



**OFFICIAL REPORT**  
AITHISG OIFIGEIL

# Rural Economy and Connectivity Committee

**Wednesday 3 May 2017**

**Session 5**



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**RURAL ECONOMY AND CONNECTIVITY COMMITTEE**  
**14<sup>th</sup> Meeting 2017, Session 5**

**CONVENER**

\*Edward Mountain (Highlands and Islands) (Con)

**DEPUTY CONVENER**

\*Gail Ross (Caithness, Sutherland and Ross) (SNP)

**COMMITTEE MEMBERS**

\*Peter Chapman (North East Scotland) (Con)

\*John Finnie (Highlands and Islands) (Green)

\*Rhoda Grant (Highlands and Islands) (Lab)

\*Jamie Greene (West Scotland) (Con)

\*Richard Lyle (Uddingston and Bellshill) (SNP)

\*Fulton MacGregor (Coatbridge and Chryston) (SNP)

\*John Mason (Glasgow Shettleston) (SNP)

\*Mike Rumbles (North East Scotland) (LD)

\*Stewart Stevenson (Banffshire and Buchan Coast) (SNP)

\*attended

**THE FOLLOWING ALSO PARTICIPATED:**

Fergus Ewing (Cabinet Secretary for Rural Economy and Connectivity)

Alan Johnston (Scottish Government)

Robbie McGhee (Scottish Government)

**CLERK TO THE COMMITTEE**

Steve Farrell

**LOCATION**

The Mary Fairfax Somerville Room (CR2)



## Scottish Parliament

### Rural Economy and Connectivity Committee

*Wednesday 3 May 2017*

*[The Convener opened the meeting at 10:00]*

### Decision on Taking Business in Private

**The Convener (Edward Mountain):** Good morning, everyone, and welcome to the Rural Economy and Connectivity Committee's 14th meeting in 2017. I ask everyone to ensure that their mobile phones are on silent. No apologies have been received.

Agenda item 1 is a decision on taking business in private. Under item 4, the committee will consider its stage 1 report on the Seat Belts on School Transport (Scotland) Bill. Does the committee agree to consider that report in private today and at future meetings?

**Members** *indicated agreement.*

## Digital Strategy

10:00

**The Convener:** Item 2 is evidence on the digital infrastructure elements of the Scottish Government's digital strategy, which was published in March. I welcome the Cabinet Secretary for Rural Economy and Connectivity, Fergus Ewing, and, from the Scottish Government, Robbie McGhee, who is the broadband policy team leader, and Alan Johnston, who is the head of the connectivity, economy and data division.

We have a lot of questions to get through. If we are to get through them all, the questions and answers should be short. I invite the cabinet secretary to make a two-minute opening statement.

**The Cabinet Secretary for Rural Economy and Connectivity (Fergus Ewing):** Thank you, convener. The digital strategy, which we published in March, sets out our vision of Scotland as a vibrant, inclusive, open and outward-looking digital nation. It sets out the actions that we will take to put being digital at the heart of everything that we do. The strategy is not just about digital connectivity; underpinning it is the provision of high-quality, world-class digital infrastructure. We will talk today about Scottish Government-led activity in that area, the success of the digital Scotland programme and our emerging reaching 100 per cent and mobile infill initiatives.

It is worth recapping three elements of that success. First, thanks to work that the Scottish Government commissioned, and as a result of the digital Scotland superfast broadband programme, about 715,000 homes and businesses that would not otherwise have been connected can now access fibre broadband.

Secondly, about 3,700 cabinets have been stood across the country, and there are live cabinets in every local authority area. I understand that the term "have been stood" is not a grammatical infelicity but the correct technical term for what one does with a cabinet.

Thirdly, more than 7,000km of access cabling—enough to stretch from Edinburgh to Florida—and 400km of subsea cabling have been laid to enable connectivity.

Quite a lot has been achieved, and it would not have been achieved if the Scottish Government had not led the way. It is important to acknowledge that, as enshrined in schedule 5 to the Scotland Act 1998—I checked it myself—telecoms are reserved to the United Kingdom. The UK Government should have been responsible for doing all that work, but we were not prepared to

wait. We do not have the powers to regulate or legislate, which makes delivering our objectives more challenging.

In the past week, the UK Parliament has passed a bill that will introduce a universal service obligation for broadband. The bill provided a unique opportunity to ensure that every part of the UK could access high-speed broadband. Ofcom's view was that the cost of introducing a USO for superfast broadband at 30 megabits per second was broadly similar to that for a 10Mbps USO.

I have written to Matt Hancock, the lead UK minister, on three occasions since October to urge the UK Government to take the logical decision to commit to a superfast USO. That could have enabled Scottish Government investment to raise the bar further in Scotland and focus on delivering ultrafast broadband. Unfortunately, the UK Government chose the short-sighted option and set the USO at just 10Mbps. That is a missed opportunity that demonstrates how the reserved nature of telecoms can often undermine our policy ambitions in Scotland.

**The Convener:** I do not want to miss the opportunity of allowing committee members to ask questions. I ask you to draw your remarks to a close so that we can move on to questions.

**Fergus Ewing:** We are doing a lot of work but, if I am not permitted to describe it, I will simply say this. In Scotland, we have very high ambitions and have achieved a lot already. Audit Scotland and Ofcom have remarked favourably that we are doing better, and faster, than down south. Nevertheless, we are constrained by the lack of engagement with the UK Government, and I am happy to give details of that lack of engagement if I am asked so to do. Thank you.

**The Convener:** Thank you, Mr Ewing.

**Rhoda Grant (Highlands and Islands) (Lab):** You have talked about the regulatory framework and about discussions with the UK Government and Ofcom on changes to it. What changes do you seek to address Scotland's needs?

**Fergus Ewing:** The regulatory framework is critical for both internet and mobile services. Commercial companies do what is profitable and provide services where there are customers, which means in cities and towns. Only by regulation can mobile operators and internet providers be required to cover the parts that commercial operators would otherwise not reach. That is a simple statement of fact. The problem thus far in the UK has been that, because the UK makes money out of auctioning spectrum, it has decided to have ultra-light regulation. That is why there is a severe lack of mobile and broadband coverage in the UK.

Other European countries have not taken such an approach. They have taken an outside-in approach, which involves regulating to require operators and broadband providers to reach out to people in rural areas who, without access to broadband and mobile, would in many cases be prevented from running a business or organising their personal lives.

That is one aspect of the proposed changes. Mr Johnston or Mr McGhee might want to deal with the question in another way.

**Robbie McGhee (Scottish Government):** In our response to Ofcom's recent strategic review of digital communications, we suggested that Ofcom should as a starting point undertake more extensive regional market analysis to determine levels of provision and, most important, whether specific factors are contributing to a poorer quality of service in parts of the country. That would go beyond what is included in Ofcom's "Connected Nations" report and focus more on qualitative elements. We propose that, from that base position, Ofcom could determine whether new national remedies or more focused regional ones might help to address the problem.

We would still like Ofcom to take that position more clearly, and we continue to engage with it. It is important to recognise that we have really good engagement with Ofcom, which has been further strengthened by the memorandum of understanding that was signed recently. We understand that regional approaches can be more complex for Ofcom to manage in some respects, but that complexity might be a price worth paying if it leads to improved communications in parts of Scotland.

**Rhoda Grant:** I am concerned that we have no map of where the fibre is in Scotland. An awful lot of that fibre has been paid for by the public purse in one way or another, but sometimes we are not using it and do not have access to it. Could we do something to regulate access, force operators to use fibre that has been laid at a cost to the public purse or recover ownership of that fibre? We have paid for it, and it seems a bit much that we are paying for it again and again.

