CWU Response to Ofcom's Consultation on Future broadband: Policy approach to next generation access

Introduction

The Communication Workers' Union (CWU) has over 70,000 members working in the UK telecommunications sector. Around three quarters are employed in BT, with the remainder spread over 30 telecommunications companies.

We welcome the opportunity to respond to Ofcom's consultation on next generation access (NGA), and we agree that current technological developments mean that a public debate on this issue is timely and appropriate. However, our overriding view is that there is currently no clear business case for early investment in NGA. This is evidenced by the absence of a mass roll-out of NGA anywhere in Europe, and the lack of NGA activity amongst communication providers (CPs) in the UK.

The uncertainty around demand for NGA services should be a serious consideration when assessing the prospects and the potential for NGA networks. There is clearly a danger that by overestimating demand, regulation could encourage over investment and over capacity in network provision, which would place a huge and unnecessary cost burden on CPs and would have serious consequences for both the industry and the workforce.

Before promoting the wider development of NGA, there is a strong case for realising the full potential of Next Generation Networks, in which CPs are committing significant investment. This will give the opportunity to maximise the benefits of NGNs and their associated investment costs. It will also allow for a considered approach in which the outlook for NGA networks, and the question of economic viability, will become clearer.

Equally, we must not underestimate demand, and it is important that we are sufficiently prepared if and when the time comes, to encourage the roll-out of NGA networks so that the UK can benefit from the associated social and economic benefits. On this basis, we believe the current debate should focus less on how NGAs should be regulated in a 'mature' state, and more on the circumstances that are right for NGA introduction, and the regulatory climate necessary to encourage NGA investment.

Question 1

When do you consider that it would be timely and efficient for next generation access to take place in the UK?

It is far from clear that there is a business case for a "timely and efficient" next generation access investment. A range of values have been given for replacing the existing BT predominantly copper network of £11-16bn. Any investment in replacing this network in the short to medium term is incomprehensible with regards to the level of investment required. This should be set against the background that Ofcom recognises "there is also no doubt that upgrade to copper based broadband networks will continue". In addition we have not yet seen the successful implementation of a fully functional and universal NGN in the UK which will not be achieved by 2011 at the earliest at the cost of £10bn by BT alone. Other CPs have yet to announce their intentions with regard to NGN and therefore it is premature to consider there is the financial case and capability to drive both developments to a similar magnitude and size. Notwithstanding this, BT has announced upgrading the access network by the use of fibre in greenfield/brownfield sites which will allow for the development of leading edge technology in what may become the new NGA. Virgin Media, given its financial restraints cannot in the short term be expected to renew or extend its network with NGA until its financial performance would allow such high levels of 'investment '.

What this debate does allow for is the commencement of a discussion as to how and in what circumstances NGA is introduced and if appropriate the regulatory climate necessary to encourage the investment and innovation that is required.

Question 2

Do you agree with the principles outlined for regulatory next generation access?

If and when there is a case for contestability by promotion at the deepest levels of infrastructure, then we agree with the regulatory principles set out by Ofcom for next generation access. However, in our view that case has not yet been made with regards to NGA (in its various formats) as it has yet to be demonstrated where the economic or potential enduring bottlenecks are.

There is an assumption in the way that the paper is read, that BT as previous incumbent will be a first mover. Currently the merits of a business case for VDSL or

FTTH by BT are less than clear, if that is the case then the rationale for a business case for metallic/fibre sub loop unbundling by a new player is far worse. The substantial investment required from the pre-planning to build of a sub loop co-locator facility will, in our estimation, delay considerably NGA rollout and again raise the question of unrecoverable sunk costs.

The reality which Ofcom has given some passing recognition to is that the technological, operational and proportionality considerations of fibre/transmission systems will mitigate against fibre or wavelength unbundling as a remedy. Furthermore the enhanced customer service benefits of soft-switching that Ethernet based wholesale products can provide will greatly reduce barriers to suitably allow greater choice of innovative products and services. This is one of the benefits of BT's 21 NGN which will be customer centric and will empower the customer beyond the current process intervention and delivering freedom from dependency on the actions of communication provider agents.

Question 3

How should Ofcom reflect risks in regulated access terms?

We believe that Ofcom has avoided setting out a clear view on what it means by equivalence when it addresses NGA.

There appears legal uncertainty even within the EU as to aspects of forbearance and regulatory holidays. This uncertainty clouds the predictability that could promote innovative investment and given the length of the legal process this could be the picture for the medium term. In the interim there is only one suitable alternative which is a sectoral agreement based on a fair and adequate return for risk model, which is based on upstream prices.

Question 4

Do you agree with the need for both passive and active access remedies to promote co-operation?

No, we do not agree that there is a need for passive access remedies, and on this point we concur with BT's Annex 1 to the European Regulators Group on NGA which is attached below.

Question 5

Do you concur there to be a role for client regulatory or public policy investment to create artificial incentives for earlier investment in next generation access?

