



OFFICIAL REPORT
AITHISG OIFIGEIL

Rural Economy and Connectivity Committee

Wednesday 31 January 2018

Session 5



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RURAL ECONOMY AND CONNECTIVITY COMMITTEE
4th Meeting 2018, 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)

*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)

*Colin Smyth (South Scotland) (Lab)

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 31 January 2018

[The Convener opened the meeting at 10:01]

Decision on Taking Business in Private

The Convener (Edward Mountain): Good morning and welcome to the fourth meeting in 2018 of the Rural Economy and Connectivity Committee. I ask all present to ensure that their mobile phones are on silent. Stewart Stevenson has submitted his apologies, due to ill health.

Item 1 is to ask the committee to consider whether to take items 3 and 4 in private. Item 3 invites the committee to consider its future work programme and item 4 relates to the committee's approach to its inquiry into aquaculture in Scotland. Do members agree to take those items in private?

Members *indicated agreement.*

Digital Strategy

10:01

The Convener: Item 2 is an evidence-taking session on all aspects of the Scottish Government's digital strategy. I welcome from the Scottish Government Fergus Ewing, Cabinet Secretary for Rural Economy and Connectivity; Alan Johnston, head of the connectivity, economy and data division; and Robbie McGhee, head of digital connectivity policy. I invite the cabinet secretary to make a brief opening statement.

The Cabinet Secretary for Rural Economy and Connectivity (Fergus Ewing): Thank you for the invitation to answer questions on the Scottish Government's work on digital connectivity. Our digital strategy sets out our approach to support a robust and world-class digital nation—a Scotland that is future proofed both economically and digitally. Recent figures show that Scotland's digital sector contributes around £4.5 billion to the Scottish economy, which is about £0.5 billion more than the food and drink growth sector, for example, and the importance of the digital sector will continue to grow as time goes on.

Our digital strategy maps out how we will shape Scotland to become the world-class, vibrant and inclusive, open and outward-looking digital nation that we should be, putting digital skills and technology right at the heart of everything that we do. That is exactly what we are doing. The Scottish Government has provided fibre broadband access to more than 870,000 premises in Scotland through our digital Scotland programme; we have launched our mobile action plan to improve coverage in Scotland; and we have helped to establish and support the growth of Scotland's first internet exchange.

However, with Scotland having some of the most challenging locations anywhere in Europe for telecoms infrastructure provision, some in our communities still do not have access to superfast broadband. That is why we are committing £600 million to the R100, or reaching 100 per cent, programme. That is the biggest public investment ever made in a United Kingdom broadband project and it underpins the first universal superfast programme in the UK. The objective is that by 2021 every home and business in Scotland will have access to superfast broadband. That is the choice that we in the Scottish Government have made—superfast broadband for all. That being said, superfast broadband is only one aspect of connectivity, and I am keen to explore the various strands of the wider digital strategy in the course of this session.

The Convener: Thank you, cabinet secretary. The first question is from Richard Lyle.

Richard Lyle (Uddingston and Bellshill) (SNP): Good morning, cabinet secretary. I received a briefing on broadband in Scotland from Which? yesterday. It says:

"Scotland has made significant progress in coverage of superfast speeds ... according to Ofcom's 2017 Connected Nations report, the greatest progress of any area in the UK."

In light of that comment, when will the Scottish Government achieve its intended goal of extending high-speed broadband to around 95 per cent of premises in Scotland? Will it be achieved in all local authority areas?

Fergus Ewing: We have made significant progress in Scotland. It is important to remember that we started from further behind and so had further to go, particularly because of the extent of the rural areas in our country. Which? and other independent commentators have acknowledged that we have made significant progress and have done so more swiftly than other parts of the United Kingdom in many respects.

As far as the target goes, it is important to clarify some misinformation that was put out by, I think, a Tory MP recently. Our target has been to achieve 95 per cent fibre coverage, which has been deliberately misrepresented in some misguided press statements recently. Our figures are currently being assured, but thinkbroadband, which is an independent analyst, indicates that fibre coverage in Scotland at the end of 2017 was 96.6 per cent. In that respect, the target was achieved.

Perhaps one of my colleagues can talk about the local authority aspect of the question before we move on.

Robbie McGhee (Scottish Government): The 95 per cent target was a national target from the outset. It applied across Scotland and both contracts. The contracts have a minimum coverage level within local authority areas. When the contracts were signed, it was agreed that every local authority area would have a minimum of 75 per cent coverage, but coverage has far exceeded that for the vast majority of local authorities. The R100 programme plans to drive coverage to 100 per cent in every local authority area by 2021.

Richard Lyle: Thank you.

Mike Rumbles (North East Scotland) (LD): The cabinet secretary referred to thinkbroadband. I do not know whether he has had an opportunity to read this morning's *Press and Journal* report on the thinkbroadband information. The *P and J* says:

"The only constituencies in"

the north of Scotland

"to meet the UK Government's 95% target were Aberdeen North and Aberdeen South",

and that all the other constituencies in the north of Scotland were

"below the Scottish average of 93.4%."

We all got the same briefing from Which? that Richard Lyle quoted, but he missed out something from his quotation. I will read the full quotation:

"Scotland has made significant progress in coverage of superfast speeds—from 83% to 87% in the last year".

Therefore,

"according to Ofcom's 2017 Connected Nations report,"

that is

"the greatest progress of any area in the UK",

but from a lower base, as

"Scotland continues to play catch up, and lags behind the rest of the UK with a 4% difference to the UK-wide average."

It is important to get the full quotation on the record. I would be interested to hear the cabinet secretary's reaction, particularly to thinkbroadband's comment, as reported in the *P and J* this morning, which seems to contradict what he has just said.

Fergus Ewing: With respect, I do not believe that it does. I say that because thinkbroadband considers Scotland as one entity, but the point is that there is more work to be done in regional areas. That is precisely why we have R100. We recognise that there is much more work to be done to provide fibre access to superfast broadband as far as possible for rural areas. Therefore, it is no surprise that *The Press and Journal* will quite fairly report that the areas where more work has to be done as a whole are rural areas.

I am absolutely delighted that the focus of the £600 million resource, particularly in my constituency and in the north-east, is such that—my officials will correct me if I am wrong—£384 million of that money is devoted to the north geographical lot. Therefore, the focus will be very much on the constituencies to which Mr Rumbles referred and on the northern constituencies that have so far been left out of the digital party.

Britain, unlike Germany and France, has neglected to make regulations requiring commercial providers to provide coverage in rural areas. If there had been such regulation, we would not be having this conversation, but there has not been, and that is entirely a matter for Mr Hancock and his colleagues in the United Kingdom Government. They have failed to provide the necessary regulation. If they had done so, the

commercial providers would have had to implement it. That has not happened, which is why we have stepped in and are acting in lieu of Mr Hancock acknowledging the responsibilities of the UK Government.

Mike Rumbles: Thank you for that answer, but I think that you misunderstood my question. I am not concentrating only on the rural areas of the north, and our constituencies in particular. This morning's report in *The Press and Journal* quotes thinkbroadband's latest report as saying that the Scottish average is 93.4 per cent, and the Which? briefing, which all members of the committee have received, mentions the figure of 87 per cent, yet you have consistently said that you have already reached the 95 per cent target.

I am simply trying to find out which figure is right. The Which? briefing says that the figure for Scotland is 87 per cent, thinkbroadband says that it is 93.4 per cent and the Government says that it is more than 95 per cent. If what the Government says is true, could you explain how it has reached that figure so that we have some idea of what is actually going on?

