Enterprise, Energy and Tourism Directorate
Energy and Telecommunications Division

T: 0141-242 5561 F: 0141-242 5589
E: Zahid.deen@scotland.gsi.gov.uk

Clive Carter
Strategy and Market Developments
Riverside House
2A Southwark Bridge Road
London
SE1 9HA

21 November 2007

Dear Clive

Please find attached, at Annex A, the Scottish Government's response to the future broadband consultation. This is not confidential.

We look forward to continuing dialogue with OFCOM on this issue.

Best regards

Zahid Deen
Head of Telecommunications Policy

ANNEX A: SCOTTISH GOVERNMENT RESPONSE TO FUTURE BROADBAND CONSULTATION

While telecommunications regulation is reserved to the UK Government, electronic infrastructure is vital to Scotland's economic development. A strong electronic infrastructure is required to allow businesses and individuals to exploit the opportunities presented by access to the internet and to e-business. Broadband is a major facilitator of this process. The Scottish Government (the devolved Government for Scotland) has therefore had a broadband strategy in place under its remit for economic development.

At the moment, broadband is available to over 99% of Scottish households. The Scottish Government is now going even further to extend its availability. We are currently in procurement to try and deliver affordable broadband access to every household and business that cannot secure the technology, but wants it.

We are also very interested in the debate on future broadband and therefore welcome this extremely useful and well articulated consultation by OFCOM. Moreover, we agree with the central tenets in the document and are wary of intervening at this stage on next generation broadband. Indeed, like OFCOM, we have been keen to proactively consider the potential economic and social benefits from next generation broadband and were one of the first parts of the UK to undertake comprehensive research on this topic.

We therefore believe we can provide an informed view and are keen to contribute to this debate as it moves forward. We have tried to provide responses directly to the five questions OFCOM pose in this consultation. However, our key points can be summarised as:

- **While next generation broadband is not yet being deployed to a major extent in the UK, we feel there is considerable scope for competition to drive commercial rollout further over the next few years and this potential investment should be allowed to take its full course;**

- **Given current evidence on economic and social benefits of next generation broadband, we agree with OFCOM that there is currently no explicit business case for public sector supply-side intervention in this area and that such intervention would be premature as well as an inefficient use of public funds;**

- **That the best course of action for the public sector at this stage is to monitor broadband developments closely and examine any change to evidence and the business case; and**

- **Given there are innovative approaches (including on regulation) in other countries where significant commercial next generation broadband investment is taking place, that these international approaches should be fully considered as part of the mix when developing policy in the UK.**

1. **When do you consider it would be timely and efficient for next generation (NG) access investment to take place in the UK**?

Depends on continuing competitive pressure

This is primarily a question for the private sector – especially as question 5 below addresses the question to a public sector audience. However, we would make a few points on commercial next generation access deployments, which suggest that these could potentially take place sooner or to a greater extent (than currently foreseen by some commentators).

First of all, we fully agree with OFCOM that there are logical reasons (a well-developed satellite platform for television reducing take-up of IPTV being a key one) why commercial investment in infrastructure to support higher bandwidths is taking place at a slower pace in the UK than in some other parts of the world. We also feel that not being the 'first-mover' on NGB should not be viewed with major alarm. As OFCOM point out, these are risky investments and moreover, there is no evidence that the economy or society in the UK is actually suffering from perceived laggard investment on broadband.

We further believe that by looking at the history of broadband development (where the UK was initially behind but caught up well) and by examining the competitive dynamic in the market, the potential for more broadband investment in the UK should not be underestimated.

Indeed, at this stage, commercial broadband investments are on the horizon but have not been allowed to take their full course. Their momentum and the competitive pressure that arises from them to produce further investment has been disregarded by many. This is problematic because we know, at least, that:

- ADSL2+ investment has taken place by many un-bundlers to the majority of the population and BT will be rolling this out over the next few years;
- Virgin have increased cable modem capacity to 20 Mbps bandwidth and is now seeking to use its broadband platform to attract/retain customers given pressures it faces in competing on premium pay-TV. There is some speculation that Virgin will launch 50 Mbps or possibly 100 Mbps services in the coming year, possibly alongside its own bandwidth hungry applications;
- Unbundling has been successful and the broadband market is very competitive in urban areas. New entrants such as Sky, Carphone Warehouse and mobile operators in the broadband market have totally changed the nature and level of competition. One of the key ways in which these entrants have tried to attract customers has been on price – but they have also used their ability to offer much higher bandwidths as a differentiating 'selling' factor.

