

# BT Response to European Commission Consultation on Proposed NGA Recommendation

14<sup>th</sup> November 2008

Submitted by Martin Atherton – Head of EU Regulation  
BT Centre, 81 Newgate Street, London, EC1A 7AJ.  
[martin.atherton@bt.com](mailto:martin.atherton@bt.com)

## **BT RESPONSE TO COMMISSION CONSULTATION ON NGA RECOMMENDATION**

BT welcomes the Commission's intention to adopt a Harmonising Recommendation on NGA. BUT, BT believes that such a Recommendation should focus on general principles such as maintaining a competitive supply of services to end-users and encouraging efficient and economically sustainable investment in new infrastructure. The Recommendation should not pre-judge or prescribe the remedies needed to achieve these goals in individual Member States.

BT agrees with the published view of the European Regulators Group that the draft Recommendation is overly prescriptive and could actually damage investment in the sector and levels of downstream competition by attempting to be too definitive at this early stage.

BT has a number of concerns about matters raised directly or indirectly in the draft Recommendation including:

- The apparent assumption of the operational and economic feasibility of multiple/parallel NGA networks;
- The assumed proportionality and effectiveness of passive remedies for NGA;
- The *a priori* assumption that access to passive network elements / remedies will foster higher levels of innovation in the NGA space than access to an appropriately specified "active" layer;
- Insufficient acknowledgement of technological evolution and the way a market-led approach can allow NRAs to define "active" wholesale services which meet the needs of communications providers in terms of price, control, and innovation. (Examples of this in the UK include Openreach's industry consultation/engagement on its Generic Ethernet Access (GEA) product and Ofcom's work in promoting Active Line Access (ALA) standards.)
- The potential lack of NRA flexibility to tailor remedies to national circumstances which is implied by the Recommendation;
- The continued focus on "fixed line" telecoms networks and the absence of sufficient recognition of the present (and ever growing) inter-platform competition (e.g. cable, mobile etc).
- The importance of separate consideration of business markets and business suppliers for which/whom passive remedies are inadequate.
- The importance of retaining a Current Cost Accounting approach to pricing of assets, or other methods which may signal the correct economic incentives.

These and other issues are discussed further below.

### **Feasibility of Multiple/Parallel NGA Networks**

BT believes that a fundamental issue – the proportion of a nation's geographical area within which multiple/parallel physical networks would

represent efficient investment – has been inadequately addressed by the Commission. It is vitally important that the net benefits from investment in a second or third network exceed the costs – yet this has not been examined.

In our own internal work and in analysis we have commissioned from Analysys Mason we have explored the investment cases for single and multiple/parallel local NGA infrastructures. The analysis shows that although the investment case for an NGA wholesale network (e.g. from Openreach in the UK) is challenging, it can be viable under certain conditions, whereas the case for multiple or even a second parallel deployment is unlikely to be viable in any but a very small proportion of target areas. The Commission also does not take due account of the fact that existing cable networks are being incrementally upgraded to DOCSIS 3 and this means that many areas (including around 50% of the UK) may soon have two fixed operators providing next generation access services.

We observe that the Commission's Recommendation notes that fixed costs are a very high proportion of investment costs for NGA and then assumes that duct/cabinet sharing will necessarily transform the investment case for a second operator. We do not accept this view and note that an independent research report by Analysys-Mason to the UK Broadband Stakeholders Group<sup>1</sup>, shows that duct and civil works are only part of the fixed costs. Thus the potential benefit from access to infrastructure is less substantial than the Commission implies. BT believes such access is unlikely to transform the investment case.

In any investment case, the cost per household (and hence likely price per household) is closely related to the percentage of passed households that subscribe. The Analysys-Mason work for the BSG shows that cost per household is still falling when there is >40% take-up of a single network. In our view this must raise doubts about the viability of multiple networks in many areas and shows why the case for NGA investment by telecoms operators is even more challenging where cable networks are already present.

Similarly the WIK study<sup>2</sup> for ECTA also questions the viability of second mover investments. The study indicates that potential VDSL replicability by a second mover varies from 0% in France and Spain through ~18% in Italy and Germany to a high of 39% in Portugal. Potential FTTH replicability however is less than 2% in all but France (due to sewer availability in Paris).