Fergus Ewing: Broadly speaking, all the figures are correct. Our target relates to fibre coverage, whereas the figures that Mr Rumbles has cited relate to superfast coverage. It is correct to say that there has been the largest increase in access to superfast coverage in Scotland, but it is also correct to say that there is still progress to be made.

Our target has always related to fibre. The figures to which Mr Rumbles refers relate to the proportions of homes and businesses in Scotland that currently have access to superfast broadband. That is a simple explanation of the situation. I do not know whether officials have anything to add before we move on, because it is an important point, although I think that I have provided clarification.

The Convener: Could you provide some more clarification, because I am now confused? You are suggesting that, when it comes to fibre, there is 95 per cent coverage, but when it comes to superfast broadband, there is only 87 per cent coverage. Is that what you are saying? Perhaps you or Mr McGhee could clarify that.

Robbie McGhee: That is broadly correct. The 87 per cent superfast figure appeared in Ofcom's report, "Connected Nations 2017", which was published in December. It is based on data that was extracted in the middle of last year, so it is not as up to date as the thinkbroadband figures, which purport to be a lot more current. That is another reason why there is a slight disparity in the figures on superfast access.

Mike Rumbles: That is helpful in indicating which of the figures is more up to date.

If I look at the issue from the view of the consumer—I am speaking as a consumer as well as an MSP—what I am really interested in finding out is what speed I can get in my home, rather than whether it is fibre broadband or superfast broadband. I think that the accepted speed is 24 or 30 megabits per second. It would be more helpful in clarifying everyone's understanding if you could refer to the speeds that people are getting. Have 95 per cent of Scottish businesses and premises now received broadband of 24Mbps? I am genuinely trying to find out what it is that we are talking about. As far as I am concerned, it is the speed that is available that normal householders want to know. Has a speed of 24Mbps been achieved for 95 per cent of people, or is it still to be achieved?

Alan Johnston (Scottish Government): The figure of 24Mbps is the one that thinkbroadband and others, including us, use for the achievement of superfast broadband. According to thinkbroadband which, as Robbie McGhee said, has the most recent figures, the figure for Scotland is 93.4 per cent.

10:15

Mike Rumbles: So we are at 93.4 per cent.

Alan Johnston: According to thinkbroadband, and we have no reason to think that its numbers are greatly out of place. That is less than 95 per cent, which was the United Kingdom superfast target at the same point. Therefore, Scotland is slightly behind the UK as a whole. Thinkbroadband numbers that were published this week showed that, at the start of 2012, Scotland was 19 percentage points behind the UK as a whole in terms of superfast coverage, whereas it is now 1.6 percentage points behind. Thinkbroadband said that the nations of the UK had closed the gap "immensely"—in Scotland's case by moving from being nearly 20 percentage points behind to being 1.6 percentage points behind.

As the minister said, we are still behind. There is still 6.6 per cent to go on superfast. That is precisely why the R100 investment is being made.

Let me contrast that again with the digital Scotland superfast broadband 95 per cent fibre target. Because that is firmly related to the contract, certain processes of validation must be gone through—they are going on at the moment. We fully expect the process to show that the contractual target has been achieved. BT Openreach has done what it agreed to do under the contract to reach 95 per cent fibre coverage, through its work to put fibre in the ground.

That has made a major contribution to the achievement of the UK 95 per cent superfast target, and a major contribution to Scottish superfast coverage making the dramatic progress that it has made. We look to further stages of DSSB, with the gainshare mechanism in 2018 and the R100 programme thereafter.

The Convener: We will come back to speed.

Jamie Greene (West Scotland) (Con): The original question was partly about when the target will be achieved in all local authority areas. The reports make clear that there is a huge digital divide between rural and urban Scotland. In Glasgow and Dundee, only 0.5 per cent of consumers get speeds of less than 15Mbps, whereas in Orkney and Shetland the proportion is nearly 30 per cent—a third of consumers there enjoy speeds of less than 15Mbps. We have been talking about percentages of over 90 per cent, but the reality on the ground is that many parts of Scotland are still suffering with terribly low speeds. I think that those parts of Scotland would like to know when they will get superfast or fibre.

Fergus Ewing: First, the digital Scotland superfast broadband programme has provided access to superfast to 870,000 homes and businesses in Scotland and has been, by any standards, a very successful procurement, exceeding expectations, with the gainshare clause, which relates to higher than expected custom for BT, enabling funding to be ploughed back into providing access for connections to superfast for even more homes.

I mention that because, were it not for that programme, some rural parts of Scotland and islands would have zero or very little access. The northern isles and Western Isles would have zero broadband—that was the situation that we inherited. In Mr Greene's part of Scotland, local authority figures show substantial improvement as a result of the digital Scotland superfast broadband programme of investment of £400 million.

The fact is that coverage is not good enough, which is why the R100 programme is designed to reach out to the remaining individuals and businesses that lack superfast broadband. I make that general point, and if a technical answer is needed, maybe Mr Johnston or Mr McGhee will give it.

Alan Johnston: I make a couple of further points. About 30 per cent of all premises in Scotland have achieved superfast or fibre through DSSB. We are talking about an intervention that has had huge play across Scotland, with nearly one in three premises in Scotland receiving access to fibre broadband through the programme. That is the scale of what we are

talking about, and it is reflected in the figures on Scotland's progress to which I referred and in the comments about that progress from Ofcom and thinkbroadband.

Peter Chapman (North East Scotland) (Con): Welcome, panel. As we have heard, the next big push is the R100 programme, on which roughly £600 million is to be spent over a three-year period starting next year, as I understand it. There is nothing in this year's budget for R100. I can understand why, but I wonder how the Scottish Government intends to fund the programme. It is a substantial sum of money. Does the Scottish Government expect to receive some of that money from the UK Government? If so, how much, and how does the Scottish Government plan to fund the balance of that sum, whatever it might be?

Fergus Ewing: The £600 million has been committed by the Scottish Government from our resources to the initial R100 procurement. All of that amount will come from the Scottish Government with the exception of £21 million from the UK Government, so the UK Government's contribution is just 3 per cent and 97 per cent is coming from the Scottish Government.

Quite frankly, that is just not good enough, and I put that point to Mr Hancock when I met him in Edinburgh a couple of months back. I specifically asked him then to make a more commensurate contribution, and I have followed up in writing. We have not had an answer. The reason why I believe that such a contribution would be fair is twofold. First, telecoms are reserved to Westminster, as we know, and therefore are a Westminster responsibility, like defence, foreign affairs or public general taxation, by and large. Secondly, there was a larger contribution towards the £400 million for the digital Scotland superfast broadband programme. Therefore I think that that would be fair. We will continue to make the argument in public realms, such as this one, and people will draw their own conclusions.

Above all, it is important now for all our constituents—including Mr Chapman's and my own—to be digitally enabled, whether they are running a bed and breakfast where internet access is essential, whether their children's education would be helped by access to the internet, or whether they want to run a small business from home in rural Scotland, which would be an enabling, empowering thing in Ms Ross's constituency, for example. All those uses are so important now that we determined that we could not wait for the UK Government to step in with a fairer share and we felt that we had to act. We have made a very substantial contribution.

Lastly, I hope that I might come on to what we are doing in the interim, convener, because we are not doing nothing. Lots of things are happening in

the interim, before R100 is rolled out in practice, but perhaps I should leave my answer there, for the sake of brevity.