So, for instance, as Virgin rollout higher bandwidths, other market players may respond or jostle to maintain their edge in offering the 'fastest speeds'**. There may be greater investment than it currently being envisaged (more than simply ADSL2+) including the use of fibre to the street cabinet or even to the home.** (For example, BT may do this in response to Virgin doubling/quadrupling their cable capacity against ADSL).

In addition to competition, the potential for lowering the costs of building next generation access or to develop savings from supporting NG access (as opposed to legacy) networks may further enhance the commercial business case for next generation broadband in the UK. In other words, the UK may start 'ticking' a number of boxes in figure 3 on page 20 of OFCOM's consultation.

Our **biggest concern however about commercially-led rollout is that competitive drivers may lead to next generation access investment taking place only in urban areas – matching the cable footprint and not much else**. This may exacerbate the existing divide between urban and rural areas on bandwidth. At this stage, most urban areas have ADSL2+ with rural areas limited to ADSL; in a few years' time, many urban areas could have ADSL2+, plus very high bandwidth cable and also witness the start of fibre deployment whilst most rural areas will see little or no change to their telecoms position.

Despite this concern however, at this juncture, we still cannot really project how far competitive pressure will extend and how far (in what geographies) it will push next generation access in the next few years. **Our main point thus remains that commercial deployments should be allowed to take their route without unnecessary distortions to the market.**

2. **Do you agree with the principles outlined for regulating next generation access**?

3. **How should OFCOM reflect risk in regulated access terms**?

4. **Do you agree with the need for both passive and active access remedies to promote competition**?

Questions that prompt other questions

On questions 2 and 4 particularly, we generally agree with OFCOM's approach and we also find it useful that it is consulting on a mix of potential approaches to complement each other e.g. for FTTC/sub-loop unbundling, offering passive copper line access at street cabinets alongside a new high, quality Ethernet based active line access product.

However, we do feel a slightly more optimistic approach or at least, more explanation could be given by the regulator on next generation access. Indeed, we think the following rather 'stand-alone' statements actually prompt more questions and a need for clarification:

a) "in the UK, there appears to be limited appetite for such (NG access) investment by third parties"
b) there are "practical problems with duct access"

On a) while we realise this is probably realistic, it would be helpful to understand why non-incumbent FTTH investment is not seen as feasible for the UK, even in a limited sense? Why would unbundlers or new entrants not want to invest in fibre themselves (even speculatively) in a few urban conurbations? Have these operators told OFCOM that this is completely off the agenda?

More importantly, on b) we also note that France Telecom is reported to have offered rival providers to run new fibre alongside its own cables in an effort to boost competition and prevent regulatory action. This suggests duct sharing should be possible and should be further explored. So why do OFCOM believe there are practical problems with duct access? On the same point, OFCOM mention the use of sewers or poles for rolling out fibre more cheaply (in France and Japan respectively). Why are these not options for the UK and *what action might be required to make them feasible*? We note, for example, that sewers have actually been used to some extent in London by Geo systems to rollout a fibre network.

On a much wider point, we do applaud OFCOM for making international and European comparisons on the rollout and the relative business cases for next generation investment. Nevertheless, we were surprised – especially as a regulator - that OFCOM makes no mention of learning from regulatory approaches deployed in other European countries where next generation access is being deployed. For example, is OFCOM in discussion with OPTA in the Netherlands on its approach to sub-loop unbundling and how it will be handling this or with the French regulator on fibre deployments there? While the market context in these countries is of course different, there may nonetheless be some learning possible from regulators discussing regulatory approaches to future broadband, with each other.

5. **Do you consider there to be a role of direct regulatory or public policy intervention to create artificial incentives for earlier investment in next generation access**?

The business case

In a nutshell, we think there may be a role for public sector intervention but now is NOT the time. This is for 2 reasons:

- As outlined above, we do not know the exact geographical boundaries in which the market itself will not deliver next generation access – and therefore where exactly intervention should take place
- Moreover, we do not see a business case for intervention on NG access as most of the economic benefit from broadband will still come from first generation bandwidths.

We would also like to thank OFCOM for outlining a clear picture on the case for NG investment in section 7 of the consultation. We think OFCOM is outlining a realistic, measured and objective assessment of the debate. **We fully agree that "there is no sufficiently compelling evidence to justify direct public intervention to promote or accelerate deployment faster than the commercial rate of deployment**".