BT believes that since further infrastructure competition is unlikely to be feasible in large areas, the prominence given to passive remedies such as duct and cabinet sharing is disproportionate and potentially highly damaging to the industry and its customers.

---

<sup>1</sup> "The Costs of Deploying Fibre Based Next Generation Broadband" – Report for the Broadband Stakeholders Group by Analysys Mason.

<sup>2</sup> "The Economics of Next Generation Access" – Study for the European Competitive Telecoms Association.

## Innovation

The Commission recognises the importance of innovation in the supply of broadband services and presumes, without offering any supporting evidence, that infrastructure competition (passive remedies) is more likely to foster innovation than service competition (active remedies). BT questions this presumption.

If an appropriate Active Line Access (ALA) standard is chosen then service providers will be able to exert significant control over the nature and characteristics of the services provided as well as the price and product packages available. Additionally the bit rates available for “active” access products are anticipated to be higher than mass market consumers will require for some time to come, and hence the scope for service innovation up to those bit rates is in fact unconstrained. In any case further unbundling is unlikely to offer competing infrastructure operators significant scope for network innovation given the probable purchase of the same or similar standardised network equipment and the physical limitations which are being reached for the existing copper infrastructure. Hence in our view the key enabler for innovation which is relevant to end-users is likely to be the right ALA standard. In the UK the evolving debate around this subject already recognises the importance of features which allow and promote innovation at the service levels above the “Ethernet” layer. In our view there is a material difference between the “one size fits all” perception which exists around “bitstream” products available via the current generation of DSLAMs and the potential for a wide variety of offerings via Ethernet.

Preliminary indications from industry suggest a number of potentially key requirements from an innovation-friendly ALA standard including:

- Security
- Quality of Service
- Multicast
- Wide range of CPE
- Flexible aggregation and interconnect;

and Ofcom is currently working with industry to develop this approach. In addition Openreach is also consulting with its customers, the UK communications providers, to refine its views on NGA Ethernet products and develop an indicative evolutionary path.

BT notes that in Ofcom’s consultation document “Delivering Super-Fast Broadband in the UK” Ofcom stated:

*6.14 The limitations today’s active products impose on product innovation could be addressed as a result of technology developments. Since raising this topic in our previous consultation, we have continued to work with industry to explore how the potential of new technologies can be realised in practical future active products.*

*6.15 Two factors lead to potential improvements in the competitive characteristics of active products in the future. The first is the increasing automation of service maintenance and support through Next Generation Operational Support Systems (NGOSS). The second is the rise of Ethernet as a ubiquitous transport in backhaul and core networks – generally termed Carrier Ethernet. Active products benefit from adopting a common interface technology as this gives independence from the underlying infrastructure and economies of scale across different deployments. Ethernet is the obvious choice for such an interface because it is a ‘raw’, relatively simple protocol, which can be used to transparently carry a range of higher level services.*

*6.16 These two factors mean that it may be possible to transfer more control of the underlying infrastructure with active access products. At its most basic it is possible to imagine a very ‘raw’ Ethernet active bitstream product which gives access to the capabilities of the physical, passive, layer whilst simply adding the minimum functionality necessary for the support of competition. Ofcom refers to the set of technical requirements that could deliver this type of active access as Ethernet ‘Active Line Access’ (ALA). We have been actively discussing these with industry since our last consultation.*

Such infrastructure control could mean that remedies in market 5 would be a suitable substitute for remedies in market 4 and make them unnecessary – though the reverse might be less true given the economics of infrastructure investment. Thus BT believes that service innovation in this situation is more efficiently and economically delivered via active rather than passive remedies. Passive remedies may be disproportionate, unnecessary and inappropriate in delivering a competitive market. In our view the Active Line Access product may well be a sufficient remedy for market 4 with no further remedies required.

