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Digital Communications Infrastructure Strategy Team

By email: dcisconsultation@culture.gsi.gov.uk

29 September 2014

Dear sir/madam

Please find attached at ANNEX A the Scottish Government's response to DCMS's Digital Communications Infrastructure Strategy consultation.

As reflected in the main body of the response, DCMS's policy considerations raised in the consultation document bear many similarities to the Scottish Government's own ongoing policy development related to delivering our vision for world class digital connectivity by 2020. Given that this is the case, I believe that there is clear advantage to be gained through collaboration between both governments to ensure optimum outcomes can be achieved in delivering our shared goals. My officials leading are keen to establish constructive channels of discussion with DCMS and I invite you to contact Harry Emambocus (harry.emambocus@scotland.gsi.gov.uk) in the Broadband Policy Team with a view to progressing this.

I hope our response is useful in DCMS's policy formulation and look forward to collaborative work in this area.



NICOLA STURGEON

DCMS DIGITAL COMMUNICATIONS INFRASTRUCTURE STRATEGY CONSULTATION

SCOTTISH GOVERNMENT RESPONSE

Q1 Views are sought on:

- a) Is this an appropriate role for Government?
- b) What other high level principles the Government might adopt?
- c) What resources do you consider the Government should aim to deploy to effectively manage its role?

The Scottish Government (SG) agrees that it is appropriate for Government to lead on the development of a comprehensive, forward-looking, digital communications infrastructure strategy. Many elements outlined in the consultation document closely mirror SG's own World Class connectivity ambitions which surpass the deliverables of the current digital infrastructure programmes of both the Scottish and UK Governments.

*Scotland's Digital Future: Infrastructure Action Plan*¹ outlined a commitment to a future-proofed infrastructure that will deliver world class digital connectivity across the whole of Scotland by 2020. For the last 18 months, SG has undertaken research and conducted extensive stakeholder engagement to help define and develop the vision of: 'Scotland as a world class digital nation where people living, working and visiting can communicate and connect instantly using any device, anywhere, anytime' – a visionary concept which we recognise is alluded to within the consultation document, particularly in Scenario 3.

One of our key publications is the report *Digital Scotland 2020: Achieving World-Class digital infrastructure: a final report to the Scottish Government*². This research was used to help us set out our vision.

Given the similarities between the Scottish and UK Government's visions, there is clear merit in close collaboration in the development of both governments' strategies, in particular, to ensure that policy fully recognises regional differences. We would welcome SG being consulted at an early stage in the development of any UK Government policy which has implications for Scotland. In the same vein, we would welcome early involvement on matters being negotiated at European level where a Scottish dimension might be pertinent – such as state aid negotiations where the needs of the hardest-to-reach geographic areas might need to be considered in a separate way.

More generally, we view the forthcoming strategy as a prime opportunity for the UK Government to adopt a more "blue skies" approach: better aligning policy development, regulation and funding to deliver more focused and effective outcomes – outcomes which are more future-proofed than current initiatives which represent a series of incremental steps. Currently, some fragmentation exists within the connectivity programmes being delivered by BDUK and DCMS, whilst there are arguably some regulatory levers, not currently used, which have the potential to result in improved coverage. As a result, current UK Government policy and the accompanying regulatory regime may not be delivering the most efficient outcomes which could be achieved. For example, SG faces challenges in

¹ <http://www.scotland.gov.uk/Publications/2012/01/1487/0>

² <http://www.scotland.gov.uk/Publications/2013/02/9054>

aligning Phases 1 and 2 of BDUK's current broadband programme; and, in respect of the recent 4G auctions, different regulatory levers could arguably have been employed to deliver even greater coverage levels.

The compartmentalisation of the various programmes is also resource-intensive. A more holistic approach could elicit efficiency gains in human resource terms and, more importantly, in terms of value for money and ultimately coverage. Furthermore, we understand that the Cabinet Office is currently undertaking work to understand how the benefits of all publicly procured digital networks (including transport, public sector and academic) can be harnessed more effectively. We agree this is crucial work which may have significant implications on how governments structure their medium-long term digital strategy development.

Q2 What potential opportunities are there for Government to leverage its combined buying power to support policy objectives?

The impact on wider digital policy objectives should form part of the procurement assessment on any significant government communications projects. The Emergency Services Mobile Communications Programme is an excellent example of utilising public sector buying power; and could be a real opportunity for government to extend 4G coverage beyond MNOs' planned commercial footprints.