We feel there are some more 'evangelical' voices in the next generation access debate who are keen for investment to be made irrespective of the evidence and who have blind faith that major benefits will materialise almost as soon as infrastructure is rolled out. We also feel that these voices carry a related risk of treating (what is apparently a) competitive telecoms sector in the UK as a nationalised industry - through creating an expectation that the public sector will intervene repeatedly with subsidy for the provision of broadband.

This is a *serious risk just now*. We believe that the lure of public subsidy on NG from some regions may already be on the verge of distorting the market and that telecoms providers could be stalling planned investments, as they wait for the chance to bid for and benefit from major state subsidies for large-scale telecoms investment.

Public policy makers however have to be aware of evidence and note the large sums that would be involved in interventionist policy on next generation access – possibly hundreds of millions of pounds. To re-iterate, it is difficult to justify intervention in a context where we do not know where the problem exists or have any proof of a deficit to economic or social well being as a result of a bandwidth divide.

That does not of course mean that the divide on next generation access does not concern us. The fact is it does and that is why we were one of the first parts of the UK to commission comprehensive research on the issue. The divide on next generation access may also impact Scotland proportionately more than other parts of the UK – given our large rural geography and tele-density considerations for commercial investment. However, after analysing the development of next generation in Scotland until 2015 and its relative economic impact, the conclusions for us were:

- Around half of the Scottish population may not be able to access very high capacity broadband i.e. 50 Mbps in the longer-term to 2015 and may have to continue with broadband connections at a much lower speed
- However, most of the economic impact over the longer-term – possibly three-quarters of a projected £3.4bn impact by broadband on Scotland's GVA - would still come from first generation broadband (bandwidths in the 512kbps-5Mbps range)
- The key beneficiaries from higher bandwidths were video based applications and largely for entertainment purposes such as video-on-demand and HDTV. These applications are available over other pervasive platforms e.g. Sky, anyway (and there is no evidence that providing them over an IP platform would transform GDP.)

These are of course projections and the Scottish Government is thus very keen to continue to monitor the market and potential new drivers which may change the picture and evidence base. In this sense, our approach resonates strongly with OFCOM view that the "**best course of action today is to continue to closely and carefully monitor developments in this area, regularly reviewing broadband data and taking due account of emerging international developments and metrics**".

We are also keen to share evidence with OFCOM and to work with it as it pays particular attention to issues such as bandwidth, penetration, content usage, pricing and the impact on social inclusion – in the fast-changing broadband market. Likewise, we will be keen to monitor changing public expectations and requirements on broadband in Scotland and share this information with OFCOM.

At this stage, we agree with OFCOM that we are not aware of any concrete evidence of unfulfilled demand from the public on next generation broadband. Even anecdotally, we receive little correspondence from the public about the provision of much higher bandwidths. This begs a question of whether policy makers – in discussing the need for future broadband provision – are at risk of creating a perceived 'problem' which does not actually exist.

On the other hand, we are fully aware that certain public sector sites without the clout to purchase bespoke bandwidth (such as leased lines) e.g. primary schools, *can* have a demand for higher bandwidths and the wider provision of next generation access is therefore very pertinent to this specific arena. Public sector needs may however be targeted through specific projects – such as broadband aggregation procurements.

In Scotland for example, we have therefore funded the 'Pathfinder' projects which are currently delivering scaleable connectivity in our most rural regions, the Highlands and Islands and South of Scotland, to cover their public sector broadband needs. We will monitor these projects' success/usage, as well as continuing to consider future broadband public sector requirements in Scotland.

Finally, we welcome OFCOM opening up the discussion around next generation and new build developments. We fully recognise that some issues will need to be teased out in 'pilots' such as Ebbsfleet valley before OFCOM can decide on what the best policy approach will be to new build. We particularly welcome OFCOM's intention to formally consult on specific new build proposals by the end of year and to develop an approach to the issue.

We certainly believe that such an approach is required as a number of major new build developments are taking place in Scotland and some are actively considering telecoms needs such as ducting and potentially FTTH e.g. in Raploch. **Clarity on the new build issue would therefore be timely and very much appreciated**.

In concluding, we would hope our response has been helpful. As you will appreciate, our message is very much on a similar wavelength to OFCOM's. We have nevertheless raised a few topics around NG access for further investigation or clarification. We now look forward to engaging further with OFCOM as it develops next generation access regulatory approaches - and as it contributes its balanced view to the wider debate opening up in the UK on the possible role for public sector intervention.

Enterprise, Energy and Tourism Directorate
The Scottish Government
November 2007