### **NRA Flexibility**

BT agrees with the ERG view that the draft Recommendation fails to allow NRAs sufficient flexibility. In particular the Commission is proposing a detailed remedy of duct-sharing (with potentially substantial system costs for complying with the detailed RIO requirements) in all cases of SMP in Market 4 with insufficient regard for whether there is sufficient demand to justify this.

BT notes that the initial set-up costs for the detailed duct-sharing RIO<sup>3</sup> required by the Commission will be substantial and much too large to be borne on the basis of a risk premium to be contributed by any eventual wholesale customers. In the event of a substantial set-up cost there must be a matching, guaranteed, up-front, cost recovery mechanism based on payments from alternative operators with a serious commitment to using shared duct.

NRAs must have the flexibility not to impose duct sharing as a remedy in market 4 where they feel there is insufficient demand or where it would discourage investment by imposing disproportionate costs or by undermining the active investment case. Where they do decide to impose a duct sharing

---

<sup>3</sup> Duct availability database, pricing of old and new duct, reservation mechanisms, etc

remedy they must have full flexibility to specify it in the way most suited to local circumstances.

Similar considerations apply to cabinet sharing and the construction of speculative spare capacity in new ducts and cabinets.

## **Markets 4 and 5**

As outlined above, BT believes that markets 4 and 5 may not be as distinct in the NGA world as they were in the copper-based PSTN world. Alternative operators may be increasingly interested more in market 5 products/services given the economics of investing for small numbers of customers. Our experience, both in the UK as an infrastructure operator and overseas as a new entrant, supports this view. Active Line Access (and Generic Ethernet Access) can be regarded as substitutes for both duct access and bitstream.

NRAs should thus be free to conclude that an appropriately specified market 5 remedy will be sufficient to address NGA competition issues without additionally requiring the imposition of a remedy in market 4. The WIK study for ECTA points out the vital importance of a market 5 remedy both as a rung in the ladder of investment and as a means to counter first mover advantages. Thus Market 5 remedies should rarely if ever be discontinued on the grounds of the apparent adequacy of Market 4 actions.

In France and Spain the NRAs have moved to introduce passive remedies as a primary form of regulatory intervention to encourage infrastructure competition. Our concern is that in many cases where passive remedies are mandated, incumbents, and other Communications Providers, do not offer any wholesale products. In most cases these competitors will either offer wholesale services exclusively to their own downstream, retail divisions or will have a commercial tariff significantly higher than charged to their own divisions. The problem is made worse by the tendency of alternative operators to consolidate.

The potential effect of passive remedies is to further increase SMP operators market shares through vertical integration and leverage at the retail level – while giving a false impression that SMP issues have been remedied.

## **Business Markets**

BT has seen in recent months an increased focus, by National Regulatory Authorities in the EU, on implementation of passive remedies which, it is claimed, encourage infrastructure competition and therefore provide more competitive services to consumers and businesses.

Suppliers of business services however generally do not have the critical mass to engage in infrastructure competition at the local level where passive remedies are focussed. Additionally, they may need to respond rapidly to customer requirements in an unpredictable range of locations – far more rapidly than would be feasible if they had to make their own investment even if

this were economically justified. Business suppliers are therefore potentially excluded from competing in markets against vertically integrated infrastructure providers and there may be a fundamental barrier to market entry in the absence of active (Market 5) remedies.

BT notes that the WIK study for ECTA concluded, inter alia, that:

*“The availability of high-quality bitstream is also crucial for business service providers, who are not targeting the mass market. They are often addressing rather widely dispersed customers on a nationwide or even pan-European basis. As they are addressing a significantly smaller customer base, this is not sufficient to reach the scale of operations economically justifying self provision of access services in many cases.”*

## **FTTN**

BT agrees with the Commission that existing remedies should remain in place for the time being and believes that the migration path should be consulted on and notified in good time to the industry. However, a requirement for open-ended negotiations with multiple parties may well make it impossible to agree a transition. Where transition plans are consulted on and shared to a reasonable timescale, SMP operators should not be responsible for other operators' transition costs.

Mandatory provision of co-location space, power supplies, etc should be left to NRA judgment as this may be impossible, disproportionate, or a serious deterrent to investment. Non-discrimination may be an impossible concept to implement in limited cabinet space and there could be implications for any operator with a universal service obligation which need to be examined more carefully.