Peter Chapman: You have answered some of the question in saying that a small percentage is coming from the UK Government. I hope that you can persuade it to come forward with some more funds. I accept that, but I wonder how the Scottish Government will find the £600 million. What are you going to cut to find £200 million a year? We all know that money is scarce. How do you propose to find that cash? It is concerning.

Fergus Ewing: We have agreed with the Cabinet Secretary for Finance and the Constitution that that is the budget. It has been agreed by the Cabinet and by the finance secretary, and we will deliver it. That is the way we do business.

Of course it means that, precisely because the UK is putting in only 3 per cent, we have less money to spend on roads and railway projects in Mr Chapman's constituency. I would urge all Tory members of Parliament to get on board with the campaign to persuade the UK Government to pay something that nearer approaches a fair share. To date I have, in correspondence with several Tory MPs, invited them to do so. It is fair to say that I have not had a response from any of them yet, but let us wait and hope.

It is also very important to say that, under the gainshare provision, there will be a lot of activity this year, and more homes and businesses will be connected. BT had expected that about 20 per cent of those who gained access would become its customers, but that percentage was exceeded, and the contract had been skilfully drawn to require BT therefore to make a contribution to provide additional connections.

Furthermore, we do not want to displace the duty on commercial providers to do their job in towns and cities—we do not want to let commercial companies off the hook, because they can make a successful business out of investing in laying access to fibre for broadband—so I fully expect that we will hear announcements from major players, which will be good news for some of the towns and cities in Scotland. However, that is, of course, for them to do.

The Convener: I will come back to Peter Chapman, but first there are a couple of supplementaries to deal with.

Gail Ross (Caithness, Sutherland and Ross) (SNP): Good morning. I want to pick up the funding issue. I know that money has been set aside in the Inverness and region city deal for broadband infrastructure. How does the city deal funding tie in with the R100 programme?

Fergus Ewing: Gail Ross is absolutely correct. I should say—especially to Ms Ross—that the deal does not apply only to the city of Inverness; it is the Inverness and Highland city region deal. I reread details about the deal the other day and digital connectivity is an important part of it. My colleague and friend Drew Hendry MP has been extremely active in that regard.

We are looking at the possibility of incorporating funds from city region deals into the programme. We expect substantial co-investment from suppliers. In short, we expect that the level of funding will exceed £600 million. The talks are at relatively early stages, but they are being conducted with good will with local authorities.

Fulton MacGregor (Coatbridge and Chryston) (SNP): Morning, cabinet secretary. You have said that we cannot wait until the UK Government makes an offer. Did it give any indication of when it might come to the table with an offer?

Fergus Ewing: None whatsoever.

Fulton MacGregor: Therefore, on what is a reserved matter, the UK Government would be quite happy to allow Scotland to suffer a lack of broadband if the Scottish Government was unable to step in.

Fergus Ewing: To be fair, I do not think that the UK Government would necessarily choose me as their spokesperson. However, we have had no response. I have repeatedly pressed Mr Hancock time and again, but I have drawn a blank so far.

The Scottish Parliament has spoken with a united voice, including all Opposition members, so the case is unanswerable. The policy is reserved and it is the UK Government's responsibility, so why is it not discharging that responsibility? It is very useful to have an opportunity to put across those points in the hope that all our colleagues across all parties will join with me in asking for a fair deal from our UK colleagues. After all, it is their responsibility.

The Convener: Will you clarify a matter for my understanding, cabinet secretary? The R100 programme has a budget of £600 million. Does that all come from the Scottish Government, or will some of it be funded through gainshare? I am a little bit unclear about that. If some of the funding is not provided through gainshare, roughly what amount of money on top of the £600 million will be provided through gainshare?

Fergus Ewing: The £600 million all comes from the Scottish Government, with the exception of the £21 million—about 3 per cent of the total—that the UK Government has provided. If my mathematics is correct, the Scottish Government is funding £579 million. There is no gainshare amount in that

figure. Gainshare applies to the previous contract—the digital Scotland superfast broadband, or DSSB, programme—which has been substantially rolled out and which has provided 870,000 homes and businesses with access to broadband.

When I talk about gainshare, I am referring to the two pre-existing contracts—the one that covered the Highlands and Islands and the one that covered the rest of Scotland. Gainshare has brought in £400 million. It continues to operate beyond expectations, in part because of its success. Therefore, in 2018, a substantial number of additional homes and businesses will receive access to superfast broadband as a result of gainshare through the previous contract. That has nothing to do with R100, which is an entirely separate programme.

The Convener: Thank you—that helps me to understand the situation. Will there be gainshare benefit from the £600 million investment in the next contract? If so, where will that money go? Will it continue to be used on promoting additional connectivity where it came from?

Fergus Ewing: Sorry, but which money are you talking about?

The Convener: The Scottish Government is investing £600 million. That will result in gainshare. Will that gainshare money be used in increasing connectivity across the areas that need it post-R100, or will that money go elsewhere?

10:30

Fergus Ewing: It is early days, because we are in the relatively early stages of the process.

Let me try to explain it this way. Gainshare is the idea that, if a broadband provider provides access by laying or having subcontractors lay fibre and then gains lots of customers, the contract should take that gain into account by making an assumption about the expectation of gain by the contractor. The two parties—the Government and the contractor—in each of the three geographical areas reach a conclusion about what a fair proportion is. For example, they agree that for every 100 houses that are connected, 10 is an expected customer rate. If there are 15 customers, the extra five are the gainshare, which should be reflected in the contract, because the company is doing better than expected.

It is quite a sophisticated process but a simple idea. We therefore expect gainshare to be incorporated in the contracts for R100 as well. However, by the very nature of the types of homes and businesses in rural Scotland that we seek to connect—Mr Rumbles referred to those in rural Aberdeenshire—there will be fewer customers, so

I expect that the gains from gainshare will be lower, but there will be some.

I hope that I have explained it reasonably clearly. If officials have anything to add, it might help.

Alan Johnston: It is quite possible that gainshare would have to work in a slightly different way in R100 from how it has worked in DSSB. DSSB was founded on the idea that we would push it out as far as we could get, but there would be further to go and gainshare would allow us to go a little bit further. With R100, we hope—although we cannot guarantee—that the initial procurement will take us pretty much to the full intervention area being provided for. *[Interruption.]* My phone is ringing—I apologise.

The Convener: Mr Johnston, while you are adjusting your media—I hope that it is not an answer being texted to you—I will say that it would be very helpful for the committee to understand, once the R100 contract is sorted out, how much the money that will be generated from gainshare, or the equivalent, is estimated to be and where it is going to be used. Maybe we can just park that there rather than labour the point.

The Convener: Peter Chapman has a specific further question before we move on to the next batch.

Peter Chapman: My question is about the process that the Government is going through right now to put the R100 programme in place. I understand that a procurement exercise is going on—a bidding exercise among the various people who can deliver the programme. Can you give us details on how the exercise is proceeding, how successful it has been and whether it is moving forward as you would expect?

Fergus Ewing: The contract notice was issued in December. The market interest that it has generated, as shown in responses from potential bidders to the notice, which was in the *Official Journal of the European Union*, is in line with our expectations.

We are in the process now, but prior to its commencement I met a number of companies that we had identified as potential bidders to indicate that we would welcome their interest if they wished to proceed. A lot of preparatory work was done; the process did not just start last December.

