Name Withheld 1 response

Title:

[✂]

Forename:

[✂]

Surname:

[✂]

Representing:

Self

Additional comments:

Adding powered equipment (NGA cabinet or G.Fast distribution point) between the exchange node and the customer premise limits the ability of other users of the physical network to develop new innovative services. In addition the smaller footprint around each powered equipment reduces the customers served and reduces the prospect of physical layer competition.

Fibre to the customer premise can use a passive optical network with fibre splitters located between the exchange node and the customer premise or use point to point fibre.
The passive optical network approach reduces the amount of fibre to deploy and the size of ducts required making it cheaper than a point to point deployment by around 15% (as estimated by Analysys Mason "The costs of deploying fibre-based next-generation broadband infrastructure Final report 8 September 2008 Ref: 12726-371" - http://www.analysysmason.com/PageFiles/5766/Analysys-Mason-final-report-for-BSG-(Sept2008).pdf).

However the network located splitters group customers at the exchange node, such that one fibre supports 16 to 64 customers. This makes unbundling more complex and reduces the possibility of physical layer competition and hampers innovation.
Point to point fibre costs more but allows individual customers to be unbundled enhancing competition and innovation.

A fibre based access solution, whether it involves access network based powered equipment or not, allows a much greater reach between the exchange node and the customer premise (of the order of 10x to 50x the distance over a copper based access solution). Such an improvement in service distance translates into area coverage per exchange node of 100x to 2500x and should lead to a significant reduction in exchange nodes required to serve customer premises. The fewer the exchange nodes the greater the number of customers served from such exchanges which directly improves the prospects for competition and innovation.

Question 1: Do you agree with our proposed NGA modelling approach? Please provide reasoning for your answer:

I have concerns over the proposed model, the limitations to modelling only the Access and the decision to focus on fibre to the cabinet.

I understand the benefits of the scorched node approach over a scorched earth approach, particularly reuse of existing physical assets. I also agree that over the period in consideration fibre to the cabinet will be the dominant delivery mechanism.

However, as KCOM are demonstrating in and around Hull now, a fibre to the premise roll-out can be achieved efficiently and in short timescales. The reason fibre to the cabinet will dominate the rest of the UK is not due to a fundamental limitation or problem with fibre to the premise, but as a result of a BT business decision.

The current network infrastructure is predicated on the reach of copper based telephony from the 1900s to 1960s. A fibre to the premise network has much greater reach. As discussed in my additional comments a strategic move to an all fibre access network should include a significant reduction in exchange nodes. Thus the network segments in scope for the model should also consider the saving in bachhaul and aggregation costs.
It is quite feasible to consider a fibre based access network where the backhaul and aggregation network is no longer required and a vast majority of customer premises are served directly from a core network of around 100 nodes. Such a network would improve the conditions for competition and innovation, particularly if point to point fibre is deployed. By progressing a fibre to the cabinet approach, and investigating the G.Fast option, BT retain physical control of the customer, minimise competition and significantly reduce the prospects of innovation.

Question 2: Do you agree with our proposed NGA modelling design? Please provide reasoning for your answer:

I have two objections to the modelling approach.

The first is covered in my answer to 3.1, namely fibre to the premise should also be modeled.

Secondly, even with a fibre to the cabinet approach there is much greater scope for a reduction in backhaul and aggregation, as outlined in my answer to question 3.1. Retaining more exchange nodes lowers the level of competition. A fibre to the cabinet approach can significantly reduce the number of exchange nodes required, well below the numbers BT currently use.

The consultation decision appears to be to model the network BT have decided to deploy. Ofcom could choose to also model a network that minimises backhaul and aggregation and maximises competition. Even without the addition of innovation improvements fibre to the premise would add I still think this second model will show an improved cost base over the BT based model.