VDSL frequency plans should be managed on a carrier neutral basis rather than placing the obligation to avoid harmful interference only on the SMP operator.

The potential migration routes from FTTN to FTTH are too unclear at this stage to mandate a design philosophy to facilitate them.

## **FTTH**

The economic considerations which lead BT to believe that demand for duct-sharing will be limited, with potentially excessive associated costs for the SMP operator and an inadequate business case for the new entrant, apply also to dark fibre. BT believes that it is essential NRAs have the flexibility to mandate access to dark fibre only where it would be an appropriate and proportionate remedy within their territories. It is also our view that not enough consideration has been given to whether this will lead to a competitive downstream market with wide choice for end users.

BT agrees that NRAs should facilitate co-operation regarding in-building NGA infrastructure.

## **Symmetry**

BT believes that it is important for national governments to take a broad view when looking at ways to facilitate NGA investment. In particular, the access networks of CATV companies and new entrants should be included in market analyses and where appropriate such networks should also be the subject of market 4 and 5 remedies.

Equally, co-operation at the time of new investment should apply to all utility-type operators including CATV, water, drainage, etc.

In many parts of the UK there is already a second network operator offering broadband services in the form of the cable TV system. The presence of this operator and its physical assets must be taken into account in any market analysis, any determination on remedies, and any assessment of the financial viability of a new entrant. Furthermore if physical asset sharing is to be mandated this should be on the basis of all relevant assets whether owned by a communications company or some other utility.

## **Regulatory Certainty**

BT welcomes the Commission's acknowledgement of the importance of regulatory certainty but is not convinced that consistency of approach in successive market reviews, on its own, will deliver what is required. BT suggests a 10 year horizon with a presumption of no changes in direction unless there is overwhelming evidence to overturn this presumption.

With FTTN deployment, it will be important to be clear from the start whether cabinet sharing and fibre backhaul will, or will not, be mandated within the 10 year horizon as this will have a significant impact on the investment case.

## **Pricing Principles**

In BT's view the key point is that pricing should be on a non-discriminatory wholesale basis to retail suppliers. The SMP operator's customer-facing units should pay the same prices as other operators. BT has made a clear commitment to this in the UK.

BT supports, and has long advocated, the idea of a risk premium for NGA investment if a regulated price is to be set. In this context the term "risk-sharing" should be understood as setting non-discriminatory risk-adjusted access prices for all retail operators – including the SMP operators' own units. The risk premium should apply to both FTTC and FTTP.

The general regulatory approach on costs to date has focussed on access prices set with reference to Current Cost Accounting (CCA) principles. This ensures that the correct cost signals are sent to potential entrants and only

efficient operators enter the market. BT believes that this would be the correct framework for NGA related passive remedies. However, CCA has in general been applied to stable and growing products / markets and extreme care must be taken to account for the uncertainty in NGA volumes and customers willingness to pay. The Commission's current proposal creates the risk of artificially driven competition based on the potential under pricing of certain key infrastructure assets.

BT notes that the Commission attempts to draw a clear distinction between existing and new infrastructure. However, ducts may be a mixture of old sections, new sections and repaired sections making this a difficult distinction to maintain. It is likely also that duct records will not be sufficiently detailed to permit a cost calculation based on the old/new distinction.

The Commission states that price should be linked to physical volume used. BT has some concerns that this will be difficult to assess given that a cable will tend to occupy rather more duct space than its strict geometrical volume depending on how regularly it can be made to lie. Any volume-based charging should be apportioned on the proportion of total used volume rather than total available volume and there may need to be a per-intervention charge related to the costs of repairing damage from new cable installation. Adequate consideration also needs to be given to instances where the increased demand drives a requirement for new duct and how this is priced as this could potentially be prohibitive in terms of cashflow.

BT believes that practical considerations dictate some form of geographical averaging of duct prices.

BT believes that NRAs should be wary of attempting to impose pricing consistency between market 4 and market 5 remedies. Traditional competition law will deal with any significant issues if they arise.