We remain confident that the level of ambition funding will attract a range of bidders. Remember, this is not central London that they are bidding for. It is not the most attractive area commercially, if you see what I mean, in terms of the value and scale of customers. The procurement is for the most rural parts of Scotland, so it is challenging. Given that, in order to increase the chances of

obtaining competitive bids in each part of Scotland, we divided Scotland into three geographical chunks—broadly, north, central and south. As a result of the process, we seek to attract competitive bids, and value for money for the taxpayer, of course.

That is where we are at the moment. We will issue an invitation to participate in dialogue next month and the procurement remains on schedule for a contract to be awarded by early 2019.

There is probably a lot more that we can say, but I will just park it there and see whether members want more information about the latter half of the procurement process.

Peter Chapman: To be honest, I would like a bit more information, if the cabinet secretary can give it. I understand that he is in a process and that there might be confidentiality issues to do with who is bidding and how it is going but, if he can get a bit more information, I would certainly welcome that.

The Convener: Cabinet secretary, rather than go through it now, you might want to reflect on what information it would be appropriate to give us and write to the committee. The committee would be satisfied with that.

Fergus Ewing: Fair enough. I am in your hands and we will do that.

Peter Chapman: That is fine.

Gail Ross: I will ask about transatlantic fibre cables. There is one from the Faroe Islands that comes onshore in my constituency at Dunnet beach in Caithness. Why are we not accessing such cables? Is there a competition rule or any reason that means that we cannot access them? Are you exploring any ways in which we could access them? The cable that comes onshore at Dunnet is bringing a lot of benefits to the Faroe Islands and Iceland, which it passes through.

Fergus Ewing: Ms Ross raises an important issue. Evidence from other countries, such as Ireland, Belgium and Finland, shows that entire industries—banking, fintech, software development and the creative industries—will cluster where there are sufficient fibre crossings. The lack of direct international connectivity through subsea fibre cables leaves Scotland overly dependent on England—specifically, on London as the only tier 1 global internet route to which Scotland is directly connected—for connections to the rest of the world. Therefore, establishing an alternative, resilient route could increase the economic opportunities for Scotland and the overall performance of our networks.

We are working with the digital team at the Scottish Futures Trust to explore opportunities. The scale of the projects is such that they are rare

and are driven by private sector operators on purely commercial grounds. We have no firm plans to invest in any specific projects at this point, but we continue to take an active interest in the matter through the Scottish Futures Trust.

Robbie McGhee: Gail Ross's point on the Shetland Faroes—SHEFA—cable emphasises the cabinet secretary's point. That cable hits the Scottish mainland and, in essence, goes straight down to the internet exchange in London with little benefit for Scotland. We are attempting to change that dynamic by establishing the internet exchange that was referred to earlier and trying to strengthen the quality and robustness of data centres in Scotland so that more and more traffic can be retained here. We are really interested in that and have made progress in recent months in engagement on it with the commercial sector.

Colin Smyth (South Scotland) (Lab): Cabinet secretary, as you said earlier, your 95 per cent target is for fibre coverage, not superfast broadband. When you reach that target, about 20 per cent of premises in rural areas will not have superfast broadband speeds of more than 24Mbps, never mind the 30Mbps that you look for in the R100 programme. Does the Scottish Government have accurate information on the location and number of rural premises that will not have access to superfast broadband when you reach the 95 per cent fibre target and the location and number of properties that will require direct Government intervention to have access to superfast broadband when you roll out R100?

Fergus Ewing: Broadly, the answer to that is yes. We have undertaken extensive consultation with the market and the public in recent months to identify and verify the intervention area for the R100 programme. The process is called an open market review. That enormous exercise has demonstrated that there are about 240,000 premises that will not have superfast broadband access delivered either commercially or via DSSB. In other words, we must look at what private sector operators will do and what has been—and will be—done under gainshare under the DSSB contracts. That helps us to define the specification for the R100 contract as the remainder of those whom we are reaching out to.

Parts of rural Scotland are among the most difficult areas in Europe in which to deploy telecoms infrastructure and to deliver services sustainably. Therefore, the case for public intervention through the Scottish Government's planned £600 million investment is a strong one.

Colin Smyth: Given the digital divide, many rural areas are being left behind because they do not have access to superfast broadband, despite some of them being situated within the 95 per cent target areas. In rolling out R100, what are you

doing to ensure that they are prioritised first, so that they have a competitive advantage, instead of the current position in which businesses in rural areas are being left behind?

Fergus Ewing: That is a fair point. In R100, we seek to prioritise the rural areas first—we are taking an outside-in approach, as it were. There is no point in going first to those premises in towns or cities that do not have access to superfast broadband, because we would expect commercial development to deal with that issue. Indeed, almost every day I am involved in responding to individual requests about that issue.

We aim to tackle those areas that are most digitally disadvantaged—that will be the initial priority in the R100 approach.

Colin Smyth: It is probably fair to say that the community broadband Scotland initiative has not been a roaring success. When will you carry out a review of your approach to enabling the development of community broadband projects in rural areas?

Fergus Ewing: We have undertaken a review of how best to deliver support to community broadband projects. We concluded that, despite several successes, the CBS model was not the best one, so a dedicated team in Highlands and Islands Enterprise will help to support community projects in future.

The investment that will be delivered through the R100 programme is a game changer, and it is right that the delivery landscape reflects that.

There is another point: we want to ensure that the R100 programme does not build over any community network that is delivering—or has firm plans to deliver—superfast broadband. We have been pressing ahead with that corpus of work. Some community projects are definitely going ahead, so we need to ensure that the R100 programme does not duplicate that effort.

Fulton MacGregor: How will the Scottish Government enforce its universal service obligation of 30Mbps, and how future proofed is that for the needs of consumers and businesses?

Fergus Ewing: Because telephony is a reserved matter, we do not have any legal powers to enforce or implement the USO. That is reserved to the UK, and it is for Ofcom to implement and enforce. Ofcom has an office in Princes Street in Edinburgh, and I have had several engagements or meetings with the team there.

We have set the USO standard at 30Mbps via the R100 programme precisely because we consider that necessary in order to equip people and businesses in rural Scotland with access to the internet with that speed capability. We

consider that 10Mbps—the speed that the UK Government is looking at—is not good enough.

As I said, we work closely with Ofcom. Members may be aware of the work that Ofcom did a couple of years ago to cost the difference between 10Mbps and 30Mbps. That area of inquiry may now become even more interesting to drill down into.

My officials may want to add something, because the issue is technical.

10:45

Robbie McGhee: It is worth drawing a distinction between the universal service obligation, which is a regulatory tool that is being taken forward by Ofcom, and the R100 programme. The UK Government has decided that there will be a 10Mbps USO at UK level, which will be taken forward by Ofcom. The R100 programme, which is separate to that, will to some extent negate the need for the USO to apply extensively—or, indeed, at all—in Scotland. From our point of view, enforcing 30Mbps through the R100 programme will be done through contractual mechanisms and what we agree with the supplier or suppliers in the procurement process.

As the cabinet secretary said, we are still keen to engage with Ofcom on the design of the UK-wide USO, particularly because it could, by and large, fall on consumers to fund it. We could find that Scottish consumers were paying for a 10Mbps UK-wide USO. On that basis, we would expect Scotland to see some tangible benefits from the USO process. We are starting the process of engaging with Ofcom and the UK Government on that.

Fulton MacGregor: You said that the USO might not apply at all in Scotland. How confident are you about that? If the USO is to apply, what sort of figures are we talking about—or do you not have that data?