**Robbie McGhee:** The constraint is that, as has been discussed, we do not have the powers to regulate, so we do not have the powers to compel suppliers to do anything. Nevertheless, we recognise the importance of having good-quality and extensive knowledge of what fibre is out there, so we initiated a project in the Scottish Government a couple of years ago, which we worked with the Scottish Futures Trust on, to extensively map fibre networks across Scotland. Unfortunately, a lot of that information was provided under non-disclosure agreements and has been deemed commercially sensitive by

operators. It has become a useful internal tool for the Scottish Government, but we are constrained from putting it in the public domain. That illustrates some of the limitations that are linked to the reserved nature of telecoms.

**The Convener:** Stewart Stevenson has a brief follow-up question.

**Stewart Stevenson (Banffshire and Buchan Coast) (SNP):** This is a complex area, but I will try to make it simple. I understand that the price of fibre is a quarter that of copper—the price that I found this morning was 96p a metre for fibre, whereas copper is £3.50 a metre. I suspect that the real issue is to do with conduits and the kit at the end of the lines.

To what extent have you explored how we can best ensure that the conduits or, for that matter, poles for overhead lines, can be used by multiple operators so that, if appropriate, there can be competition or people can sling up dark fibre if they want it? Another issue is access to the equipment at the end of the fibre. It strikes me that we are being a little simple in talking just about the fibre, which is quite cheap.

**Fergus Ewing:** It is fair to say that it is the laying of the conduits—often over very long distances for rural and island connections—that incurs the huge cost. That is not a new problem, and Ofcom has wrestled with it. Openreach has been offering a physical infrastructure access—PIA—product for some years, and it has developed an enhanced PIA-style solution, which has been trialled by providers and has informed recent proposals.

In rural Scotland, the need for co-operation is pronounced. I raised that with the recently appointed chair of Openreach, who visited here at my request just last week. We discussed further co-operation between all the companies involved, by which I mean not just operating in twinsets but more pronounced co-operation and collaboration with a view to cutting costs.

A second point, which may pervade the conversation, is that we should not think of inserting conduits and laying fibre for access to broadband as being like roads or schools projects, because laying fibre is a public-private project. Traditional procurement for roads and public buildings is paid for by the taxpayer, but we need to work in tandem with the commercial operators to get the best price from them. I am afraid that that may limit what I can say about cost estimates and so on. We must bear it in mind that the model of infrastructure project is different, as it is a public-private model.

It is not the taxpayer's job to fund the provision of mobile or internet services in cities, where commercial operators already do that and make a

good return. Scottish Government and UK Government money is required to get to the parts that commercial operators would not otherwise reach—the rural and island parts. Sadly, that is where we have been badly let down by the UK Government. Mr Hancock is currently the responsible minister but, although I have written to him on numerous occasions and sought a meeting with him last October, he has not been amenable to arranging a meeting.

**The Convener:** I remind everyone that I will do my utmost to keep the meeting moving. So far, it has taken eight minutes to answer the first question. We have in excess of 27 questions so, if we do not keep the answers short, we could well stray into going beyond lunch.

**Richard Lyle (Uddingston and Bellshill) (SNP):** My question could be quite long, but I will try to keep it short. The Scottish Government states that it will

“Develop, test and make decisions based on robust models of investment drawing on the very latest international data on the economic and social value of digital connectivity”.

What data will the Scottish Government use?

**Fergus Ewing:** Do you mean the data that we will use to inform decisions about the procurement of the broadband facilities or the data on the economic benefits that flow therefrom?

**Richard Lyle:** The data on the economic benefits.

10:15

**Fergus Ewing:** The Scottish Futures Trust commissioned a report from a major firm, which I think from memory was Deloitte—[*Interruption*—my memory is correct. I believe from something that I read earlier that the estimated benefit of digitalisation—of Scotland becoming a properly connected, switched-on country—would be in the order of £13 billion per annum, which is an enormous figure. I do not have the breakdown here but, as representatives, we know the issues for tourism businesses, for example, that cannot access the internet. How can someone who runs a bed and breakfast or a self-catering establishment advertise vacancies, other than through the internet? All of us—particularly those of us who represent rural constituencies—are extremely aware of the constraints that lack of such access represents in the modern business era.

Correspondingly, the ability to attract businesses, including some large businesses, is enhanced considerably by the active, successful and efficient operation of broadband and mobile connectivity. In other words, companies come to a country that is connected. Increasingly, they might not be so inclined to do business and locate

investment in countries that are not connected. That is one reason why our reaching 100 per cent programme is so important.

**Richard Lyle:** You mentioned mobile phone connectivity. Last week, I asked Ofcom how much the UK Government will make from the new sale of 5G. Do you have any idea? How many billions of pounds will it be?

**Fergus Ewing:** That is asking me to predict what will be bid at an auction whose parameters are not yet set. If the laissez-faire, open-market, hard-right approach is taken, the UK Government will get a hell of a lot of money but, if the approach that I hope members will agree on for Scotland—that we protect and think of the provision for our rural and island areas—is taken, it will get a lot less. That is the principle. I have raised the matter with Matt Hancock but, sadly, he will not meet me to discuss it, which is extremely disappointing.

**Stewart Stevenson:** We have partially covered my first question, which is about how competitive we are internationally in terms of what is available to people, particularly in urban areas. I will ask a second question, which is related but slightly different. Are we exploring ways in which we can ensure that new buildings are digitally ready wherever they are in Scotland, using the planning system, the business rates system or other ways of promoting that objective? That complements the idea of becoming more competitive.

**Fergus Ewing:** We are ensuring that new buildings are digitally ready. For example, as a matter of technical information, from 1 January this year, adjustments to the building regulations set a standard for in-building physical infrastructure for high-speed electronic communications. That enables easier installation of fibre at any time and it applies to all new homes and other buildings in Scotland. We have raised this with major suppliers and they are being proactive about it. For example, Openreach now offers to provide fibre-to-premises connectivity to developments of 30 properties or more and it has a tariff proposal for smaller housing developments.

Those are all measures that I have encouraged, working with the commercial operators that are involved. We work very closely with them. In addition, CityFibre has committed to deliver new gigabit fibre networks in Glasgow, Edinburgh, Aberdeen and Stirling; Virgin Media, which I met recently, has announced significant new investment to expand its coverage footprint in the cities; and Hyperoptic has invested in full fibre networks in Glasgow and Edinburgh.

In June last year, we published a mobile action plan, which was the first in the UK. It is designed to encourage mobile operators to come to Scotland and erect more masts to enable wider

mobile coverage to deal with other aspects such as infill. The mobile action plan deals with speeding up planning permission and extending permitted development rights.

I am having further discussions with mobile operators and others on how to build on and extend that plan to ensure that Scotland becomes the most attractive place for these operators to build new masts in. There are a great number in planning at the moment; I think that the figure is several thousand, but we will get back to you once we have found it.

**The Convener:** I believe that Jamie Greene has a specific question on the matter.

**Jamie Greene (West Scotland) (Con):** I have just a very brief follow-up to Stewart Stevenson's question. Will the cabinet secretary expand on the proposition in the digital strategy that the Government will

"Use Scotland's business rates system to incentivise the commercial delivery of new fibre and mast infrastructure"?

**Fergus Ewing:** Obviously, we want to ensure that we are an attractive location for further digital connectivity, so we are looking to work with the commercial operators that are involved to consider how the business rates system might deal with that. The Barclay review is nearing completion, and I imagine that Ken Barclay will have looked at that issue and will report on it. In principle, however, we want to use the business rates system to ensure at the very least that we are not uncompetitive with other parts of the UK. It is a sensible approach to adopt.