We also support the UK Government's efforts to open up publicly funded communications networks, such as the Janet network and Network Rail's telecommunications infrastructure. These could potentially play an important role in extending digital services into non-commercial areas.

SG is currently looking at a range of business models that could accelerate the deployment of world class digital infrastructure in Scotland. Part of this is an assessment of the extent to which we could capture and utilise the impact of public sector revenue spend on digital services to underpin the growth of new or enhanced networks. Public sector, in parallel with business and mobile, demand has, for example, underpinned the CityFibre's emerging Gigabit City model which is being rolled out in a number of UK cities, including Aberdeen. There may be opportunities for the public sector to procure services in a way that delivers best value and injects competitive pressure at the infrastructure layer.

Q6 Which countries should be our benchmarks on communications infrastructure to ensure that businesses remain in the UK and continue to invest?

In developing our World Class vision, SG considered five international case studies: Australia, Ireland, Lithuania, South Korea and Sweden.

A summary of the findings is presented below, whilst the detailed findings can be found in our report: *Digital Scotland 2020: Achieving World-Class digital infrastructure: a final report to the Scottish Government*³.

The case studies provided insight into the infrastructure options for World Class connectivity as well as the enabling elements: supply and demand stimulation activities, funding options and regulatory actions.

Five general lessons from the international cases:

³ <http://www.scotland.gov.uk/Publications/2013/02/9054>

- Successful broadband development programmes generally emanate from a confluence of market forces, government initiatives and user cultures.
- All the countries are pursuing dual-mode broadband strategies, combining fixed broadband and mobile broadband initiatives. However, the two tracks are being pursued in different manners, given the strong market wind behind mobile services and the take-up of tablets, smartphones, dongles and other wireless devices.
- If government intends to "force" broadband operators to extend their coverage to what they consider commercially non-viable areas, it is useful for the government to also stimulate or otherwise facilitate the emergence of the respective demand.
- With Sweden and Lithuania as partial exceptions, broadband development has generally called for supra-regulatory initiatives on the government side, as traditional regulatory approaches often result in procedural stalemates.
- South Korea's relatively directional approach to ensuring broadband involvement and inclusiveness is likely to have produced positive results, given the leading level of broadband adoption that South Korea has managed to achieve. However, overall, there has been limited evidence as to the effectiveness of the demand stimulation and user involvement projects that have been pursued in most of the countries.

We believe that the findings and conclusions arising from these case studies are as relevant for both Scotland and UK-wide policy development. In developing its strategy, we suggest the UK Government may wish to further consider these or other international examples in a similar benchmarking exercise.

Similarly in developing the mobile elements of its strategy, we encourage the government to consider international case studies, such as SG's comparison of the experience of policy and regulatory interventions in three European Countries: Sweden, France and Norway, as set out in our report *Economic Impacts of Mobile Communications in Scotland*⁴.

Q7 What metrics do you think should or will become relevant in comparing network performance in different countries? What metrics should most appropriately be used as the basis to set objectives for government policy?

In addition to the measures of network characteristics listed in the consultation document, we believe that at a macro level, measurement of economic impacts of digital connectivity must be integral to the setting of policy objectives – for both fixed and mobile connectivity, and for both business and public sector productivity. Evidence must be robust and specific to the country or region. With regards to mobile connectivity, SG has published analysis to estimate the economic impacts of improved service levels in Scotland. In respect of both business and public sector productivity, our research identified impacts as being attributable to improvements in both voice and data coverage. Moving forward, this type of analysis will be important to both measure success of previous or current government policies and help justify future policy decisions. The full analysis is available in SG's report *Economic Impacts of Mobile Communications in Scotland*⁵.

Q24 Do you expect commercial providers to deliver future infrastructure and meet demand on a purely commercial basis, or is some form of public intervention likely? If public intervention is likely how might that work with the commercial provision of infrastructure? What form might that intervention take?

⁴ <http://www.scotland.gov.uk/Publications/2014/03/6913>

⁵ <http://www.scotland.gov.uk/Publications/2014/03/6913>

SG has outlined an ambitious vision for world class connectivity – digital infrastructure that will support any device, anywhere, anytime connectivity will put Scotland on a world stage. We expect that this will require significant levels of investment over and above what is currently being delivered through the current government programmes, albeit these are building a platform for world class and delivering a step change in digital infrastructure. However, in the longer term, we recognise that more needs to be done.