Robbie McGhee: It will depend on the timing of the USO being implemented at UK level. If that happens before 2021, there might be some parts of Scotland that R100 has not reached, which might therefore not have 10Mbps at that point, given where we are with deployment. They would not be disqualified in any way from going forth and trying to benefit from the USO. We are not clear on the timings. The regulatory process for implementing a USO is lengthy; it involves a lot of consultation on various elements of the design. It might well be that the timings broadly align and it is 2020-21 before the USO is in place at UK level, at which point the scenario that was painted, whereby the USO might not apply because there is widespread availability of 30Mbps, might come to pass.

Fergus Ewing: We have urged the UK Government to set up a USO working group involving the UK Government, Ofcom and the devolved Administrations. That would be an effective way to ensure that the USO is developed in a way that benefits all parts of the UK. That suggestion was made some time ago. The committee might be interested in that; it might think that it would be a useful way of helping everyone in the UK to make progress.

Jamie Greene: My question follows on from Fulton MacGregor's question, and the panel's response to it. My understanding of the USO process is that it is proactive in the sense that the consumer will apply for connectivity and the USO provider will be obliged to build the infrastructure to deliver the service up to a maximum threshold, whereas the R100 process seems to be more of a passive, reactive process. Is there any sense of confusion among consumers about the fact that two parallel processes, albeit with different target speeds, are being undertaken concurrently by two separate organisations and Governments? What day-to-day discussions does the team at Digital Scotland have with the Department for Digital, Culture, Media and Sport or Ofcom to ensure that there is a joined-up approach to those two distinct schemes?

Robbie McGhee: There is a real concern on our part that the public might be confused by two parallel processes, which is why we have engaged, or attempted to engage, extensively with the DCMS up to this point. To be fair, when it was going through the process of determining whether there would be a regulatory USO or a voluntary USO with BT, there was good dialogue around that. We are looking to continue that now that the baton has passed to Ofcom to implement the USO. We are in the process of setting up a detailed workshop with Ofcom around that, for which I hope to have a date soon, which will involve aligning some of the messaging about that.

We said in response to previous USO consultations that we think that the USO could be designed slightly differently so that the approach is not so demand led and so that an element of infrastructure investment underpins it. The issue that might impact the effectiveness of a USO is the infrastructure that currently exists across the UK. If the underlying fibre is not there, probably the only option available to people is satellite broadband. The view that we have expressed is that if the USO is a mechanism to enhance the underlying fibre infrastructure across the country, it should enable a genuinely demand-led USO, with various different technologies coming into play.

Those are the sort of areas that we are keen to discuss with Ofcom and the UK Government. The messaging to the public will feature as part of that.

Fergus Ewing: There is another issue here, as Mr Greene highlighted. If the UK approach is that people have to ask for a service, what happens when they move house and the next occupants find that they are in a house that does not have access? That will mean that a solution has to be found and somebody has to come back and do the work again in a particular area. It seems to be a bit ad hoc, in contrast to a universal approach in which everybody is provided with access, which is an investment for the future for all homes and businesses, not just those—the current occupants—who at the particular time decide to avail themselves of an opportunity. That is a practical, commonsense point that tends to suggest that the Scottish Government approach is to be preferred.

Mike Rumbles: I am finding this discussion very helpful, in that I am understanding clearly what is going on. I am, however, confused in one area that I hope you can help me with, which is the distance from the exchange to an individual household. I am reluctant to do this, but I will take my own example, because it is what I know best.

Two years ago, superfast broadband cable was put along the road in front of my house into the village of Kildrummy, and I thought that that was great. Then I found out that I would not be getting superfast broadband even though the cable goes right past the house, because I was too far from the green box. The same thing obviously applies to lots of people in rural Aberdeenshire. My question is about whether my household is counted as one of the 93 per cent, because the broadband has gone to the green box and that is it, or as one of the 7 per cent that are still to get that facility. Can you be helpful and explain that?

Fergus Ewing: I will make a general point and then ask Robbie McGhee to answer the specific point about Mr Rumbles's own home, which I have to say we have not specifically researched.

Mike Rumbles: I am just using it as an example.

Fergus Ewing: I am not a technician, but the general point is that the long-lines issue relates solely to the delivery of broadband over copper, which is how broadband was traditionally accessed in the UK with BT as the company that laid the access using copper. The conductive qualities of copper are limited, so the effectiveness and the speeds drop as you become more distant from the cabinet.

Our plans require fibre to be the main route to providing access to superfast broadband and, as I understand it, fibre can provide almost limitless speeds. I mentioned earlier that the R100 programme would be future proofed. It is intended to provide speeds at superfast now, which is

30Mbps, but in times to come it should be capable in most instances of being upgraded to even faster speeds. I think that it is primarily a distinction between copper and fibre. Your second question was whether you are one of the included or excluded and Mr McGhee is going to answer that.

Robbie McGhee: Obviously, I do not know the individual case, but the principle is that if you cannot receive 30Mbps at your premises, you will not be included in the figures for superfast coverage, so you will be part of the 7 per cent. The distinction is that, if you were connected to a fibre-enabled cabinet, you would count towards the DSSB programme target, which is for fibre broadband coverage, but you would not be included in any superfast coverage figures and, accordingly, you would be included in the R100 intervention area.

Mike Rumbles: So the R100 commitment means what it says on the tin—it means to all premises, not just to the green box. Is that right?

Robbie McGhee: Yes. Connection via cabinet—the green box—relates to the way in which BT Openreach delivers broadband services, which is via local exchanges, cabinets and so on. Depending on the outcome of the procurement process, that may well continue, albeit that every supplier has indicated that the issue of long lines is well known and that full fibre will increasingly be the preferred technology in rural areas. The extent to which we continue with cabinets and the way in which the DSSB programme has worked will depend very much on the outcome of the procurement process.

Mike Rumbles: I was happy, but now I am confused. Can I just jump to what we can expect by the end of the R100 programme? In my house, I get 8Mbps at best. In four years' time, will my household and others like it be getting a minimum of 24Mbps?

Robbie McGhee: Yes.

Mike Rumbles: So that will definitely happen.

Robbie McGhee: Yes.

Mike Rumbles: That is great.

The Convener: Just for clarity, I think that you mean in three years' time: 2021.

Mike Rumbles: Four years' time is at the end of 2021. We have four years, less one month.

The Convener: Well—

Mike Rumbles: To be fair to the minister, it is three years and 11 months, is it not?

Fergus Ewing: Mr Rumbles is absolutely correct, and I do not think that I have ever said that before.

Mike Rumbles: There is a first time for everything.

We have Ofcom before us next week, so it would be helpful to hear your response to my final question. Ofcom expects to publish its final decision on the market review in a statement in early 2018, with new regulatory measures taking effect from 1 April 2018. How will Ofcom's regulatory proposals—when they arrive—help the Scottish Government's digital strategy?

Fergus Ewing: I do not think that there will be any difficulty with that. I think that there was potentially a perceived difficulty in the UK with the recommendations when the UK was pursuing its contract with BT, which of course has fallen through. Certainly, the regulatory environment is essential to the success of our strategy. How Ofcom regulates the wider market can have, as I mentioned earlier, a critical impact, because it dictates what has to be done by commercial bodies. That is why regulation assumes an importance in this area that is perhaps not readily understood.

There are some things that the UK Government and Ofcom can do in the coming months that would set more stringent coverage obligations on mobile operators, for example, as part of the forthcoming 5G spectrum auctions. We want the spectrum auctions to require coverage in rural areas and to take the German outside-in approach rather than leave the rural areas, as Mr Greene said, in a state of relative digital disadvantage or poverty. We have not touched on the issue of mobile connectivity yet, but it is very important for rural areas, where getting a signal is a bit of a challenge.