There are other, equally important aspects to the issue. For example, a tariff applies to cells that are affixed to public buildings, and I am aware that some of the tariffs that are being proposed down south appear to be pretty substantial, if not regarded as exorbitant by some of the providers. That is another area where we are looking to work with business, the principle being that, if we work with companies, we avoid the problem that the UK Government ran into when it intended to create 84 mobile masts across the UK and it ended up with three because it failed to speak to business or meet and engage with the industry. It got it all wrong.

**Stewart Stevenson:** I want to ask a small and specific question about whether we are, at a commercial level, competitive internationally. I find it very confusing but, according to the numbers that I have, installing fibre up to 2km costs £3,500 whereas, as I understand it, the cost in Sweden is more like £1,000. I should say that these are just isolated bits that I picked out of a morass of information, but it appears that the annual rental for that fibre is £2,500, whereas I understand that



in many other European countries the figure is about a fifth of that.

Are our infrastructure providers really up to the mark internationally? After all, Government can only do so much. Are the suppliers doing enough?

**Fergus Ewing:** That series of absolutely apposite questions gets to the root of things. I have met companies that are involved in the nitty-gritty of laying conduits and installing the apparatus, including erecting the masts, and the higher the costs, the lower the likelihood of achieving the coverage that we wish to achieve. The issue is therefore crucial, and we are working closely with all the operators in those areas.

It is also important that we train people up to do the work. If we want to install provision in the Western Isles, for example, and no one there is sufficiently trained to do so, people have to be ferried in and live in temporary accommodation. We need to think carefully about those practical issues, and we have done so in our work with companies.

The four operators are making significant commercial investment in mobile. I can share with the committee that around 8,000 existing mast locations are being or will be upgraded to 4G and that 70 per cent of those masts are shared between operators. EE is building 330 new masts in Scotland as part of its 4G roll-out and to serve the new emergency services network requirements, and I have discussed the issue with EE and other mobile operators.

A lot is being done, and I get the impression that most local authorities have an open-door approach as they are keen to accommodate the work and have it done without protracted delays for planning permission, where that is required. There is good team working in Scotland to achieve the extension of mobile coverage, which is such a bugbear for communities that are challenged in that regard, such as those that Gail Ross represents.

**Fulton MacGregor (Coatbridge and Chryston) (SNP):** You have more or less answered the question that I was going to ask about new-build areas that are not digitally ready. The Chryston end of my Coatbridge and Chryston constituency has seen a lot of new developments over the past couple of years, and since I became an MSP I have had a lot of queries about connectivity and broadband in those areas. What more, if anything, can the Scottish Government do to help such communities? I appreciate that you touched on that in your answers to Stewart Stevenson and Jamie Greene.

**Fergus Ewing:** I mentioned the adjustment of building regulations to make them a driver of good practice in installation, and that is sensible. There

is provision for developments of fewer than 30 properties, which will probably affect rural areas.

We are in receipt of complaints regarding some new developments. I frequently take them up directly with Brendan Dick of BT, and he is extremely helpful in having them dealt with. In a small country, we can give people a prod, and I think it is the role or province of Governments to do that.

Mr MacGregor raises a salient issue. If a development goes up and there is no access to broadband, frankly, people get pretty hacked off. There is that element. I am in the committee's hands. I would be very keen to hear the committee's views about what else we could usefully do within the range of our powers. Of course, we rely on the UK Government to set a properly ambitious USO. Although it has not been willing to meet me, it does not appear to be too keen to set an ambitious target, which is sad.

**Jamie Greene:** On page 22, the digital strategy says that the Scottish Government would like to

"Extend international fibre links, reducing our reliance on London and building greater resilience and diversity into our networks".

That sounds an intriguing prospect. Do any of the witnesses have any more detail on what those fibre links might look like, where they might be established and how much they might cost? I am acutely aware that, in this part of the world, there is very limited scope outside London and Dublin for international fibre links. That sounds an ambitious thing to tackle and it might be quite a big piece to bite off. Will you share more detail on that?

**Fergus Ewing:** We mentioned that because we should set high ambitions. Jamie Greene mentioned Ireland. I understand that it has developed a direct fibre link to the USA and that, therefore, data can be transferred there instantly. I am told that a data round trip from Portrush in Ireland to the financial district of Manhattan takes 66 milliseconds. I am also advised that one reason why HBO decided to film "Game of Thrones" in Ireland was that the direct fibre connectivity enabled US producers to carry out pre-production work in real time, allowing scenes to be re-shot before scenery was broken down and removed. Those are interesting examples, are they not? They give a flavour of the opportunities that exist if Scotland is able to develop links of that nature and not simply connect ourselves to the net.

**Jamie Greene:** I do not disagree with anything that the cabinet secretary said, but my question was on the detail of the proposal. What sites are being looked at, how much might the links cost and when might they be implemented?

**Fergus Ewing:** It is far too early to say what the costs would be of a project that we have not scoped out and that is not at a certain stage, but plainly the costs would be substantial.

At present, we do not have definitive plans to intervene. Our first duty in the R100 programme is to connect our own homes and businesses to the internet. People would perhaps look askance if we spent taxpayers' money on other things before we have achieved that connectivity, so I think that our R100 programme is correct. However, we recently announced support of £500,000 to bolster IXScotland, which is the first internet exchange in Scotland and a key piece of infrastructure to support future growth. I will be happy to provide the committee with more information on that, if you like—as you know, convener, I do not like to go on.

10:30

**Peter Chapman (North East Scotland) (Con):** I will push you a wee bit on that, cabinet secretary. Which countries are you looking to connect fibre to? You mentioned Ireland and the USA. What other plans are there for the connection of fibre from Scotland? Where will it go?

**Fergus Ewing:** As I said, we have no definitive plans at present, because—I thought that I set this out pretty clearly—the first duty is to connect homes and businesses in Scotland. That is the aim of R100 and is our headline policy objective, and I think that it is the right aim. We cannot do everything at the same time.

However, the example that I gave of “Game of Thrones” really does illustrate the exciting opportunity that being an independent country such as Ireland, which is able to legislate and regulate on such things for itself, opens up.

**Mike Rumbles (North East Scotland) (LD):** Last week, Ofcom told the committee that securing 100 per cent superfast broadband coverage by 2021 would cost up to £250 million. Do you agree? How much will the Scottish Government put in?

**Fergus Ewing:** That is an extremely important question and I want to take care in answering it—I have given this some thought. First, the connection here is not like a public sector project, as I said. When one gives an estimate of the cost of a public sector project, it is because the taxpayer will pay it all. Here, the objective is to have private sector operators contribute as much as possible.

The contracts that I mentioned earlier are a good case study, because we are just about completing them. The aim is to provide 95 per cent access to broadband by the end of this year, and the contracts are on track to do that—Ofcom has

acknowledged our success in that regard. The cost of the project is around £400 million, of which the taxpayer's contribution was, I think, around £280 million—my officials will correct me if I am wrong—and BT's contribution was around £120 million or £126 million. My point is that this is not conventional procurement but public-private procurement.

To answer your question, I add that we have, of course, done cost modelling on what we think the cost of the total provision will be, but that provision will need to be subdivided between public and private. As the cabinet secretary, I want to make sure that the taxpayer gets the best deal, so I do not propose to go into the outcome of the cost modelling exercise that we have done, because I do not want to impair the commercial negotiations that will commence later this year or early next year and be brought to a conclusion in the course of next year. I do not want to give everyone involved a heads-up on the figures that we have in mind from the cost modelling. Also, our open market review work is not quite complete. You asked an important question, Mr Rumbles, and one that you are quite entitled to ask, but I need to be careful in answering it.

