

RURAL ECONOMY AND CONNECTIVITY COMMITTEE

DRAFT BUDGET 2017-18; BROADBAND

SUBMISSION FROM EWAN SUTHERLAND

Introduction

Scottish Ministers aspire to provide “world class” broadband by 2020,¹ using the 1980s Martini jingle “Any time, Any place, Anywhere”,² to which they added delivering superfast broadband (i.e., an advertised speed of 24 Mbps) to 100 per cent of premises by 2021.³ However, they have very few powers with which to deliver those promises. The comparable European Union (EU) targets are for 30 Mbps for all homes by 2020,⁴ of which half should be using 100 Mbps, with aspirations to Gigabit speeds. Her Majesty’s Government (HMG) set targets for the provision of superfast broadband to be 90 per cent of the United Kingdom by early 2016 and 95 per cent by December 2017.⁵

The Scottish Government has had little engagement with the EU and OECD governance networks where best practice policies are discussed and reviewed. Echoing its former interest in the ‘arc of prosperity’, it sometimes draws, usually inappropriately, on the example of Sweden. There have been few academic publications on broadband policy in Scotland, reflecting limited capacity in its universities.⁶ Think tanks have been engaged only on social and geographic digital divides.⁷ While policies reflect global best practice, they do not engage with it in a critical way, nor do they reflect the particular challenges of Scotland (e.g., rural demographics) and its economy (e.g., major sectors).

The next section reviews the powers of Scottish Ministers and Parliament. This is followed by brief analyses of the regulatory framework, the BT Openreach Agreement, and the BDUK rural broadband state aid scheme. Then there are reviews of the Community Broadband Scheme, the business communications markets, and world class broadband. After an analysis of Brexit, and a possible second independence referendum, there are conclusions.

Powers of the Scottish Government and Parliament

The Scotland Act reserves legislation on telecommunications and Internet access to Westminster,⁸ though the majority of the laws and policies have been developed in Brussels. Consequently, the powers of Scottish Ministers are limited, though they can procure services that have a telecommunications component (e.g., as an anchor tenant for a network for schools). The provision of state aid appears to be *ultra vires*, given its reserved status.⁹ The claim that Scottish Ministers are investing £90 million

¹ Scottish Government (2012) *Scotland’s digital future - infrastructure action plan*. Edinburgh: Scottish Government.

² <https://www.youtube.com/watch?v=bF1IUGpQO-o>

³ Scottish Government (2016) *A plan for Scotland: the Scottish Government’s programme for Scotland 2016-17*.

⁴ EC (2010) *Europe 2020: A strategy for smart, sustainable and inclusive growth*. COM(2010) 2020

⁵ <https://www.gov.uk/guidance/broadband-delivery-uk>

⁶ Leanne Townsend, Claire Wallace, Gorry Fairhurst & Alistair Anderson (2016) “Broadband and the creative industries in rural Scotland” *Journal of Rural Studies*, in press. Ewan Sutherland (2012) “Broadband: towards a national plan for Scotland” *Fraser of Allander Economic Commentary* 36 (2) 67-82. Jason Whalley & Susan Howick (2008) “Understanding the drivers of broadband adoption: the case of rural and remote Scotland” *Journal of the Operational Research Society* 59 (10) 1299-1311. Andrew Tookey, Jason Whalley & Susan Howick (2006) “Broadband diffusion in remote and rural Scotland” *Telecommunications Policy* 30 (8-9) 481-495.

⁷ Daniel Heery & Douglas White (2013) *Going the last mile – How can broadband reach the final 10%*. Dunfermline. Carnegie Trust.

⁸ See section C 10 of Schedule 5 of the Scotland Act 1998.

⁹ Sections 29, 53 and 54 of Scotland Act, read with Schedule C.

is thus open to doubt, since they would not be allowed to do so, unless it is money from HM Treasury expressly for that purpose or “clawed back” from previous such projects.

Scottish Ministers and the Scottish Parliament have certain powers regarding planning rules and rateable values, which affect the economics and timing of network deployment.