SG is keen to take a more sustainable approach to the delivery of our world class vision by developing and testing a range of more innovative commercial structures and potential procurement routes with which to secure investment, such as financial instruments, joint venture arrangements or a public-private partnership models. Indeed, such methods – i.e. those methods *beyond* the ‘traditional’ gap-funded model – are increasingly being encouraged by the European Commission.

Scotland is at the forefront of implementing innovative financial mechanisms to support infrastructure deployment. These include Tax Increment Financing and the NPD (Non-Profit Distributing) model, which was developed and introduced as an alternative to (and has since superseded) the traditional PFI (Private Finance Initiative) model in Scotland.

This work is being led by Scottish Futures Trust, an arms-length company, wholly owned by Scottish Ministers, which is tasked with driving best value from public investment in infrastructure. SFT is now working with SG to identify innovative funding and delivery mechanisms for public investment in digital infrastructure, aimed at unlocking and de-risking private investment and accelerating the deployment of future-proofed infrastructure that will enable digital connectivity right across Scotland.

SG and SFT are interested to understand how the government is assessing the viability of such approaches and, in due course, would welcome a more detailed discussion with view to potential collaborative working in this area.

Q27 How might efficient investment in communications infrastructure be supported, for example by changes in the regulatory framework?

Q28 Are there any further measures necessary to incentivise the rollout of future mobile infrastructure in currently underserved areas?

Further to our response to Q6, in the context of international comparisons, SG encourages the UK Government to look at regulatory approaches adopted outside the UK which could assist the achievement of policy outcomes. These include, for example, alternative spectrum auction methods such as the “beauty contest” approach adopted in Sweden in respect of 3G spectrum and the approach in Germany adopted in respect of 4G which facilitates early deployment in non-urban areas.

All regulatory measures which have the potential to incentivise rollout should be considered afresh, for example passive infrastructure access (PIA) for mobile backhaul. We understand that the current definition of markets prevents PIA being designated as a remedy in the market where mobile backhaul rests, but it nevertheless this remains an issue which has been cited as a disincentive to investment. Another example which has been cited is the regulatory regime which governs mobile network operators’ (MNO) access to BT’s fibre. With specific reference to the new fibre routes being deployed the Digital Scotland Superfast Broadband programme, where these are located in areas of poor mobile coverage, SG is keen for the mobile backhaul opportunity of this fibre to be fully realised – particularly as it

has been publicly funded. However the UK's current regulatory regime determines the conditions under which MNOs can gain access to this fibre.

We again reiterate that a blue skies, aligned and holistic approach to regulation and policy development must be considered if optimum outcomes and the maximum possible impact of public funding is to be achieved.

Q29 Is there a role for a revised USO or USC to ensure that minimum consumer demand requirements are met and to reduce the potential for a new digital divide? What might this look like?

We agree that in the future, as superfast broadband penetration increases, there may be a need to implement measures to ensure that some areas do not remain underserved. A revised USO (or USC) may be the appropriate tool for this. We would encourage the UK Government to analyse this option fully in order that it can fully understand the costs and benefits of implementing a revised USO or USC as part of a holistic approach to aligning policy and regulation.

Q43 What role might local bodies have in facilitating the future delivery of digital communications infrastructure?

Currently, local bodies undertake a number of roles in relation to facilitation of the delivery of digital communications infrastructure. These can include being the local planning consenting authority, being a partner in national government digital infrastructure strategies, and part funder of national strategies. As part of a comprehensive government strategy, we believe that it's vital that government works with local bodies to ensure that they are committed to the high level strategy principles from the outset and work collaboratively to ensure success. This collaboration can include ensuring planning consents are processed and approved in a timely fashion, looking for opportunities to coordinate streetworks, providing access to public buildings for the siting of infrastructure, and ultimately, using the infrastructure to deliver public services. Raising a high profile of digital is therefore key, and this must extend throughout the organisation, including ensuring the support of local elected members.

Furthermore, we encourage DCMS to work more closely with major cities to ensure government strategy links into their wider strategy based on regional aspirations and drivers. This was referenced in the RSA's report on Connected Cities⁶ which highlights the need for closer interaction and powers.

⁶ <http://www.citygrowthcommission.com/publication/connected-cities-the-link-to-growth/>