If there is time, convener, I would like one of my officials to describe the cost modelling that we have done, which is designed to lay the ground and compute as far as we can what the likely range of provision is expected to be.

**Robbie McGhee:** In doing so, we can in some respects differentiate between the work that we have done and the work that Ofcom has done. Ofcom's analysis was part of the preparatory work that it did to lay the ground for the UK Government's universal service obligation, and I think that Ofcom envisaged the solution with the lowest possible cost. That was a factor in the number that came out of that work.

As the cabinet secretary said, we had a different type of cost model, which was very much informed by the costs of current programmes. We built up a detailed cost model for different parts of the country and extrapolated across Scotland based on rurality. A key factor is that we are looking to get a technology solution that is as future-proofed as possible, and that factor has differentiated the work that we have undertaken and that of Ofcom.

**Mike Rumbles:** May I pursue this topic, convener?

**The Convener:** Yes.

**Mike Rumbles:** Thank you for those responses, but the first part of my question was about whether you agree with Ofcom. It has said—this is in the public domain—that it will cost up to £250 million to deliver 100 per cent coverage in Scotland. I do not think that we got an answer to my question. I

want to press you further on the matter, cabinet secretary, because the figure is not commercial in confidence. Indeed, we have already received evidence on it. I simply want to hear the Scottish Government's response and to know whether the cabinet secretary thinks that that is an accurate figure.

**Fergus Ewing:** To be fair, Mr McGhee said that Ofcom's figure was based on the solution with the lowest possible cost—I heard him say that. We do not think that Ofcom's cost model is necessarily the best one. A little more information from Mr McGhee may be of help to the committee.

**Robbie McGhee:** In broad terms, we thought that Ofcom's figure was on the conservative side, and I know that the UK Government considered that potentially to be the case, too.

Ofcom is looking at a different technology solution. By and large, Ofcom's analysis is based on technologies such as long-range very-high-bit-rate digital subscriber lines—VDSL—and delivery of a lot of the USO component over existing copper networks. Our presumption is that the R100 programme will not be so reliant on the copper networks. We do not necessarily have any fundamental issues with Ofcom's analysis, but it was undertaken on a different basis from our analysis.

**Mike Rumbles:** The minister mentioned that, of the £400 million spent so far, £280 million was from public funds and £126 million was from BT. We do not have the resources of commercial organisations. Ofcom is well aware of all the figures, but we do not have them. I am just trying to get to the nitty-gritty of the matter and delve down a bit more. How much of the £280 million of public money was from the Scottish Government's resources?

**Fergus Ewing:** I think that we paid the lion's share of that. To be fair, the UK Government, the Scottish Government and local authorities all made a commitment, so there was a united, team Scotland approach on provision.

Mr Rumbles, your question is about R100 and the estimated costs of the future project. I mentioned the cost of the past project to illustrate that this work is not conventional public procurement but public-private partnership. Our aim is to get the maximum from the private sector and the minimum from the public sector. Mr Johnston can give you the figures for the existing contract if that would be of use to the committee.

**Alan Johnston (Scottish Government):** There are a couple of things to add to those points. Of the £400 million for the digital Scotland superfast broadband project, the Scottish Government and local authorities provided £153 million; the UK Government provided £101 million; Highlands and

Islands Enterprise provided £11 million; the European Union provided £12 million; and BT, on capital and operation costs, provided £126 million. On the split between the Scottish Government and local authorities, the Scottish Government provided £63 million and local authorities provided £91 million.

I will make a further point on the R100 programme. Two dimensions come in on future costs and budget projections. The first is that the precise solution to the R100 commitment has not yet been determined. We are in discussions with potential contractors and we are looking to see technological innovation. There are different ways that it can be done and they have not yet been entirely determined, so it is no surprise that there is a range of cost estimates in the frame. The costs will vary depending on the solution that is ultimately chosen, but it has not yet been determined.

As the cabinet secretary said, the second dimension is the nature of the procurement and the extent to which it is competitive and brings in private sector investment.

**The Convener:** We have talked about the figures that Ofcom has produced. It is my understanding that the £250 million figure that was cited was for scenario 3—the all-bells-and-whistles option, as it were, which would lead to the greatest improvement. You are suggesting that that is not the case. Will you clarify that for me, Mr McGhee?

**Robbie McGhee:** Ofcom looked at three different scenarios: scenario 1 involved a 10Mbps USO, scenario 2 involved a more robust 10Mbps and scenario 3, which is the £250 million one, involved a 30Mbps USO. This is very broad-brush, but I characterise that by saying that Ofcom costed what it would take to just achieve 30Mbps by looking at how it could wring every last bit out of the copper network. In some cases, it would only just make 30Mbps.

We have looked across the piece to see whether we could produce a more future-proofed solution, which would enable far higher speeds than 30Mbps.

**The Convener:** For clarity, and to put it on the record, the figure that Ofcom gave was £200 million, not £250 million, according to our notes. You might have upgraded the figure slightly.

**Mike Rumbles:** The committee's role is to hold the Government to account. The Government has made a political commitment to 100 per cent coverage by 2021, and we are all in favour of that. Our job is to tease out whether, realistically, the Government has put aside enough resources to achieve that objective by 2021. I am not trying to put at risk anything that comes under commercial confidentiality in negotiations with commercial

companies, but the companies know that the Government has committed to 100 per cent coverage. I am trying to get at whether the Cabinet and the Government are confident that, whatever the outcome of the arrangement, there will be enough Scottish Government resources to meet the Government's political commitment by 2021, even though we are talking about commercial contracts.

**Fergus Ewing:** That is a fair question. The first tranche of the cost of R100 is included in the budgetary provision for digital infrastructure projects of £112 million in 2017-18. I mention that because that figure is divided between completing the existing contracts and preparing and starting to fund the new contract, so I am not really giving very much away.

I also mention it because £112 million is a fairly sizeable chunk of money; it is not as if it is £10 million or £20 million. The work will obviously be done in stages and we will undoubtedly report back to the committee. The Scottish Government recognises that the R100 project is challenging and ambitious, but we believe that it is achievable. In our thinking, we have earmarked provision for future years, which we expect to be sufficient to meet the not inconsiderable costs involved.

Incidentally, we also envisage that, were we to remain within the European Union, there would be the possibility of obtaining funding. Such funding is potentially available at the moment. I think that a Scottish rural development programme application for backhaul in the Highlands and Islands is pending; my officials can give more details about that in relation to the cost of Brexit if it is of interest to the committee. We would obviously look to the UK Government to match any EU money, as it promised it would in the event of Brexit.

**The Convener:** I just want to push this slightly. As I am sure other committee members have done, I have been to various meetings about the cost of delivering the last 5 per cent of digital connectivity in the Highlands. We have a figure from Ofcom, and we have had a figure of £200 million to £300 million from Highlands and Islands Enterprise. I have heard figures in excess of £500 million. I understand totally that part of that will be funded by whoever delivers the service and that it will not all come from the Government. I also understand that the way that the contract works means that, with more connections, the cost to be borne by the provider will be greater.

We all have an obligation to ensure that, by 2021, everyone has access to superfast broadband and, as parliamentarians, we will be held to account if they do not. If the cost is as high as £600 million—which, on the basis of what has happened with previous contracts, you suggest might be reduced to £400 million, with the provider

providing the rest—that concerns me. Is the Government going to be in a position to come up with that money? Can it confidently say at this stage that it believes that more than one company will tender for the contract in the most difficult areas?

