problems

- Is doubtful to what extent 'duct sharing' is a sufficient and practicable solution to possible bottleneck situation caused by FTTH deployment

See also the comments given above.