The Convener: We are about to move on to mobile connectivity. However, I have a question first. I think that we have all been approached by people who are struggling to get broadband. A point that the committee has made before is that what people really want to know is when they will get superfast broadband and when it will be delivered. Some people cannot wait until the end of 2021. I think that the cabinet secretary said that the contract would be awarded in early 2019, which means that there will be two years in which to complete the contract. Is part of the contract going to enable the cabinet secretary to tell people in specific areas when they can expect to get the superfast broadband that they are looking forward to getting? They do not know when that will be, but will you be able to tell them at that stage in 2019?

Fergus Ewing: We are going back to Mr Rumbles's point, because I think that the timescale is three years from the start of 2019, if you see what I mean, so it will be over 2019, 2020 and 2021. As the completion date is the end of

2021, there will be three years in which to complete the task.

To answer your question, we should certainly be in a much clearer position about what has been proposed once the contracts are awarded. The coverage footprint to be delivered by the successful R100 bidders can, by definition, be confirmed only at the end of the procurement process, which we expect to be around the end of this year.

I stress that the aim is to extend new fibre backhaul to all corners of the country. However, the convener's point is an extremely fair one that is raised by people every day. We will wish to communicate the precise detail as early as possible to the public so that they can understand what infrastructure will be deployed in their area.

I want to go back to a point that I think should be emphasised. We are talking about an infrastructure project, so it is not like buying something from a shop. The infrastructure project involves five stages: survey, design, build, connect and activate. They are stages in an infrastructure project that is like that of constructing a new road or railway, so it takes time. I say that not to make an apology or a mitigation but to point out the reality. We must explain and be honest about the fact that that process takes a bit of time.

11:00

However, by early next year, we should be in a position to provide a lot of information about who will be connected. That will be a step forward. I imagine that, at that point, those people who are not covered by the plans will make known their views. That is why we have the objective of connecting everybody by the end of 2021, which is ambitious but, we believe, deliverable.

The Convener: I do not want to labour the point, but I read the programme for government, in which it is clearly stated that that will be done by 2021, not by the end of 2021. Thank you for clarifying that that will happen by the end of 2021.

Mr Lyle will now ask about the mobile access plan.

Richard Lyle: Last year, the Scottish Government published its mobile connectivity action plan. It is working with the Scottish Futures Trust and the mobile industry to develop a 4G mobile infill programme. Scotland's landscape is among the most beautiful in the world, but its glens and hills are not suitable for mobile phone reception. There remain large areas of Scotland's landmass where it is not possible to receive a mobile voice or mobile data service. What is being done to resolve that? What progress has been made in addressing the mobile not-spots? What

can the Scottish Government do to encourage mobile operators to provide better coverage and more masts in areas where it is impossible to receive a signal?

Fergus Ewing: The issue that Mr Lyle raises is hugely important. We were the first country in the UK to establish a mobile action plan, in which we set out a variety of methods that we wanted to use to deliver better and more adequate mobile coverage throughout Scotland. I think that Wales has now brought forward its plan, which it started in October, but we were a bit ahead of the game.

One of the ways in which we have sought to achieve the objectives that Mr Lyle was correct to say are necessary has been to legislate to relax the planning rules so that permitted development rights can be extended to enable masts to be put up more quickly. As far as I know, that has been embraced by local authorities with vigour and enthusiasm, perhaps because our constituents are very keen to have such access and therefore want the process of putting up masts to be undertaken as quickly as possible. I know that the attitude of Highland Council officials has been excellent in dealing with the various players. In addition, we are trialling non-domestic rates relief for new mobile masts in a number of pilot locations.

The substantive answer to Mr Lyle's series of questions is that, this year, we are implementing our 4G mobile infill programme, in which £25 million will be invested to deliver improved mobile coverage. We have publicly consulted on a proposed intervention area. We will commence procurement around February or March, and the contract will be awarded in around the summer. The tender that will be launched will cover 16 sites initially, and there will be the ability to add additional sites to maximise the use of the £25 million of funding. We estimate that that should finance the putting up of around 50 to 60 masts, although the final number will be dependent on the outcomes of the procurement exercise.

There is a lot more that I could say on that, but I will pause there in case there are specific points that I have not addressed.

Richard Lyle: I think that you have addressed most of what I asked about.

When I was driving up to my son's one day, I saw one of the tallest masts that I have ever seen on a hill towards Aboyne. I take it from what you have said that you are using the £25 million to put up masts that will improve connectivity for people who want to use their mobile phones in places such as my colleague Mr Rumbles's area, Aberdeenshire, which is iconic and beautiful—

Mike Rumbles: Absolutely.

Richard Lyle: —but, unfortunately, very hilly in certain parts. I take it that we are going to improve the connectivity there.

Fergus Ewing: I am not quite sure that I understood the question—I was mesmerised by the reference to Mr Rumbles.

We want rural areas to have their mobile not-spots or complete lack of coverage dealt with, hence the mobile infill programme. That is not intended to supplant investment by private sector operators; rather, it is intended to get connectivity to rural areas.

It is important to make the point that our infill programme cannot deliver coverage to all mobile not-spots in Scotland, but the funding will be targeted where the most impact can be delivered. Mobile not-spots will remain, so other things will need to be done to tackle that problem, which we appreciate is very serious for a great many people.

John Finnie (Highlands and Islands) (Green): Good morning, cabinet secretary and members of the panel. I am a non-technical person, but I understand the term “4G”, and I am advised that 5G is coming.

I commend the outside-in approach that you have alluded to, cabinet secretary. How much of Scotland will be 5G ready prior to the spectrum being made available?

Fergus Ewing: We are establishing a Scottish 5G hub to position Scotland as a testing ground, thereby allowing the key elements that underpin the future success of 5G to be developed and trialled. For some time—certainly since I became cabinet secretary—we have been urging the UK Government to take the right regulatory approach so that rural areas are not overlooked.

At this stage, we have not committed any funding to the development of 5G, because it is a reserved issue. The UK Government has committed £740 million to jointly support 5G and local fibre networks, so we are talking about a hugely important new wave of improved mobile enablement and connectivity, but we are not yet at the point at which I could answer Mr Finnie’s question. Perhaps Robbie McGhee can add to that.

Robbie McGhee: A lot of the 5G landscape will be set by the regulatory environment, and Ofcom is preparing to launch options for the spectrum that will be important to 5G delivery. There is a perennial tension between how much revenue auctions generate and how much coverage they result in and what obligations or other conditions Ofcom attaches to them. What those conditions are is really important.

At local level, through the innovation partnership that we have mentioned, we are working with

industry and academia to start to think about new ways in which 5G can be delivered and supported in rural locations in particular. In the first instance, we are keen to develop proposals that would benefit from the substantial UK Government funding that has been announced in this area. Therefore, we have a twin-track focus of attempting to see Scotland benefit from the UK Government’s investment and attempting to influence the Ofcom position on the options.

John Finnie: Forgive me, but I stress again that I am not technically minded. It is often the case with such policies that the rich get richer and the poor get poorer. Therefore, if someone has provision, it can be enhanced, but if they do not, they continue as they are. With the adoption of the outside-in approach, is there the potential for areas that do not have 3G coverage to skip straight to 5G coverage?