10:45

**Fergus Ewing:** There are lots of points to address. First, we are fairly early on in the process—that is a reasonable point for us to make. We are proceeding with the open market review and have said that we are going to tender. Secondly, as you rightly say, the way to get the best value is by tendering and attracting competitive bids. The R100 contract is not as immediately commercially attractive as supplying the City of London—that is a matter of common sense—so it is extremely important that we attract competitive bids. We have been working hard, as you would expect, in seeking to identify those who may have an interest in bidding, because competition is the key to securing the best possible deal.

Thirdly, on your main point about whether we are putting aside enough money, I think that £112 million is a fairly substantial chunk of money to set aside for digital infrastructure, particularly given that, as I said earlier, the Scotland Act 1998 says that the UK should really pick up the tab for all of this anyway. That is a strict interpretation of the law, which, as a lawyer, I am not averse to. We have really gone some way—the £112 million is for 2017-18; we then have 2018-19, 2019-20 and 2020-21. We have £112 million this year, not all of which will go towards the new contract, and then three further years in which to make provision for it. In the course of those three years, I expect to have the pleasure of further grillings on the topic.

**Jamie Greene:** Can I clarify Mr Johnston's comments on the £412 million for the DSSB? Are you saying that £101 million came from the UK Government and £62.8 million came from the Scottish Government?

**Alan Johnston:** Yes. That is correct.

**Jamie Greene:** Thank you.

I now have a technical question on the aim of reaching 100 per cent coverage. Given that there will be a UK-wide USO—which will manifest itself as 30Mbps, 10Mbps or whatever the final outcome of the Digital Economy Bill is—and assuming that contracts will be signed with telecoms providers to provide the service at a UK-wide level, is there any detail on how the contracts that the Scottish Government will enter into for its R100 programme will work compared with how any UK-wide contracts that the Department for Culture, Media and Sport might enter into, perhaps with some of

the same providers or with a completely different provider, will work? It is a genuine question. I want to ensure that we are not spending public money twice, and there is a lack of clarity on how the two programmes may work simultaneously.

**Fergus Ewing:** That is a fair question. I have sought to take a collaborative approach with the UK Government partly for the reason that you mention—that it would make sense to have an aligned approach. I do not want to labour the point that I made about not being able to meet the UK minister, but it is a pretty dire situation. I have written to him since October and in those letters—this is important, because it gets to the root of how we should be working—I have suggested that a working group be set up, involving the devolved Administrations and the UK Government, to oversee the development and implementation of the USO. I think that my officials were in touch with their counterparts yesterday, but officials can only do what they are bid by ministers and, so far, there has not really been a willingness even to take part in a workshop. That is very disappointing. I hope that, whatever happens after 8 June, an approach can be adopted by the UK Government that is more pragmatic and constructive—because that is, of course, what I seek to be.

**John Mason (Glasgow Shettleston) (SNP):** Jamie Greene has covered part of the question that I was going to ask. The Digital Economy Bill, which was passed last week, went for a speed of 10Mbps. The House of Lords and Opposition members in the House of Commons wanted it to provide for a speed of 30Mbps. Because it provides for a speed of only 10Mbps, it is thought not to be ambitious enough and has been described as “a baby step”. How does that affect the Scottish Government’s plans to go for a speed of 30Mbps?

**Fergus Ewing:** Mr Johnston wants to answer that.

**Alan Johnston:** I reiterate the point that the cabinet secretary made a moment ago, which is that there is a lot to be discussed and explored in relation to how the UK Government intends to use the power that ministers now possess as a result of the passing of that bill and what it will mean. I understand that the relevant UK Government minister indicated in a committee session on the bill that a possible virtue of having such a power would be that it could be used to encourage private sector providers—primarily Openreach—to reach a voluntary agreement to provide the required level of broadband speed.

There is still much to be determined with regard to how the UK Government intends the USO to operate in practice. We are keen to have those discussions because, as Mr Ewing said, some of

the ways in which it could operate would be more consistent with and helpful towards a 30Mbps commitment in Scotland than others. We want to get the right approach to that.

Yesterday, we again proposed at official level a workshop in June to take that forward. We hope to receive a positive response after the election.

**John Mason:** If the UK Government is not forthcoming in that regard, would the worst-case scenario be that we would not be able to achieve the 30Mbps target by 2021?

**Alan Johnston:** No, I would not say that. The commitment would remain; I do not think that its delivery would be threatened. However, it would clearly make for better use of resource all round if the necessary work could be done in a co-ordinated way.

**Stewart Stevenson:** This is a technical question, but I think that it is a relevant one. Does the 10Mbps speed that the UK Government envisages providing essentially represent a migration from ADSL—asymmetric digital subscriber line—to VDSL? In other words, does the upgrade to 10Mbps involve the continued use of copper rather than fibre?

**Robbie McGhee:** I think that that would probably be a fair assessment. In the absence of detail, it is difficult to be definitive, but that is probably a fair characterisation.

**Stewart Stevenson:** That is fine—thank you.

**The Convener:** I want to ask about the timescale for the delivery of broadband. A question that we are all asked as MSPs is when the programme is going to be delivered. When will you be in a position to give people an indication of when they can expect broadband to be delivered in their area? If we can tell constituents that they might not get it for two years, that will allow them to come up with alternative plans.

**Fergus Ewing:** I refer back to the fact that more than 715,000 homes and businesses have been connected and have access to DSSB because we acted in Scotland. That is a reasonable achievement, but it is of no comfort to those who do not have broadband. I have—quite fairly—been quizzed on the matter here and in the chamber.

Looking forward to the R100 programme, there are a number of steps that we need to complete before we can finalise our delivery plan. First, we need to complete our open market review, which will confirm commercial investment plans. Following that, we must consult on a new intervention area—we expect to do that over the summer. Commercial investment is key. Extensive supplier engagement and other preparation is being undertaken to make sure that we get the process right. We have also set up an expert

group to act as a sounding board and to advise us on our emerging approach to make sure that we are attuned with industry advice in the way that we proceed on procurement. Once that work has been finalised, we will set out the basis for our procurement approach.

Plainly, our target—the manifesto commitment—is to complete the provision of access under the R100 programme by the end of the parliamentary session. At the moment, I am afraid that it is not possible to say to people who live in X, Y or Z when they will get connected; we will have to look at that later along the line. Obviously, the public want us to get the specification right. This is not straightforward, which is why we are proceeding with care.

I do not know whether the officials can add anything to what I appreciate is a very pertinent question about timescales.

**Robbie McGhee:** Much of the detail on deployment will be linked to the completion of procurements and agreement to the detail of the contracts. What I would say is that we are absolutely committed to being as open and transparent as we can be about R100 deployment. We have done a lot of work with the teams in the Scottish Government and Highlands and Islands Enterprise who are managing the digital Scotland contracts, and part of that lessons-learned work has focused on how we convey information to the public in the most user-friendly way and how we get the most up-to-date information. Great strides have been made in that respect in the course of the DSSB project, and as a result, the most up-to-date information is now available via the website. However, we recognise that improvements can still be made, and that will influence our approach to R100 delivery.

**Jamie Greene:** I find that very helpful. On the issue of mapping, the [scotlandsuperfast.com](http://scotlandsuperfast.com) website has greatly improved since I joined the committee, but I think that the real problem with the information that is available to people is that, when the maps come up, a lot of areas are in green—which means that they are accepting orders—but when you drill down into this on a premise-by-premise basis, you will find a lot of people complaining that, even though they are connected to the cabinet, they are unable to access superfast, primarily because of their distance from the cabinet. They call up the internet service provider, but they are finding it a problem to get any sort of speed, and I am worried that these premises are being counted as having access to superfast. A lot of people are falling through the net, and the information that is available to them does not reflect the reality on the ground. What can be done to address that issue?