They are also lobbyists, arguing their case with HMG and the Office of Communications (OFCOM). Unlike the operators, they have only ever made very general political demands, not the detailed techno-economic interventions with data and analyses that OFCOM needs to defend its decisions before the Competition Appeal Tribunal (CAT) and the Competition and Markets Authority (CMA). One, seemingly unused, political route is through the Joint Ministerial Committee (JMC). The administrative waters were muddied by the Scotland Act 2016,¹⁰ with Scottish Ministers becoming involved in appointing a director with UK-wide responsibilities to the OFCOM board. Unlike HMG, they cannot intervene directly on markets.

One area where Scottish Ministers appear to have responsibility is in the encouragement of non-users to adopt the Internet, which can improve productivity and is essential for ‘digital by default’ government services.

The regulatory framework

Broadband Internet access is a ‘single market’ for the United Kingdom, under a British version of the EU policies and legislative framework. The applicable legislation is primarily EU regulations and transpositions of EU directives, plus the Digital Economy Bill.¹¹ Additionally, there have been a few *ad hoc* interventions by HMG (e.g., mobile coverage and unsolicited calls).^{12,13} The Chancellor of the Exchequer recently provided rates relief in a bid to encourage infrastructure deployment.¹⁴

While OFCOM is referred to as ‘the’ regulator, it is merely one among many, including the Office of the Telecoms Adjudicator (OTA2), Advertising Standards Authority (ASA),¹⁵ Internet Watch Foundation (IWF), and Interception of Communications Commissioner’s Office (IOCCO). The work of analysing and regulating markets is conducted by OFCOM, subject to some referrals to Brussels, frequent appeals to the CAT and higher courts, and oversight by Westminster.

BT Openreach Agreement

Central to the deployment of broadband has been the Openreach Agreement between BT and OFCOM, which was originally a matter of competition law, rather than telecommunications regulation.¹⁶ Whether it was a wise decision is now immaterial, since OFCOM has found itself unable to escape its basic design. It has been updated several times, through market analyses, appeals and references to the CMA, plus a decennial review that strengthened the independence of Openreach from BT.^{17,18,19} A decision on legal separation of Openreach will shortly be submitted

¹⁰ Amending Section 1 of the Communications Act 2002.

¹¹ <https://services.parliament.uk/bills/2016-17/digitaleconomy.html>

¹² <https://www.gov.uk/government/news/government-secures-landmark-deal-for-uk-mobile-phone-users>

¹³ <https://www.gov.uk/government/news/government-clamps-down-on-nuisance-call-crooks>

¹⁴ See the 2016 Autumn Statement. <https://www.gov.uk/government/publications/autumn-statement-2016-documents>

¹⁵ See, for example, regulation of broadband price claims. <https://www.asa.org.uk/News-resources/Media-Centre/2016/Changes-to-broadband-price-claims-in-ads-comes-into-force-today.aspx>

¹⁶ Competition law is a reserved matter.

¹⁷ 1237/3/3/15 TalkTalk Telecom Group PLC v Office of Communications (VULA) [2016] CAT (19 May 2016).

to the EC, but may be appealed.²⁰ The Agreement was reviewed by Westminster committees, though diverted by lobbyists from ISPs, who sought the break-up of BT.^{21,22}

Openreach created an historic path dependency, from which there seems no easy escape. It provides a UK-wide platform for service-based competition, with BT having controlled technological progress.

BDUK state aid scheme

In order to improve broadband availability in rural areas HM Treasury took £500 million from the Television Licence Fee, effectively a broadband tax.²³ It is now in its final phase, spending money that was “clawed back” allowing additional coverage. The scheme was developed by Broadband Delivery United Kingdom (BDUK), a unit within DCMS, and approved by the EC under the state aid rules.^{24,25}

Implementation was reviewed by the Public Accounts Committee, which complained that it did not support competition and lacked transparency for ISPs and for ‘local bodies’.^{26,27,28} It was also reviewed by the Public Accounts Committee of the Welsh Assembly.^{29,30}

Audit Scotland produced a progress report and an update.^{31,32} Oddly, these reports failed to mention the work by other auditors or the limitations faced by Scottish Ministers in trying to implement their policy goals. It is unclear whether any of the money had been raised by Scottish Ministers.