Fergus Ewing: We are future proofing our approach in the current broadband and mobile programmes to ensure that our investments can support 5G in the future. In other words, the R100 and 4G investments are being delivered in such a way that they can be improved when we move to 5G.

It was a bit disappointing that, through its failed mobile infrastructure project, the UK Government managed to deliver only three out of the planned 84 sites in Scotland. That catastrophic failure on the part of the UK Government makes it all the more important that we get our procurement right in our mobile infill programme this year, the ambitious targets for which I have explained to the committee.

The Convener: I will change the order of the questions and bring in Peter Chapman, because it seems more sequential for him to ask his questions at this point.

Peter Chapman: Thanks, convener.

Cabinet secretary, in an earlier answer you touched on how the changes to the planning rules and regulations will impact on the ability to deliver better mobile communications. How will the changes to the new electronic communications code assist with the deployment of digital infrastructure in Scotland?

Fergus Ewing: There are two aspects to that, one of which is reserved and one of which is devolved. I referred to our use of devolved powers, which are our responsibility, in taking action on permitted development rights. On the public mood, those of us who are longer in the tooth—I mention no names—will remember that there might have been some objection to such work 15 years ago, because there was concern about potential health damage from mobile masts. However, now the attitude has flipped and people

want coverage as soon as possible, so they understand that the masts are to be welcomed. We have therefore used our powers to try to advance that work. We are working with the operators to see, in a practical sense, what more we can do. That is why I have spent some time meeting them and working with Ofcom, which has been extremely helpful in the process, too.

The second aspect relates to the electronic communications code, which Mr Chapman mentioned, which is a reserved matter, so, unfortunately, it is not within our purview. However, we have been broadly supportive of the reform of the electronic communications code. The new code has been operational for only just over a month, so it is a bit early to make an assessment of its effect on telecoms investment. We expect that rental values will move downwards over time and we are keeping a close eye on that. We are aware that landowners, including public sector landowners, have expressed concerns about lower rental values arising from the implementation of the code. Scottish Land & Estates and NFU Scotland have been involved with that.

Broadly speaking, we want the process to move forward, because, as I think that Mr Chapman is hinting, that is a way to tackle the problem as quickly as we can and to provide the access to coverage as quickly as we can for our constituents.

Peter Chapman: I agree. I am very supportive of our driving forward these developments.

What planning changes has the Scottish Government introduced—or what changes does it plan to introduce—to assist with infrastructure development, especially in new housing and new business developments?

Fergus Ewing: I mentioned earlier the permitted development rights for the masts. Building regulations are the more appropriate method of regulation in the area that Mr Chapman is asking about, because they say how a house must be constructed and what standards it must adhere to. Planning is more about where the houses go.

I do not have the detail in front of me—I can provide it to you in writing—but we have taken steps to ensure that larger housing developments must be provided with access to superfast broadband. It is not the developer's responsibility fully to connect and activate it in individual homes, but providing access to large-scale developments is now mandated by the building regulations. I recently met a variety of players to urge that we move to allow smaller housing developments to receive the same attention. Mr Chapman is quite correct to raise the issue. It is an area in which we

are using our powers to try to ensure that new buildings, whether homes or business premises, are not left out but are digitally provided for.

Jamie Greene: I will stick with the topic of technology. I presume that the R100 project, which I appreciate is going through a procurement process at the moment, will, given its nature, be made up of a mix of technologies. Can anyone on the panel give us more information on what the potential mix of technology will be? Will any of it include full-fibre services such as fibre to the premises?

11:15

Robbie McGhee: As I mentioned earlier, the indications are that full fibre will be quite a prominent technology in rural areas. It will obviously be quite expensive in some areas, so the suppliers will potentially look to introduce some flexibility within that.

We are as guilty as others of talking about the R100 programme as being about providing a speed of 30Mbps, but it is important to recognise that that is a minimum speed and that the vast majority of premises that are connected will get speeds in excess of that. Indeed, even within the DSSB programme, for those premises that currently receive superfast speeds, the average speed is about 60Mbps. It is therefore by no means the case that everyone will get just a flat 30Mbps. Obviously, full-fibre technologies support ultrafast speeds of 300Mbps plus, and I think that such technologies will be quite prominent in the R100 mix.

At this stage, what the final mix will be is very much subject to the outcome of the procurement process, but we know that there is a variety of other superfast technologies out there that can be utilised by suppliers as they see fit. However, the deployment of fibre will certainly underpin the vast majority of the R100 roll-out.

Jamie Greene: In the same vein, do you know what percentage of households will at the end of the R100 process have access to superfast or ultrafast speeds of above 30Mbps? Has any modelling been done to forecast that?

Robbie McGhee: The nature of the R100 programme is such that all premises will be able to access 30Mbps by the end of 2021. We have done modelling that has informed the process to this point about the types of outcomes that the initial procurement could deliver. However, as the procurement is on-going, it would probably not be particularly wise to share that with interested suppliers. Clearly, we hope that, given the competitive procurement process, we will outstrip some of those modelling assumptions about what

we might expect for the level of investment through the procurement process.

Jamie Greene: Thank you. A number of existing UK Government initiatives are aimed at increasing full fibre across the UK, including the digital infrastructure investment fund, the local full-fibre network programme and the challenge fund—there is around £600 million of funding in there. Is the Scottish Government aware of those schemes, and is it participating in any of the funding or initiatives?

Robbie McGhee: Yes, we are obviously aware of the schemes. For example, through the local full-fibre networks partnership, we hosted a local authorities workshop in December with the UK Government. Clearly, there are a number of elements to those schemes. They appear to be a bit less targeted in nature, so they are quite demand led. There are some voucher elements for small and medium-sized enterprises. Various different things are being trialled, so at this point we do not know what the widespread deployment of those funds will be.

We want Scotland to benefit from all those funding streams. We are aware and are supportive of a number of local authority bids to the UK Government, particularly around the local full-fibre networks fund. We are also supporting bids for the 5G element of that fund through the innovation partnership. We think that, although there are the unique challenges that have been spoken about, Scotland has a really strong case to benefit from that investment.

Jamie Greene: For the benefit of the rest of the committee, I mention the fact that the UK Government trial in Aberdeenshire on full fibre is one of those initiatives.

Robbie McGhee: That is right.

Jamie Greene: Cabinet secretary, you responded by letter to a question from us on this year's draft budget and the broadband voucher scheme. You stated:

"We anticipate that our ... £600 million investment through the ... R100 procurement will deliver a fantastic coverage ... However, we are also planning for the possibility that this may not entirely complete the job".

What did you mean by that? In addition, can you provide more detail on the potential "future phases" that you referred to in your letter? I am slightly confused, because I thought that the R100 programme was about providing 100 per cent superfast coverage by 2021. What are the "future phases"? In what way will the £600 million not finish the job?

Fergus Ewing: We expect the £600 million investment through R100 to deliver fantastic coverage. It is an enormous amount of money and

it has been divided into amounts that have been set by reference to the perceived need in cost in the three different areas.

We will see what each of the bidders proposes. There will be a dialogue with each bidder in order to determine the preferred bidder, and we will then move towards acceptance. That is the process, and until that process is complete, by definition, it is not possible to know what the bids will be. The whole process is designed so that the bids do as much as possible. That is the aim. We are looking for bidders to reach as many of those who have not got access as possible, with the preference being for fibre. However, it is possible that that will not complete the job, and we are scoping options for future phases, which might include a superfast voucher scheme.