**Robbie McGhee:** Just to be clear, the contracts were very much designed and deployed in order to maximise coverage, and we know that issues have arisen as a result. I stress that we are talking about a real minority here, but there are some issues with long lines and drop-offs in speed. However, I make it clear that the open market review is looking at speeds at premise level, and if individual premises are found to be unable to get 30Mbps, they will be in the intervention area for R100. It is important to stress that there is absolutely no sense in which they will fall between the cracks in that way.

As I have said, our approach will be to look at technology solutions that deliver more consistent performance across areas, and I guess that that will be reflected in the technology solutions that will be offered by suppliers. That is certainly what we hope, and those are the indications that we are getting through the supplier engagement that is taking place.

**Jamie Greene:** Just for clarification, then, are you saying that even if it is in an urban environment or even if it falls within an area where it might have access to a superfast cabinet but is just not achieving the speeds, any residential or commercial premise that cannot access superfast will be able to take advantage of intervention under R100 and have access to superfast by the end of 2021?

**Robbie McGhee:** Yes. It will be classified as a white premise and will therefore be eligible for intervention.

**The Convener:** The next question, which is from John Finnie, is on a slightly different subject.

**John Finnie (Highlands and Islands) (Green):** Before I ask my question, convener, I want to pick up on a comment that the cabinet secretary made about lack of engagement. In recent if not successive weeks, we have heard from him on agriculture, fisheries and the issues that we are discussing today, but the ability of this committee to carry out scrutiny is being impeded by the unwillingness of the relevant UK ministers to engage with the cabinet secretary himself. That is, on one level, a discourtesy to the Scottish Government, but it is also a discourtesy to the committee. We need to be able to carry out meaningful scrutiny, and I hope that at some point we will pick up on the issue and make representations on the matter, because it is simply not acceptable.

**The Convener:** I think it important for the committee to get access to the information that it needs for it to do its job properly. As I have told you before, John, we are mindful of the need to get people up here. It is difficult at the moment, but we will renew our efforts as a committee post the

election to ensure that the right people come up and speak to us.

**John Finnie:** Thank you for that assurance, convener.

**Fergus Ewing:** The point is very well made. I would have expected at least a Hancock half hour.

**The Convener:** I am not sure that we can cope with a Hancock half hour at the moment, cabinet secretary. I believe that you are going to talk about something else, Mr Finnie.

11:00

**John Finnie:** Yes, I want to ask about mobile access. We touched on some of this, cabinet secretary, when you mentioned the mobile connectivity action plan. I commend the outside-in approach, which puts rural areas before urban areas, particularly with regard to 5G. How will the Government's mobile connectivity action plan help with the R100 project?

**Fergus Ewing:** People, particularly those who—happily—are in the first half of life, are increasingly using mobile phones to access the internet. I think that there is a trend in the direction of that as a lifestyle practice. Therefore, more mobile coverage is an enabler, in general terms. That is why I am so keen to build on the good work that we set out in the mobile action plan, which is the only such action plan in the UK—I am not sure why, as it seems an easy thing to do; there is nothing magic or particularly complicated about it. As I said, people are increasingly using their mobile phones rather than fixed broadband connections, not just to access the internet but to complete virtually all their transactions, and the continuation of that trend accentuates the importance that we attach to mobile coverage. The officials might want to give you a more technical answer.

**Robbie McGhee:** We see an interplay between activity around mobile and the R100 project. There are probably two things to pinpoint in that regard. As the cabinet secretary said, people are increasingly using mobile devices and mobile networks to access superfast broadband, so when we design a mobile infill initiative, on which we are obviously working with the operators, there is potential to use it flexibly to target areas that do not have broadband or will not have it delivered by the main R100 procurements.

The other, crucial, point that demonstrates the interplay between the two is that we are designing the R100 procurements to look at delivery of new backhaul, which is the trunk fibre that underpins domestic broadband and 4G and 5G services. We are aiming to ensure that the new backhaul that is delivered through the programme is as easily

accessible as possible to mobile network operators. That should make it far easier to deploy 4G, and in future 5G, services.

**John Finnie:** Thank you. I have a further question, Mr Ewing, on a subject that might have been covered—I might be getting my meetings mixed up. In February, you approached Ofcom to see whether it would be willing to facilitate a session on mobile coverage. Can you give us an update on that? Has the session taken place?

**Fergus Ewing:** It has not taken place. My officials and I had a fruitful meeting with Ofcom at its premises in the centre of Edinburgh—I think that it took place around February—at which it was agreed that we should have a further session with some of the commercial operators present. I have discussed the matter since with other operators, all of whom have agreed, so I hope that a session can take place before the summer recess, perhaps after 8 June.

The purpose is to have a collaborative relationship with the key commercial players and to convey to them that we want them to do more business in Scotland—that is welcome—that we want to work with them and that, where we can do something that does not involve disproportionate costs, we will try to do it. My experience in dealing with companies is that such an approach is exactly the one that most companies want; they do not necessarily expect massive amounts of money to be thrown at them but they appreciate a proactive Government that is ready to reach out. Having such a session is one of several ways in which we can do that.

**John Finnie:** Two digital approaches are running in parallel—the UK Government's approach and the Scottish Government's approach. Do you hope that representatives of the UK Government will come along to the meeting?

**Fergus Ewing:** I suggested that that would be helpful. I do not know whether it would be someone from the Scotland Office or Mr Hancock, but they would be welcome.

**John Finnie:** Thank you.

**The Convener:** It is interesting that the cabinet secretary said that only people in the first half of life use mobile phones to do a lot of business. I think that I do a lot of business that way, too.

Mr McGhee, a lot of places in the Highlands have no G, let alone 3, 4 or 5G. How much will you rely on the provision of superfast broadband via mobile phones to deliver to the last 5 per cent? Is that a reasonable way forward?

**Robbie McGhee:** Mobile could be a factor in future, but it is not at the forefront of our planning. As we get into the really difficult areas, a variety of technologies will need to be deployed, including

mobile; 4G at the moment and 5G in future will have a part to play. However, mobile is not the focus of the initial R100 procurement. It is one of many technologies that could be deployed in future.

**Stewart Stevenson:** Depending on where you are, 5G is really two different things. In urban areas, it is about high speeds and high frequencies. In rural areas, on the 700MHz band, it is about providing area coverage at speeds that are much higher than they were previously and it is technically much simpler to implement. Could that bit of 5G be done more quickly than high-frequency 5G in London, Birmingham, Edinburgh and Glasgow, where there are lots of technical issues and potential interference with the radio frequency in adjacent states? That simply does not apply to much of rural Scotland, which currently has no mobile signal worth talking about.

**Robbie McGhee:** The upcoming 700MHz spectrum option will be crucial. We are engaging with Ofcom about what that will look like and how it will be designed. Coverage obligations are just one element of that.

On the wider issue of how 5G will evolve, we are keen for Scotland to be at the forefront of 5G deployment. We recently set up a partnership with industry and academia—the Scotland innovation partnership—which we hope will morph into, in effect, a 5G hub for Scotland. We will be looking to use Scotland as a test bed for how 5G could be deployed in rural locations, because we are not short of those. We have made good progress with the likes of EE, BT, Facebook and Cisco Systems—a whole host of companies and universities are involved. We will develop that over the coming months and, crucially, we see it as a potential way to access UK Government funding that has been set aside for 5G development. It is an area that we are very interested in.