The Digital Economy Bill expands the universal service obligation to include broadband, in effect charging the higher costs of rural access to customers in urban areas.³³ Consequently, HMG will cease to have direct involvement in expanding its geographic coverage, merely setting targets for OFCOM, and all but eliminates the involvement of Scottish Ministers.

Community Broadband Scotland

The intention of CBS was to experiment with alternatives for rural provision of broadband, by funding a few small schemes.³⁴ Two case studies have been published. Again the question arises as to whether the expenditure of £2.5 million is *ultra vires*.

CBS replicates work being done in thousands of rural communities across OECD countries, using off-the-shelf technologies, for example, there is a comparable

¹⁸ 1238/3/3/15 British Telecommunications PLC v Office of Communications (VULA) [2016] CAT (19 May 2016).

¹⁹ <https://www.ofcom.org.uk/phones-telecoms-and-internet/information-for-industry/policy/digital-comms-review>

²⁰ <https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2016/update-on-plans-to-reform-openreach>

²¹ Select Committee on Communications, 1st Report of Session 2012-13. *Broadband for all – an alternative vision*. HL Paper 41. See also the response of HMG in Cm 8457.

²² Culture, Media & Sport Committee, 2nd Report of Session 2016-17. *Establishing world-class connectivity throughout the UK*. HC 147.

²³ <https://www.gov.uk/government/publications/the-digital-communications-infrastructure-strategy>

²⁴ http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=3_SA_33671

²⁵ EU Guidelines for the application of state aid rules in relation to the rapid deployment of broadband networks. (2013/C 25/01).

²⁶ Public Accounts Committee, Fiftieth report of Session 2013-14. *The rural broadband programme*. HC 834

²⁷ Public Accounts Committee, Twenty-fourth report of Session 2013-14. *The rural broadband programme*. HC 474.

²⁸ Ewan Sutherland (2016) “Broadband and telecommunications markets; policy, regulation and oversight” *Parliamentary Affairs* 69 (2) 387-408.

²⁹ <http://www.senedd.assembly.wales/mgIssueHistoryHome.aspx?IIId=15844>

³⁰ Auditor General for Wales (2015) *Welsh Government investment in next generation broadband infrastructure*.

³¹ http://www.audit-scotland.gov.uk/docs/central/2015/nr_150226_broadband.pdf

³² http://www.audit-scotland.gov.uk/uploads/docs/report/2016/nr_160818_broadband_update.pdf

³³ <http://services.parliament.uk/bills/2016-17/digitaleconomy.html>

³⁴ <http://www.hie.co.uk/community-support/community-broadband-scotland/>

scheme run by HMG.³⁵ Secondly, there are no cheap interconnections to the Internet, with micro-ISPs having to lease backhaul to the London Internet Exchange (LINX),³⁶ with one Hebridean project piggybacking the Joint Academic Network (JANET) to save money. Moreover, small ISPs lack access to content delivery networks (CDNs) and to bundled content (e.g., television football matches) that make broadband attractive to many consumers.

Business communications market

In addition to the market for residential broadband, there is a market for high capacity broadband links to business premises, including mobile network base stations and Internet Service Providers (ISPs). This has been regulated by OFCOM and OFTEL for many years, as leased lines then as business communications, both the quality and price of leased lines in peripheral London and the rest of the United Kingdom, in the absence of sufficient competition.³⁷ The level of adoption of fast broadband by business appears to be lower in the United Kingdom, than in comparable EU MSs. The regulation of such markets is problematic not only in the United Kingdom, but also in the USA, where 'special access' or business data services are being contested before the FCC and the courts.³⁸

The input from Scotland to the market analysis was limited to a short note from a QUANGO, making a non-specific complaint about provision for rural SMEs. Although backhaul for ISPs and mobile operators is thought by some to be important, that was not conveyed to OFCOM. No data were provided on the costs or market conditions, without which OFCOM cannot act without evidence.