I do not think that there is any confusion whatsoever. We want to reach as many homes and businesses as possible. A large amount of money has been set aside and a rigorous process has been worked out that is now being applied. A large team of professionals is working on this. It is a complex procurement and the aim is to reach as many people as possible with fibre within the timescale. Competition between the bidders will push coverage as far as possible and it could remove the need for any subsequent phases. At the moment, however, it is not possible to say that for certain. We have to see what proposals the bidders make.

Because of that, we are scoping how a voucher scheme would work. That is informed by our experience of the better broadband scheme, which is being administered on behalf of the UK. If it is needed, a voucher scheme would not be in place until 2019 at the earliest, because we will have to wait and see what the bids are and go through the acceptance process before we can ascertain whether it is necessary to have a second scheme.

In the meantime, the better broadband scheme offers an interim solution. It offers connection vouchers to people who cannot receive 2Mbps. As members might know, the scheme was recently extended until the end of 2018 and it is a reasonable option for people who want an interim solution. It aims to get customers up to a minimum speed of 10Mbps.

Alan Johnston: We are preparing for the possibility that additional interventions may be required alongside the initial procurement. That should not be taken to mean that those interventions would be made after 2021. The commitment to deliver 100 per cent by the end of 2021 is a firm commitment, so if additional activity is required alongside the procurement, it will also be delivered by the end of 2021. The 100 per cent by 2021 is a firm commitment. It might not be entirely delivered by the main procurement and

further activity might be required, but that activity would be undertaken over the same timescale.

Jamie Greene: If I could just clarify—

The Convener: Jamie, could you be relatively quick on this one?

Jamie Greene: I will be brief. I just want to summarise. The procurement process might not deliver the 100 per cent, but the back-up is that there might be some sort of voucher scheme in addition to the current better broadband voucher scheme. Is that correct?

Robbie McGhee: Yes. In effect, the procurement does not double as the programme. The programme might contain elements other than the initial procurement.

John Mason (Glasgow Shettleston) (SNP): My understanding is that England and Wales are looking at some kind of rates relief for fibre investment. Whenever I see the word “relief”, I think of loopholes and local government losing revenue. What is the Government’s thinking about whether there should be rates relief in Scotland?

Fergus Ewing: The Scottish Government’s new growth accelerator deal will offer one year’s non-domestic rates relief for all new fibre that is laid from 1 April this year. We have committed to matching the UK Government’s non-domestic rates relief scheme on new fibre in future years, subject, however, to confirmation of the details. We cannot confirm anything until we know what the details are. We are working with the Scottish Futures Trust and the industry with the aim of developing a scheme that is targeted at incentivising new fibre build in underserved areas.

John Mason: Is the Government confident that that will not be abused and that there is no room for loopholes?

Fergus Ewing: In general, business rates are—in the scale of avoidability of taxes—a pretty difficult tax to avoid, because they are a tax on the occupancy of premises, and premises are fixed—they cannot be shifted or taken to the Cayman Islands. No Government can entirely prevent companies from going bust and not being able to pay their bills but, in general, business rates are paid.

The rates are levied on lit fibre only—that is, fibre that is being used by an operator. Fibre that has been laid but which is unused—unlit fibre—is not rated. There might be scope for aficionados of the rating system to delve down into the issue a bit more deeply to make sure that we do not inadvertently or unwittingly make it possible for attempts to be made to hoodwink the assessors and the rates collectors. Perhaps my officials could look into that, because the issue that Mr

Mason raises is a serious one that we must always bear in mind.

John Finnie: I want to ask about cybersecurity and resilience. The Scottish Government’s latest digital strategy, “Realising Scotland’s full potential in a digital world”, promised that Scotland’s critical national infrastructure would be secure and resilient against cyberattack. How does the Scottish Government monitor the resilience of fixed and mobile digital infrastructure?

Fergus Ewing: Mr Finnie raises an extremely important subject. If my memory serves me correctly, it is one on which I have opined in one of my many appearances before the committee.

The cyber threat is very serious. There is nothing more serious than breaking into information technology systems. Recently, the public sector, the health sector and commercial players such as aviation companies have all been affected. It is an extremely serious issue, and it is up to all of us to observe good practice in our security passwords and so on. Not choosing your daughter’s Christian name as your password—which, I must admit, I used to do some years ago, although I stress that I no longer do so—might be a good example.

The attempts at fraud that are made are now so sophisticated that people can send emails to us all that might look as if they have come from the Government or from public bodies, so extremely careful scrutiny is necessary. The programme for government commits us to working with the national cyberresilience leaders board to develop a suite of five action plans that will drive Scotland towards our vision of being a world-leading nation in cyberresilience by 2020. As you would expect, a lot of work is being done by the police and others in that regard.

I must admit that my preparation on the subject was perhaps not as full as it should have been, but we might be able to come back to it in due course, if it is within our purview to do so.

The Convener: John Mason will ask the final question.

John Mason: Your letter to the convener about the effects of Brexit covered a range of issues, including digital connectivity. You raised the issue of what the UK regulatory framework will be when we lose the European framework, if that is what happens. In addition, many people are concerned about mobile roaming charges in Europe when we leave the EU. Are those your main concerns? Can any assurance be provided on those areas? Are there other concerns that you have about Brexit?

Fergus Ewing: The telecoms industry seeks certainty and predictability on such matters. Certainty and predictability on regulation—or the

lack of it—determine what costs will have to be incurred by investors. The absence of certainty and predictability can and probably will impair, delay and push to the side investment decisions. Therefore, we are talking about extremely important matters.

I would certainly welcome some clarity, because we have not had assurances from the UK Government on whether the regulatory framework for telecoms will differ from the European framework, which at the moment sets the parameters for the way in which Ofcom regulates. We do not know whether that will be the case.

We do not know, either, whether UK consumers will continue to avoid mobile roaming charges post-Brexit. We have had no assurances on that. I remember that it was argued that it was independence that would involve us having roaming charges; funnily enough, it now seems that Brexit will do that. There we are—how things change. The issue might be covered in some of the papers that the UK Government has failed to release recently. I might be the wrong person to ask—I suppose that the committee could always invite Mr Hancock to give evidence.

11:30

The Convener: Do you have a follow-up, Jamie?

Jamie Greene: I would like to make a point rather than ask a question, if I may.

Unfortunately, because we are so tight for time, we have not been able to have much discussion of the cybersecurity part of the digital strategy, which is important. Given that Scotland was hit particularly hard in the recent attack—the NHS, in particular, was affected, as were many other organisations around the world—I make a request for the cabinet secretary and his team to provide more detail on the preparedness of the Scottish Government to deal with such cyberattacks. That is an area that we could have gone into more detail on; perhaps we will do so in future sessions. That is a polite request.

Fergus Ewing: I am in the committee's hands. It is a perfectly reasonable request. There are key officials who are involved in that area of work who are not here today, so I respectfully suggest that it would probably be useful for the matter to be looked at separately.

I do not downplay anything that Mr Greene said. We all recognise that cybercrime—whether it is cyber-enabled crime or cyber-dependent crime—is an extremely serious threat. The more we talk about it, the more people might think about protecting themselves. Changing their password is the most basic step that everybody can take.

The Convener: I think that cyberresilience is covered by other portfolios, so it would be useful if you could consult your colleagues and write to the committee to let us know what is being done. That would be extremely helpful.

Fergus Ewing: Okay. I will do that.

The Convener: Thank you.

I thank you and Alan Johnston and Robbie McGhee for coming to the meeting.

11:32

Meeting continued in private until 12:24.

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