**Richard Lyle:** Cabinet secretary, when you came before us on 21 December to discuss the draft budget, we spoke about community networks. The digital strategy promises to support community broadband Scotland to deliver a pipeline of 16 community networks across the country, with the potential to connect up to 8,000 premises. Will you provide more detail on exactly what the pipeline will deliver and which communities it will support?

**Fergus Ewing:** It might be helpful if I wrote to the committee with full details, because there are 16 projects and I do not have time to go through them all. I do not have all the details in front of me, but I know that their locations range from north Skye and Fair Isle down to Berwickshire and Ettrick in the Borders. They are all at different stages of development. Significant progress has been made, and community broadband Scotland

anticipates that the majority of those will go to procurement in the course of this year.

**Richard Lyle:** That is quite acceptable to me and, I am sure, to the committee.

Will that promise in the strategy complete the role of CBS in the R100 project? Does the promise mean that CBS will not be funded to support any additional community projects?

**Fergus Ewing:** From memory, we have provided an additional £1 million of funding this year to community broadband Scotland. However, we do not think that it will play a central role in the procurement process; it has a role to play, but not as the primary provider. Nevertheless, CBS will have an on-going role in supporting community-led initiatives and we are working with it to establish its future funding needs. The 16 projects that I referred to can be funded from existing resources, including European money through the SRDP. That shows that the European Union has been a good friend to rural communities in Scotland, and a friend whose loss would represent potential damage to such projects in future.

**Gail Ross (Caithness, Sutherland and Ross) (SNP):** Good morning, cabinet secretary. If communities know that they will be part of the R100 programme, why would they consider taking forward a community scheme with CBS? Would it still be a good option for them?

In answer to another question, you said that it was difficult to know where the R100 programme would roll out. However, with the current contract, which we have discussed at the committee before, it has been difficult for communities to know whether to proceed with a community scheme because they have not known when the roll-out will come to them. We need to reassure our communities about that. Will you comment on those points, please?

**Fergus Ewing:** As I think I said, R100 will be the primary means of ensuring that rural and island communities have access to superfast broadband. That is the fundamental point that I have made. CBS is on hand to provide advice and is focused primarily on delivering the 16 projects to which I have alluded and details of which I will furnish the committee with. I appreciate that it is frustrating and I well understand that some communities want to press ahead now, but we have to proceed in the most efficacious way and R100 is the way to do that. It is difficult to envisage communities being given the choice that is envisaged in your question, because we have a clear plan to proceed to provide R100.

It is important to appreciate, as I am sure members do, that installing fibre broadband is not a straightforward matter. Like any other infrastructure project, it involves a load of work to



survey, design, build, connect and activate. At each one of those stages, practical problems can arise, as with any other infrastructure project. It is important to think of it as a process that takes a lot of work, effort and planning to get right. It is not like switching electricity suppliers; it is of a different order.

**Gail Ross:** I agree that the R100 programme is the way forward. We have made that commitment to the whole of Scotland. However, for communities that may not be connected until, say, 2021, is there a solution for bridging the connectivity gap between now and then?

**Fergus Ewing:** R100 really is the way to do it. If we did not do it in that way, there would be a myriad of different projects and it would be unlikely to be affordable or deliverable in terms of the sheer administration. Each of the 16 community projects involves a huge amount of work, so we have to consider the practicalities, even though I appreciate that we are asking some communities to be patient. That is the best approach.

I do not know whether I have missed anything out.

**Robbie McGhee:** I will mention just one element. We administer the better broadband scheme, which is a UK Government scheme that provides such interim support. Funding is available to support solutions for premises that receive less than 2Mbps. Those are often satellite or non-superfast solutions, but they could be a bridge between a service that is clearly sub-basic broadband and the superfast service that we would hope to deliver further down the line. It is worth recognising that.

**Gail Ross:** There is a non-profit community benefit society in the north of England called Broadband for the Rural North—B4RN. Have you looked into doing or supporting anything similar to that in Scotland?

**Robbie McGhee:** Yes. The B4RN project is prominent and highly successful but difficult to replicate. A number of factors have led to its success. It is close to a core backhaul route. The project is also funded through community shares, so no public funding has been put into it at all, which makes it far easier to get through under state-aid rules. We have talked to B4RN and we know the project inside out. Community broadband Scotland has worked extensively with it to understand whether elements of it can be replicated.

We talked earlier about international comparisons. It is striking that we can consider other examples elsewhere but rarely find a model that can be transplanted wholesale into a context outwith the particular place. However, the B4RN model is very interesting. B4RN has been active in

establishing a backhaul presence in Scotland, which may mean that it can support other community projects in future.

**The Convener:** Rhoda Grant wants to come in on that.

11:15

**Rhoda Grant:** Yes. I am a little concerned about the statement about community broadband Scotland. Am I correct that the projects that it is funding now will be the last ones that it funds? If so, what hope is there for communities that cannot wait for another four years?

**Robbie McGhee:** We would not characterise those as being the last projects that community broadband Scotland will fund. It will not be helpful to have a plethora of community projects springing up in development when we are about to go for large-scale procurements, but we still see CBS as having a very important long-term contribution to make.

We anticipate that the initial R100 procurements will go only so far in delivering superfast access. CBS will have a key role in future phases, involving pushing coverage further in various ways and linking communities into the new backhaul that we will create. An important element of the way in which we will structure procurements will be setting up accessible points of presence that communities will be able to access.

CBS can play an important role by providing support, advice and funding to communities further down the line. However, it makes sense for there to be an element of consolidation around CBS's current project pipeline, rather than it adding to that pipeline at the moment—I stress that it is just for the moment—while large-scale procurement activity is planned.

**Rhoda Grant:** Does that mean that communities that are looking to do something now need not apply, or should they apply? What you are saying is a bit vague as to what communities, some of which are already working on things, should do. If the funding is being withdrawn and they have to stop their projects, I imagine that that will cause a huge amount of frustration.

**Robbie McGhee:** It is not a case of the door being closed. We stress that communities that are in that position should continue to engage with CBS and get advice and support. CBS is more than willing to continue a dialogue about where a community is up to and what its circumstances are. If it looks as if there is a real opportunity to fund something, CBS might still look at that, but our default position is that it would complicate things a little if we were to fragment the intervention area that we put to the market through

R100. The large-scale investment that will come through R100 has to be a factor for CBS's investment profile over the next couple of years.

**Rhoda Grant:** I have a final question on that. Will the community-owned and run broadband projects that CBS has funded be taken into R100, so that there are upgrades and system management? Will there be an opportunity for those communities to become part of the larger network, rather than continuing to run projects themselves in the future?

**Robbie McGhee:** It depends. For example, we do not see that community networks will come through the R100 process. The initial procurements will be targeted at larger operators and suppliers that can operate at scale. CBS has done a lot of work with community broadband projects across the country to look at sustainability issues and to determine procedures to ensure that, if circumstances change, the lights can be kept on and services can be maintained. It has done a lot of work in conjunction with the universities in Edinburgh and Stirling to look at how the sustainability of community networks can be enhanced. That is an area in which CBS has been quite active. However, the R100 procurements will be of a scale that will be beyond community broadband networks initially.

**Peter Chapman:** Carrying on with the CBS stuff, we have heard that there is a scheme in Glen Lyon. The folks there are concerned that the small supplier that CBS is working with to deliver that service might not be financially robust. What will happen in the event of that supplier going bankrupt? Will the Government underwrite that? Will it help to ensure that any areas affected still have a service?

**Fergus Ewing:** We work with community broadband Scotland to ensure sustainability and to determine effective procedures on procurement to enable service continuity when there are financial difficulties. The CBS model has tended to support community-owned networks, which makes it easier to cover such an eventuality, whether by retendering for an alternative supplier or by taking on the running of the network in the short term.