Broadly no, as there is no economic business case and Ofcom is trying to set a false market. The costs of an equitable investment across the UK either requires considerable financial investment/support or would only facilitate selective entry, thereby creating a digital divide which from an externality perspective is opposite to the desired outcome. We believe the question should be amended to address the externality benefits for those parts of the UK, whereby due to lack of density and volume of demand there could be regulatory and investment incentive where the market fails. The desired objective being to anticipate in the absence of intervention the creation of a digital divide and to take early action either to prevent such a divide or to shorten the period as to how long this may exist.

December 5th 2007

Billy Hayes
General Secretary, CWU
150 The Broadway
Wimbledon
LONDON
SW19 1RX

Annex 1 of BT's response to the European Regulators Group Consultation on Next Generation Access, June 07, on Sub-Loop Unbundling / Co-location of Equipment at the Cabinet (as referred to in the response to Question 4).

BT does not view a "multiple SLUO" model as one which supports competition at the deepest sustainable level of investment in NGA networks. In our opinion, the creation of an EOI "layer 2" product which is able to benefit from reduced engineering costs through aggregation of multiple CP bandwidth requirements probably offers the best opportunity for efficient and sustainable investment in an NGA network. Such a product would also represent a natural development of the competition model which exists today.

It should also be noted that BT was obliged to provide unbundling at the cabinet in 2000 by Oftel, yet, except for a few trials, very little interest has been shown in the product to date. There are a number of reasons for this, but primarily it is one of scale and economics. For example a major UK operator (and Openreach customer) has estimated that the unit cost of delivery of service via cabinet level SLU is approximately four times that of exchange based LLU. In addition, when compared to the roll-out plans of exchange based LLU operators today, the challenge facing potential SLUOs looks daunting. Currently LLUOs plan to unbundle approximately 1,200 exchanges out of a population of approximately 5,500, because a minimum target volume of customers (thought to be generally about 300 lines) is required for the deployment to be economically viable. There are approximately 90,000 cabinets in the UK and each has of the order of 300 lines connected to it. The economic threshold can rarely be realised at smaller exchanges or cabinets where the breakeven

point is potentially even higher due to lower customer densities and utilisation and higher deployment costs. The challenging economics facing SLU have been confirmed by the recent Analysys report for OPTA on the business case for sub loop unbundling in the Netherlands.

In addition there are a number of technical, operational and planning issues to consider with SLU:

o The current SLU model requires an operator to build an alternative cabinet within a short distance of the Openreach cabinet (100m maximum but in practical terms this is reduced by up to 50% depending on the type of equipment in the cabinet (VDSL or ADSL2+) and the number of other operators also unbundling the cabinet).

o There is also a time based aspect. A CP who chooses to unbundle a cabinet may find that their equipment does not function to the initial standard at a future point in time due to other competitors also choosing to unbundle at the same cabinet. In this sense the SLU product design may not be inherently stable.

o After the SLU operator has gained access to the unbundled sub loop, and has placed xDSL equipment in their cabinet there are service restrictions. Because of the potential cross talk issues each cabinet has a maximum power level that can be used within the ANFP (Access Network Frequency Plan). The ANFP is designed to protect the services being provided over copper cables in the cabinet from either another SLU operator or from the exchange.

o The final engineering component, other than street mains power which can be difficult to provide, is to connect the SLU operator's cabinet to a point where they can connect to their backhaul network. This is often the local BT exchange.
o Additionally, whilst there are published prices for the tie cable that Openreach provides between the SLU operator's cabinet and a new cross connect frame built within the existing BT cabinet, many of the additional costs are based on charges for civil engineering works and therefore are priced per installation due to localised variations in costs, which makes build or buy decisions more complex for an investing CP.

The economics of backhaul between an alternative SLU cabinet and an SLU operators' POP are challenging. Whereas a single provider of an EOI bitstream product can offer the benefits of aggregation to all CPs who have customers connected to a cabinet, the opportunity for a single competing CP to efficiently aggregate traffic is very low. In this respect, it is also worth noting that Ofcom currently regard backhaul, even at a local exchange level, to be an economic bottleneck. In fact, BT is finding that the financial case for SLU still appears challenging, even with assumptions of substantial CP traffic aggregation built in, and therefore we are led to the conclusion that there are few realistic business opportunities available to CPs unless a more integrated wholesale product is developed.

In summary a regulatory model for SLU which is intended to support multiple self build SLU operators looks to have a number of challenges:

o It may be expensive in both capital and operational terms.
o It may have uncertain technical performance parameters which vary over time and may be potentially fault prone.
o There is potential for congestion and multiple street-corner cabinets in targeted areas, with issues of "land grab" and monopolisation of limited space in others.
o National network design and interconnection may become increasingly fragmented and increasingly uneconomic, leading to duplicated and ultimately redundant investment. Such fragmentation could also prevent FTTC becoming a "stepping stone" in an integrated plan for FTTP deployment at a later stage in network development.
o Even with the most optimistic assumptions, a multiple SLUO model only looks to be economic in very small regions of the UK (perhaps at a single cabinet level).
o There is also little logic to suggest that a multiple SLUO model is the best route to major service innovation for end users.
o For all the reasons given above, efficient investment at a more appropriate level in the network will make high bandwidth wholesale services available to all CPs, without the need for duplicated investment, allowing funds to be invested in product and customer service innovation and differentiation.