World class broadband

While Scottish Ministers aspire to world class broadband, this has neither a specific meaning nor have they defined one.³⁹ Their target of 100 per cent of premises to have superfast broadband by 2021, falls short of world-class speeds, and fails to achieve its own Martini goal, since it applies only to premises.⁴⁰ Scotland remains a follower within the United Kingdom, having failed to achieve its target of leading the four nations by 2015.⁴¹

The performance of the United Kingdom is perfectly adequate at superfast speeds compared to OECD nations, but is less impressive at higher speeds.⁴² The recent intervention by the Chancellor appears designed to increase deployment of fibre optic cables and 5G, which could keep the United Kingdom within the group of leading countries. However, it will not deliver the Martini goal, since 5G is very unlikely to reach remote areas in the short or medium term.

There has been no impact assessment to determine the costs and benefits of the 100 per cent provision, despite the costs of the last few per cent of premises being very high. Such premises already have access to satellite services, with a subsidy scheme from HMG to cover installation costs.

³⁵ <https://www.gov.uk/government/publications/community-led-broadband-schemes>

³⁶ <https://www.linx.net/>

³⁷ <https://www.ofcom.org.uk/consultations-and-statements/category-1/business-connectivity-market-review-2015/final-statement>

³⁸ https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-63A1.pdf

³⁹ Ewan Sutherland (2013) "A short note on world class broadband" <http://dx.doi.org/10.2139/ssrn.2273492>

⁴⁰ For example, Singapore has already reach 1 million of 1.25 million homes with optical fibres, enabling up to 10 Gbps.

⁴¹ See Fig 1.1 of OFCOM (2016) *The communications market report*. London: Office of Communications.

⁴² <http://telecoms-policy-analysis.blogspot.co.uk/2016/11/united-kingdom-how-fast-is-broadband.html>

Brexit, independence, etc.

In the first quarter of 2017, HMG will notify the EC it is invoking Art 50 TEU, beginning the formal Brexit process. When completed, this will give HMG considerable freedom to modify the legislative framework for telecommunications, indeed it will be obliged to do so, to remove defunct references to EU institutions and policies.⁴³ The reformulation of policies and the amendments to legislation will be drafted in Whitehall and scrutinised in Westminster, without any formal role for Scottish Ministers, though open to influence by Scottish MPs and peers. An obvious danger is that vested interests will persuade HMG to make changes that are beneficial to them, rather than to consumers.

Unlike in other areas, Brexit brings no automatic additional powers to Scottish Ministers or the Scottish Parliament. Whereas, the funds from the EU used to support rural broadband will be lost.

An exception would be if there were to be a second independence referendum, not in a 30-year generation, but in the coming months. A vote to leave the United Kingdom would necessitate the preparation of legislation converting the existing legal framework into Scottish statutes, to create a ministry and an array of agencies and regulatory authorities, to create new licences for operators, and to begin to gather the financial data from operators needed by the regulator.⁴⁴ This is a long and complex process, one that some operators might prefer to avoid, by selling to local interests.

Conclusion

The idea of world-class infrastructure, might be plausible for motorways or sewerage, but not in telecommunications, with continuing advances that are at least evolutionary and, often, revolutionary. Only governance systems can be world-class, ensuring that markets achieve the best possible outcomes, with strong feedback loops. For the longer term it is possible to build ducts and poles, to ensure open access, and lay as much fibre as possible, though even that will be replaced.

The role of Scottish Ministers, with telecommunications and broadband being reserved matters, is necessarily limited, much more so than their promises require. They need to reconsider how they contribute to the United Kingdom governance of telecommunications markets (e.g., through the JMC). With OFCOM they must set out detailed objectives and provide information about conditions of demand and supply. Whether the goal is 100 per cent of premises, world-class broadband or Martini services, Scottish Minister must rely on HMG, something they seem loath to admit. The delivery of 100 per cent coverage now depends on the Digital Economy Bill and the subsequent actions of OFCOM and any appeals to the Competition Appeal Tribunal.

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⁴³ Ewan Sutherland (2016) "The implications of Brexit for the governance of telecommunications markets in the United Kingdom" *info* 18 (7) in press.

⁴⁴ Ewan Sutherland (2013) "Independence and the regulatory state—Telecommunications in Scotland and the rest of the United Kingdom" *Telecommunications Policy* 37 (11) 1046-1059.