Generally speaking, Governments do not underwrite an open-ended guarantee in the event of companies going bankrupt, nor should they. I have not heard anyone suggest that as a policy formulation. The approach that we take—it is certainly the one that we will take with the R100 programme—is to follow the process of due diligence in assessing the robust financial standing of any bidder. That approach is a sine qua non of proper procurement practice.

At community level, it is quite fair to make the point that Mr Chapman makes that there is a risk,

but the CBS model has taken that into account in the two ways that I have described.

**Peter Chapman:** I am concerned about the issue, though. When CBS goes into partnership with suppliers, surely it should ensure that those companies are financially robust. We are talking about people on the ground getting involved in long-term commitments. It would be difficult if, within a short period, a supplier went bust.

**Fergus Ewing:** I am certainly not going to start talking about individual companies. If Mr Chapman wants to write to me about individual cases, that would be fine.

The point is that the better way to proceed is how we are proceeding—by providing universal access through a nationwide procurement effort through R100. Utility providers tend to be substantial companies and a lot of provision is made thereanent. For example, electricity suppliers need to have certain financial security in order to be able to offer electricity supplies to consumers—precisely for the point that Mr Chapman raises.

As I say, I have covered two ways to deal with the issue: to retender and seek an alternative supplier or to take on the running of the network in the short term. I do not know whether there is anything else to add.

**Robbie McGhee:** I do not know the specifics of the case, but the one point that I would make with complete confidence is that a supplier that has been selected as a result of a community broadband Scotland project will have been through a procurement process that will have looked at financial viability and a whole range of other aspects of the company in question. It is not a case of CBS alighting on a particular supplier and doing a deal with it. All the projects—even the fairly small-scale ones—go through a procurement process.

**Fergus Ewing:** There is no magic formula. Even the biggest banks got into financial difficulty. It was not bankruptcy but, frankly, it might not have been too far from practical insolvency. There are no means on earth whereby Government can provide a magic cure for such eventualities. A sensible procurement process—as I have described and as Mr McGhee indicated in the supplementary information that he provided—takes account of that. Each company that enters into the procurement process is vetted and asked to fill in documentation that is designed to ensure that the risk that Mr Chapman has fairly highlighted is minimised and mitigated.

**Stewart Stevenson:** I signal that my question might be longer than the answer needs to be. The R100 project will almost certainly mean that a proportion of the existing copper will not be good

enough to deliver to the remaining premises. Because of Ofcom's intervention, Openreach is separated from BT in a way that it was not before. Clearly, there are a number of ways of getting at wires to replace existing copper or to augment it. In the public domain, there are sewers, canals and railway conduits. Fibre can also be put along the top of power lines, which are in private hands. The Government has planning authority in relation to power lines that carry more than 20 kilovolts.

With that set of options, how is the Government working with publicly owned and privately controlled potential routes for cables to ensure that we get the widest possible opportunity to put the right wires—be they fibre, copper or whatever—on existing infrastructure and thus get the best bang for our buck?

**Fergus Ewing:** The short answer will be provided by Mr McGhee.

**Robbie McGhee:** We try to support anything that can facilitate deployment. We alluded to our work on the use of public sector assets to assist operators with deployment. We will not specify through the procurement process how things should be done, because industry will need to respond on that issue. I am sure that it will come up with a lot of innovative proposals on the delivery and deployment of fibre.

As you said, copper will increasingly struggle to deliver what we want it to in parts of the country. That message was recognised in our recent discussions with Openreach.

**The Convener:** Across rural Scotland, a lot of railway lines have fibre laid for signalling and telecommunications, but only a small proportion of it is used for that purpose; the fibre has much greater capacity. I have spoken to a lot of people who find it frustrating that they can see a fibre line next door to their house but they do not have a connection. What contact have you had with the railways about that?

**Robbie McGhee:** We have had discussions about that for a number of years. That process was triggered in part by the mapping exercise that we did on fibre. Mapping Network Rail's assets along railway lines was a key component of that exercise.

Some of the limitations and constraints relate to the reserved nature of this area. The extent to which Network Rail's infrastructure can be opened up for telecoms purposes is very much the Cabinet Office's call, and the situation is complicated by the fact that it is a publicly funded asset, which means that opening it up commercially has state-aid implications. From the UK Government's perspective, the issue was deemed almost too difficult to look at until recently, but once we have a new UK Administration, we

will follow up on that and reopen discussions, because the railway infrastructure is an asset that could be used to deliver telecoms.

**The Convener:** Another issue that I have heard mentioned is the fact that, in many cases, BT has the ability to turn up the gain or the power on the copper—those are not technical terms; I am not technical enough to know the correct terms—to give a better reach to the far end, but it cannot do that because of European legislation. What work has been done to see whether it is possible to allow BT to do that, so that some communities without broadband can get it?

**Stewart Stevenson:** I can supplement that point. I suspect that the convener is talking about long reach, which could be implemented only if we were to change everybody on that whole bit of the network. There are issues around that.

**The Convener:** Thank you for your technical assistance. I do not always know the depth of your knowledge.

**Robbie McGhee:** That issue was discussed with Openreach last week, and it made the point that it did not worry about the technology as long as it worked. From its point of view, the issue is the complexity of migration. A range of communications providers deliver services over the infrastructure; the challenge is migrating all of them on to a VDSL solution. There will have to be a dialogue primarily between Openreach and Ofcom about the technical limitations or, indeed, the opportunities of that approach.

**The Convener:** My final question is about the construction of the Beaulay to Denny power line. Was consideration given to stringing fibre on that power line, which is a major route across Scotland? That approach has been used on other power lines.

**Robbie McGhee:** Through the contract, we have facilitated discussions between BT and Transport Scotland on a number of different on-going transport projects. We can provide some details to the committee on whether BT utilised the opportunity on that particular project. I know that there was dialogue throughout on joining up projects where that made sense.

**The Convener:** As members have no more questions, I thank the cabinet secretary and his team for giving evidence to the committee this morning.

11:30

*Meeting suspended.*

11:32

*On resuming—*

## **Subordinate Legislation**

**Road Traffic (Permitted Parking Area and Special Parking Area) (Angus Council) Designation Order 2017 (SSI 2017/79)**

**Parking Attendants (Wearing of Uniforms) (Angus Council Parking Area) Regulations 2017 (SSI 2017/80)**

**Road Traffic (Parking Adjudicators) (Angus Council) Regulations 2017 (SSI 2017/81)**

**Road Traffic (Permitted Parking Area and Special Parking Area) (Stirling Council) Designation Order 2017 (SSI 2017/82)**

**Parking Attendants (Wearing of Uniforms) (Stirling Council Parking Area) Regulations 2017 (SSI 2017/83)**

**Road Traffic (Parking Adjudicators) (Stirling Council) Regulations 2017 (SSI 2017/84)**

**The Convener:** Item 3 is subordinate legislation and the six negative instruments that are detailed on the agenda. The committee will now consider any issues that it wishes to raise in reporting to the Parliament on the instruments. Members should note that no motions to annul have been received and that there have been no representations to the committee on the instruments.

Do members have any comments?

**Richard Lyle:** It should be mentioned how much money has been raised through parking charges, particularly by the City of Edinburgh Council, which has generated more than £17 million, and Aberdeen City Council, which has an annual balance of nearly £4.4 million. That is a surplus. It is interesting to note that.

**The Convener:** That is duly noted. I am pleased to report that I have not contributed to that pot.

Does the committee agree that it does not wish to make any recommendation in relation to the instruments?

**Members** *indicated agreement.*

11:34

*Meeting continued in private until 12:10.*

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